N60234.AR.000030
NAS SAUFLEY FIELD
5090.3a

# REMEDIAL INVESTIGATION REPORT FOR SITE 4 FUELING FACILITY AND FORMER HANGARS AREA NAS SAUFLEY FL

5/12/2008

TETRA TECH INC

Rev. 1
05/12/08

# REMEDIAL INVESTIGATION REPORT
# FOR
# SITE 4 - FUELING FACILITY AND FORMER HANGARS AREA

## OUTLYING LANDING FIELD SAUFLEY
## PENSACOLA, FLORIDA

**Submitted to:**
**Naval Facilities Engineering Command**
**Southeast**
**NAS Jacksonville Building 103**
**Jacksonville, Florida 32212**


**Submitted by:**
**Tetra Tech NUS, Inc.**
**661 Andersen Drive**
**Foster Plaza 7**
**Pittsburgh, Pennsylvania 15220**



**CONTRACT NO. N62467-04-D-0055**
**CONTRACT TASK ORDER 029**

**MAY 2008**



**PREPARED UNDER THE SUPERVISION OF:**

**GERALD WALKER, PG**
**TASK ORDER MANAGER**
**TETRA TECH NUS, INC.**
**TALLAHASSEE, FLORIDA**

**APPROVED FOR SUBMITTAL BY:**

**DEBRA M. HUMBERT**
**PROGRAM MANAGER**
**TETRA TECH NUS, INC.**
**PITTSBURGH, PENNSYLVANIA**

**PROFESSIONAL CERTIFICATION**

Remedial Investigation Report
Site 4 – Fueling Facility and Former Hangars Area
Outlying Landing Field Saufley
Pensacola, Florida

This Remedial Investigation Report was prepared under the direct supervision of the undersigned geologist using geologic and hydrogeologic principles standard to the profession at the time the report was prepared in general conformance with the Requirements of Chapter 62-770, Florida Administrative Code. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of additional information on the assessment described in this report. This report was developed specifically for the referenced site and should not be construed to apply to any other site.

_____
Gerald Walker, P.G.
Florida License No. PG-0001180

_____
Date

This page intentionally left blank

# TABLE OF CONTENTS

**SECTION** **PAGE**

**PG CERTIFICATION** ..... **iii**
**ACRONYMS** ..... **ix**

**EXECUTIVE SUMMARY** ..... **ES-1**

**1.0 INTRODUCTION** ..... **1-1**
1.1 PURPOSE OF INVESTIGATION ..... 1-1
1.2 FACILITY BACKGROUND ..... 1-1
1.2.1 Site Description and History ..... 1-3
1.2.2 Environmental Investigations in the Vicinity of Site 4 ..... 1-5
1.2.3 Regulatory Setting ..... 1-6
1.3 REPORT ORGANIZATION ..... 1-6

**2.0 STUDY AREA INVESTIGATION** ..... **2-1**
2.1 SURFACE SOIL SAMPLING ..... 2-1
2.2 SUBSURFACE SOIL SAMPLING ..... 2-1
2.3 MONITOR WELL INSTALLATION ..... 2-2
2.4 GROUNDWATER SAMPLING ..... 2-4
2.5 AQUIFER TESTING ..... 2-6
2.6 BACKGROUND SAMPLES ..... 2-6
2.7 DIRECT PUSH SCREENING POINT SAMPLING ..... 2-6
2.8 GEOPHYSICAL SURVEY ..... 2-6

**3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA** ..... **3-1**
3.1 SURFACE FEATURES ..... 3-1
3.2 METEOROLOGY ..... 3-1
3.3 SURFACE WATER HYDROLOGY ..... 3-1
3.4 GEOLOGY ..... 3-2
3.5 SOIL ..... 3-2
3.6 GROUNDWATER HYDROLOGY ..... 3-3
3.6.1 Regional Hydrology ..... 3-3
3.6.2 Site Specific Hydrology ..... 3-4
3.7 DEMOGRAPHY AND LAND USE ..... 3-14
3.8 ECOLOGY ..... 3-14

**4.0 NATURE AND EXTENT OF CONTAMINATION** ..... **4-1**
4.1 CONTAMINANT SOURCES ..... 4-1
4.2 BACKGROUND CHEMICAL CONCENTRATIONS ..... 4-1
4.3 GEOPHYSICAL SURVEY ..... 4-6
4.4 SOILS AND VADOSE ZONE ..... 4-6
4.4.1 Surface Soil ..... 4-6
4.4.2 Subsurface Soil ..... 4-6
4.5 GROUNDWATER ..... 4-19
4.5.1 Volatile Organics ..... 4-23
4.5.2 Semivolatile Organics ..... 4-33
4.5.3 TRPH ..... 4-33
4.5.4 Pesticides and PCBs ..... 4-34
4.5.5 Inorganics ..... 4-34
4.5.6 Summary ..... 4-37
4.6 SURFACE WATER AND SEDIMENTS ..... 4-37
4.7 AIR ..... 4-38

**5.0 CONTAMINANT FATE AND TRANSPORT** ..... **5-1**
5.1 POTENTIAL ROUTES OF MIGRATION ..... 5-1

5.1.1 Physical and Chemical Factors Affecting Contaminant Mobility ..... 5-1
5.1.2 Specific Gravity ..... 5-1
5.1.3 Vapor Pressure ..... 5-3
5.1.4 Water Solubility ..... 5-4
5.1.5 Octanol/Water Partition Coefficient ..... 5-4
5.1.6 Organic Carbon Partition Coefficient ..... 5-4
5.1.7 Henry's Law Constant ..... 5-5
5.1.8 Bioconcentration Factor ..... 5-5
5.1.9 Distribution Coefficient ..... 5-5
5.1.10 Mobility Index ..... 5-6
5.1.11 Potential Pathways for Contaminant Migration ..... 5-6
5.1.12 Leaching of Soil Contaminants to Groundwater ..... 5-7
5.1.13 Migration of Groundwater Contaminants ..... 5-7
5.1.14 Volatilization from Soil or Groundwater ..... 5-8
5.2 CONTAMINANT PERSISTENCE ..... 5-8
5.2.1 VOCs ..... 5-9
5.2.2 SVOCs ..... 5-9
5.2.3 Metals ..... 5-9
5.2.4 Pesticides ..... 5-10
5.2.5 Polychlorinated biphenyls (PCBs) ..... 5-10
5.3 CONTAMINANT MIGRATION ..... 5-10
5.3.1 VOCs ..... 5-10
5.3.2 SVOCs ..... 5-11
5.3.3 Metals ..... 5-11
5.3.4 Pesticides ..... 5-11
5.3.5 PCBs ..... 5-12

**6.0 HUMAN HEALTH RISK ASSESSMENT ..... 6-1**
6.1 HUMAN HEALTH RISK ASSESSMENT PROTOCOL ..... 6-1
6.1.1 Data Evaluation Protocol ..... 6-2
6.2 SELECTION OF COPCS FOR HHRA – USEPA METHODOLOGY ..... 6-13
6.2.1 Subsurface Soil ..... 6-14
6.2.2 Groundwater ..... 6-14
6.3 EXPOSURE ASSESSMENT/ESTIMATION OF RISK ..... 6-15
6.3.1 Conceptual Site Model ..... 6-15
6.3.2 Calculation of EPCs ..... 6-20
6.3.3 Chemical Intake and Risk Estimation ..... 6-21
6.4 TOXICITY ASSESSMENT PROTOCOL ..... 6-28
6.4.1 Sources of Toxicity Criteria ..... 6-28
6.4.2 Toxicity Criteria for Dermal Exposure ..... 6-29
6.4.3 Toxicity Criteria for Carcinogenic Effects of PAHs ..... 6-29
6.5 RISK CHARACTERIZATION (USEPA METHODOLOGY) ..... 6-30
6.5.1 Evaluation of Chemicals Other Than Lead ..... 6-30
6.5.2 Interpretation of Quantitative Risk Assessment Results ..... 6-30
6.5.3 Risk Characterization Using USEPA Guidelines ..... 6-31
6.6 RISK CHARACTERIZATION USING FDEP CHAPTERS 62-777 AND 62-780, FAC ..... 6-33
6.6.1 Florida Methodology for Evaluating Soil ..... 6-33
6.6.2 Florida Methodology for Evaluating Groundwater ..... 6-39
6.6.3 Risk Characterization Using State of Florida Guidelines ..... 6-40
6.7 HUMAN HEALTH RISK UNCERTAINTY ANALYSIS ..... 6-44
6.7.1 Uncertainty in Selection of COPCs ..... 6-47
6.7.2 Uncertainty in the Exposure Assessment ..... 6-48
6.7.3 Uncertainty in the Toxicological Evaluation ..... 6-50
6.7.4 Uncertainty in the Risk Characterization ..... 6-52
6.8 SUMMARY AND CONCLUSIONS ..... 6-53
6.8.1 Summary of USEPA Risk Assessment ..... 6-53
6.8.2 Summary of Florida Risk Assessment ..... 6-54

**7.0 SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT ..... 7-1**
7.1 INTRODUCTION ..... 7-1
7.2 SCREENING-LEVEL PROBLEM FORMULATION ..... 7-1
7.2.1 Environmental Setting ..... 7-1
7.2.2 Contaminant Fate and Transport ..... 7-4
7.2.3 Ecotoxicity ..... 7-7
7.2.4 Complete Exposure Pathways ..... 7-9
7.3 UNCERTAINTY ..... 7-10
7.4 SUMMARY AND CONCLUSIONS ..... 7-10

**8.0 SUMMARY AND CONCLUSIONS ..... 8-1**
8.1 SITE HYDROLOGY ..... 8-1
8.2 SOIL ASSESSMENT ..... 8-1
8.3 GROUNDWATER ASSESSMENT ..... 8-2
8.4 HUMAN HEALTH RISK ASSESSMENT ..... 8-4
8.5 ECOLOGICAL RISK ASSESSMENT ..... 8-4
8.6 CONCLUSIONS ..... 8-5

**REFERENCES ..... R-1**

**APPENDICES**

**A FIELD DATA SHEETS**
**B SOIL BORING LOGS AND SOIL SAMPLING INFORMATION**
**C GROUNDWATER AND WELL INFORMATION**
**D SLUG TESTS ANALYSIS FOR UST SITE 2406**
**E GEOPHYSICAL SURVEY**
**F SPECIES OF CONCERN IN ESCAMBIA COUNTY**
**G DATA VALIDATION REPORTS**
**H SUPPORTING INFORMATION FOR HUMAN HEALTH RISK ASSESSMENT**

## TABLES


| NUMBER | | PAGE |
|---|---|---|
| 2-1 | Remedial Investigation Analysis Summary | 2-3 |
| 2-2 | Monitoring Well Construction Details | 2-5 |
| 3-1 | Static Water Levels | 3-5 |
| 3-2 | Average Hydraulic Gradient | 3-11 |
| 3-3 | Vertical Gradient | 3-12 |
| 3-4 | Slug Test Results – UST Site 2406 | 3-13 |
| 4-1 | Summary of Contaminants Detected in Background Subsurface Soil Samples | 4-3 |
| 4-2 | Summary of Contaminants Detected in Background Groundwater Samples | 4-4 |
| 4-3 | Summary of Contaminants Detected in Subsurface Soil Samples – Building Perimeters | 4-8 |
| 4-4 | Summary of Contaminants Detected in Subsurface Soil Samples – Washrack | 4-9 |
| 4-5 | Summary of Contaminants Detected in Subsurface Soil Samples – SPLP Results | 4-11 |
| 4-6 | Summary of Contaminants Detected in Subsurface Soil Samples – Soil Borings | 4-12 |
| 4-7 | Summary of Contaminants Detected in Subsurface Soil Samples – Monitor Well Samples | 4-13 |
| 4-8 | Subsurface Soil Sample Arsenic Exceedances | 4-18 |
| 4-9 | Summary of Contaminants Detected in Washrack Screenpoint Groundwater Samples | 4-22 |
| 4-10 | Summary of Contaminants Detected in Groundwater | 4-27 |
| 4-11 | Iron Exceedances in Groundwater | 4-35 |
| 4-12 | Aluminum Exceedances in Groundwater | 4-36 |
| 4-13 | Manganese Exceedances in Groundwater | 4-36 |
| 5-1 | Environmental Fate and Transport Parameters for Organic Chemicals | 5-2 |
| 5-2 | Relative Mobilities of Inorganics as a Function of Environmental Conditions (Eh, pH) | 5-3 |
| 6-1 | Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Subsurface Soil | 6-6 |
| 6-2 | Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Groundwater | 6-8 |
| 6-3 | Exposure Routes for Quantitative Evaluation | 6-16 |
| 6-4 | Summary of Cancer Risks and Hazard Indices | 6-32 |
| 6-5 | Florida Level 1 (Residential) Direct Contact Evaluation – Subsurface Soil | 6-35 |
| 6-6 | Florida Level 2 (Industrial) Direct Contact Evaluation – Subsurface Soil | 6-36 |
| 6-7 | Comparison with SCTLs for Leachability to Groundwater and CSAT Limits – Subsurface Soil | 6-42 |
| 6-8 | Florida Level 1 (Residential) Direct Contact Evaluation - Groundwater | 6-45 |


## FIGURES


| NUMBER | | PAGE |
|---|---|---|
| 1-1 | Facility Location Map | 1-2 |
| 1-2 | Site Map | 1-4 |
| 3-1 | Shallow Groundwater Flow, January 9, 2007 | 3-7 |
| 3-2 | Deep Groundwater Flow, January 9, 2007 | 3-8 |
| 3-3 | Shallow Groundwater Flow, June 11, 2007 | 3-9 |
| 3-4 | Deep Groundwater Flow, June 11, 2007 | 3-10 |
| 4-1 | Background Locations | 4-2 |
| 4-2 | Building 807 Soil Boring Locations and Exceedances | 4-14 |
| 4-3 | Building 810 Soil Boring Locations and Exceedances | 4-15 |
| 4-4 | Building 807 Wash Rack Soil Boring Locations and Exceedances | 4-16 |
| 4-5 | Building 810 Wash Rack Soil Boring Locations and Exceedances | 4-17 |
| 4-6 | Building 807 DPT Screen Point Sampling Locations and Exceedances | 4-20 |
| 4-7 | Building 808 DPT Screen Point Sampling Locations and Exceedances | 4-21 |
| 4-8 | Building 808 Monitoring Well Locations and Exceedances | 4-24 |
| 4-9 | Building 810 Monitoring Well Locations and Exceedances | 4-25 |
| 4-10 | Building 810 Monitoring Well Locations and Exceedances | 4-26 |

# ACRONYMS

| | |
|---|---|
| AST | aboveground storage tanks |
| ATSDR | Agency for Toxic Substances and Disease Registry |
| AVGAS | aviation fasoline |
| BCF | bioconcentration factor |
| bls | below land surface |
| BRAC | Base Realignment and Closure |
| BTEX | benzene, toluene, ethylbenzene, and xylene |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CLEAN | Comprehensive Long-term Environmental Action Navy |
| CLP | Contract Laboratory Program |
| COC | chemical of concern |
| COPC | chemical of potential concern |
| $C_{SAT}$ | soil saturation |
| CSF | cancer slope factor |
| CSM | conceptual site model |
| CTL | cleanup target level |
| CTO | Contract Task Order |
| °F | degrees Fahrenheit |
| DPT | direct-push technology |
| EDB | ethylene dibromide |
| Eh | oxidation reduction potential of groundwater |
| EPC | exposure point concentration |
| EU | exposure unit |
| eV | electron volt |
| FAC | Florida Administrative Code |
| FDEP | Florida Department of Environmental Protection |
| FID | flame ionization detector |
| FL-PRO | Florida Petroleum Range Organics |
| GCTL | Groundwater Cleanup Target Level |
| GPR | ground penetrating radar |
| HASP | Health and Safety Plan |
| HEAST | Health Effects Assessment Summary Tables |
| HHRA | Human Health Risk Assessment |
| HI | hazard index |

# ACRONYMS (CONTINUED)

| | |
|---|---|
| HQ | hazard quotient |
| ILCR | incremental lifetime cancer risk |
| IR | Installation Restoration |
| IRIS | Integrated Risk Information System |
| $K_d$ | distribution coefficient |
| $K_{OC}$ | organic carbon parition coefficient |
| $K_{ow}$ | octanol water parition coefficient |
| MCL | maximum contaminant level |
| MRL | minimum risk level |
| Mg | milligrams |
| mg/kg | milligrams per kilogram |
| mg/L | milligrams per liter |
| mL/g | milliliters per gram |
| MOP | Monitoring Only Plan |
| MTBE | methyl tertiary-butyl ether |
| NAD | North American Datum |
| NAS | Naval Air Station |
| NAVD | North American Vertical Datum |
| NAVFAC SE | Naval Facilities Engineering Command, Southeast |
| NAAS | Naval Auxillary Air Station |
| NCEA | National Center for Environmental Assessment |
| NEESA | Naval Energy and Environmental Support Activity |
| NETPDTC | Naval Education and Training Professional Development Technology Center |
| NETPMSA | Naval Educational and Training Program Management Suppor Activity |
| NTTC | Navy Technical Training Center |
| OERR | Office of Emergency and Remedial Response |
| OPPTS | Office of Prevention, Pesticides, and Toxic Substances |
| OLF | Outlying Landing Field |
| OSWER | Office of Solid Waste and Emergency Response |
| PAH | polynuclear aromatic hydrocarbon |
| PCB | polychlorinated biphenyl |
| PEF | particulate emission factor |
| PPRTV | Provisional Peer Reviewed Toxicity Values |
| PRG | preliminary remediation goal |
| PVC | polyvinyl chloride |

# ACRONYMS (CONTINUED)

| | |
|---|---|
| PWC | Public Works Center |
| RAC | remedial action contractor |
| RAGS | Risk Assessment Guidance for Superfund |
| RAP | Risk Assessment Plan |
| RBC | risk-based concentration |
| RCRA | Resource Conservation and Recovery Act |
| RfC | reference concentration |
| RfD | reference dose |
| RME | reasonable maximum exposure |
| RMO | Risk Management Option |
| RI | Remedial Investigation |
| S | water solubility |
| SARA | Site Assessment Report Addendum |
| SCTL | Soil Cleanup Target Level |
| SLERA | Screening Level Ecological Risk Assessment |
| SOP | Standard Operating Procedure |
| SPLP | synthetic precipitation leaching procedure |
| SSL | soil screening level |
| SVOC | semivolatile organic compound |
| TAL | target analyte list |
| TEFS | toxicity equivalence factors |
| TCL | target compound list |
| TRPH | total recoverable petroleum hydrocarbons |
| TRW | Technical Review Workgroup |
| TtNUS | Tetra Tech NUS, Inc. |
| µg/L | micrograms per liter |
| UCL | Upper Confidence Limit |
| USDA | United States Department of Agriculture |
| UST | underground storage tank |
| USEPA | United States Environmental Protection Agency |
| VF | volatization factor |
| VOC | volatile organic compound |
| VP | vapor pressure |

# EXECUTIVE SUMMARY

The primary objective of the Remedial Investigation (RI) at Site 4 - Fueling Facility and Former Hangars Area, is to provide data to evaluate the current environmental conditions and guide the selection of a remedy that is protective of human health and the environment for any contamination present at Site 4, Outlying Landing Field (OLF) Saufley, Pensacola, Florida.

## SITE HISTORY

Since the 1940's the OLF Saufley has undergone several changes in use. Originally, the primary use of Site 4 were oriented towards aviation activities. Undergound storage tanks (USTs) and transmission lines were installed and maintained to support these efforts. However, presently all flight activities have been discontinued and the primary mission of the base became tenant support and training.

## REMEDIAL INVESTIGATION

There were no previous investigations on Site 4. Beginning in 2006, personnel from Tetra Tech NUS, Inc. (TtNUS) conducted geophysical and electromagnetic surveys, installed monitoring wells, and conducted soil and groundwater sampling activities. The information gathered was used to assess and characterize the nature and extent of the contaminants, as well as to better understand the characteristics of the site.

The investigation included the collection of 68 subsurface soil samples around the perimeters of Hangars 807, 808, 809 and 810, wash rack areas, and randomly throughout the site. Also, 10 background subsurface soil samples were collected near the western perimeter of the installation. Soil sample depths ranged from 2 to 55 feet below land surface (bls). Additionally, 44 groundwater monitoring wells, ranging from 30 to 130 feet bls were installed and sampled in two phases, and two background wells were installed near the eastern perimeter of the facility. After collection, the subsurface soil and groundwater samples were sent to an off-site laboratory where they were analyzed for select volatile organic compounds (VOCs), benzene, toluene, ethylbenzene and xylene (BTEX) plus methyl tertiary-butyl ether (MTBE), metals, cyanide, semivolatile organic compounds (SVOCs), total range petroleum hydrocarbons (TRPHs) and polychlorinated biphenyls (PCBs).

## NATURE AND EXTENT OF CONTAMINATION

Even though there is no information that could help narrow the precise source and nature of materials, as well as the specific time of disposal, the contaminants found are consistent with the historic uses of the site. Therefore, one may conclude that release of contaminants at Site 4 appear to have resulted from routine aviation maintenance, cleaning, and refueling.

In subsurface soil samples, 18 samples had exceedances of the Florida Department of Environmental Protection (FDEP) residential soil clean-up target level (SCTL) for arsenic and a total of 53 samples exceeded the United States Environmental Protection Agency (USEPA) Region IX preliminary remediation goal (PRG) for arsenic. One subsurface soil sample had TRPH exceedences to the residential SCTL and to the leachibility to groundwater SCTL. Also, concentrations of 1,1-biphenyl and methyl chloride exceeded the leachibility to groundwater criteria SCTL in one sample each. No concentrations were detected exceeding commercial SCTLs in the samples collected during the subsurface soil investigation at Site 4.

During the first round of groundwater sampling, which took place from December 2006 to January 2007, VOCs and SVOCs were detected at concentrations exceeding Groundwater Cleanup Target Levels (GCTLs) in samples from monitoring wells in the vicinity of Buildings 807 and 810. However, further investigation near Buildings 807 and 808 established that the contamination is not expanded through the whole site. Results of additional well installation and sampling near Building 810 delineated the contaminants to a limited area. Additionally, across the site, metals exceeded primary and secondary groundwater standards during the sampling events. However, detected concentrations of metals were reported throughout the samples, including those from the background monitoring wells, which may suggest that it is related to background conditions.

**RISK ASSESSMENT**

As part of the remedial investigation, a Human Health Risk Assessment (HHRA) and a Screening Level Ecological Risk Assessment (SLERA) were compiled using data acquired during the investigation. The HHRA and SLERA were conducted using USEPA and FDEP established criteria and guidelines. It should be noted that due to lack of exposed soil and lack of surface water, only subsurface soil and groundwater were evaluated.

In subsurface soil, both carcinogenic and non-carcinogenic risks from exposures to subsurface soil were within acceptable levels. However, in groundwater, both carcinogenic and non-carcinogenic risks for exposure to groundwater exceeded USEPA and FDEP acceptable levels, but exposure to groundwater is considered unlikely . Furthermore, results of the SLERA indicated that possible exposure routes at Site 4 are incomplete.

## CONCLUSIONS AND RECOMMENDATIONS

The concentrations and types of compounds detected in subsurface soil pose minimal risk to any potential receptors that may be exposed. However, risks associated with contact with groundwater at the site exceeded state and federal criteria. Exposure to groundwater is highly unlikely due to the depth at which groundwater is encountered and the fact that the residents in the area have municipal water available and the main source of potable water in the OLF Saufley facility is a well field located at the Naval Technical Training Center (NTTC), which is several miles away. Regardless, due to the concentrations found in the groundwater, Site 4 will require measures to eliminate or to better control exposure via long-term groundwater monitoring, engineering controls, and/or institutional controls. A detailed evaluation of alternatives to achieve this goal should be conducted. Therefore a Feasibility Study for Site 4 Outlying Landing Field Saufley is recommended.

# 1.0 INTRODUCTION

TtNUS, under contract to the Department of Navy, Naval Facilities Engineering Command, Southeast (NAVFAC SE) has completed this RI Report documenting the investigative activities at Site 4 (Fueling Facility and Former Hangars Area) at OLF Saufley located near Pensacola, Florida. This RI was prepared under the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055, Contract Task Order (CTO) 029.

## 1.1 PURPOSE OF INVESTIGATION

The primary objectives of the RI is to provide data to evaluate the current environmental conditions and guide the selection of a remedy that is protective of human health and the environment for any contamination present at Site 4. To accomplish this objective, multiple samples of soil and groundwater media were collected and analyzed using published regulatory standards. In an effort to delineate the sources and risks, a geophysical survey was performed and a human health and ecological risk assessment were conducted.

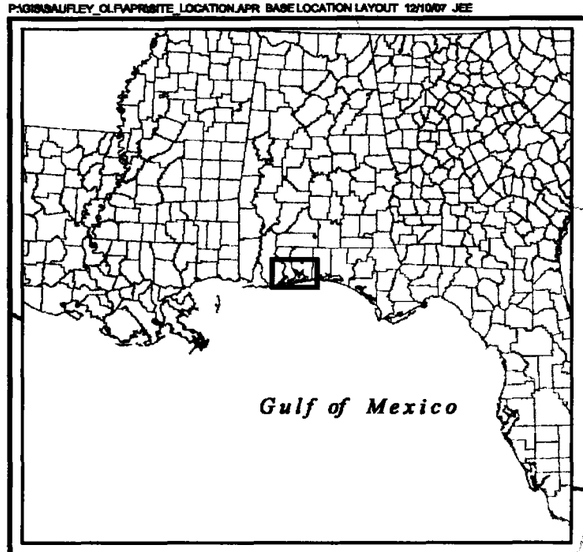
Achieving these objectives by being able to characterize the environmental conditions, determining the risks and collecting information of the nature and extent of the contaminants in the area will provide the basis for a remedy selection that is protective of human health and the environment during the Feasibility Study process.

## 1.2 FACILITY BACKGROUND

OLF Saufley is located in Escambia County, northwest Florida (Figure 1-1). The facility is situated between Interstate 10 and Perdido Bay approximately five miles northwest of Pensacola, Florida. OLF Saufley encompasses 866 acres with the majority of the area consisting of a number of support buildings, a Federal Prison located south of the airfield, four airstrips, grass covered fields, and undeveloped lands. However, the airfield has been inactive since the last major hurricane affected the area in 2004.

The area currently occupied by OLF Saufley was farm and woodland before it was purchased by the Navy in the 1930's. Opened in 1940 as Naval Auxiliary Air Station (NAAS) Saufley, NAAS Saufley was used to train pilots during World War II and the Korean Conflict. In 1957, the mission at Saufley Field was changed to basic training for naval aviators. NAAS Saufley was re-designated as a Naval Air Station (NAS) in 1968 and retained that status until 1976 when NAS Saufley operations were

P:\GIS\SAUFLEY_OLF\APR\SITE_LOCATION.APR BASE LOCATION LAYOUT 12/10/07 JEE




N

NAS Whiting Field

10

OLF Saufley

110

NAS Pensacola

Gulf of Mexico

4 0 4 Miles

| DRAWN BY | DATE |
|---|---|
| A. JANOCHA | 6/09/03 |
| CHECKED BY | DATE |
| C. ODOM | 12/10/07 |
| REVISED BY | DATE |
| | |
| SCALE | |
| AS NOTED | |

NAVFAC

FACILITY LOCATION MAP
REMEDIAL INVESTIGATION
OLF SAUFLEY
PENSACOLA, FLORIDA

| CONTRACT NO. | |
|---|---|
| 00036 | |
| APPROVED BY | DATE |
| | |
| APPROVED BY | DATE |
| | |
| DRAWING NO. | REV. |
| FIGURE 1 - 1 | 0 |

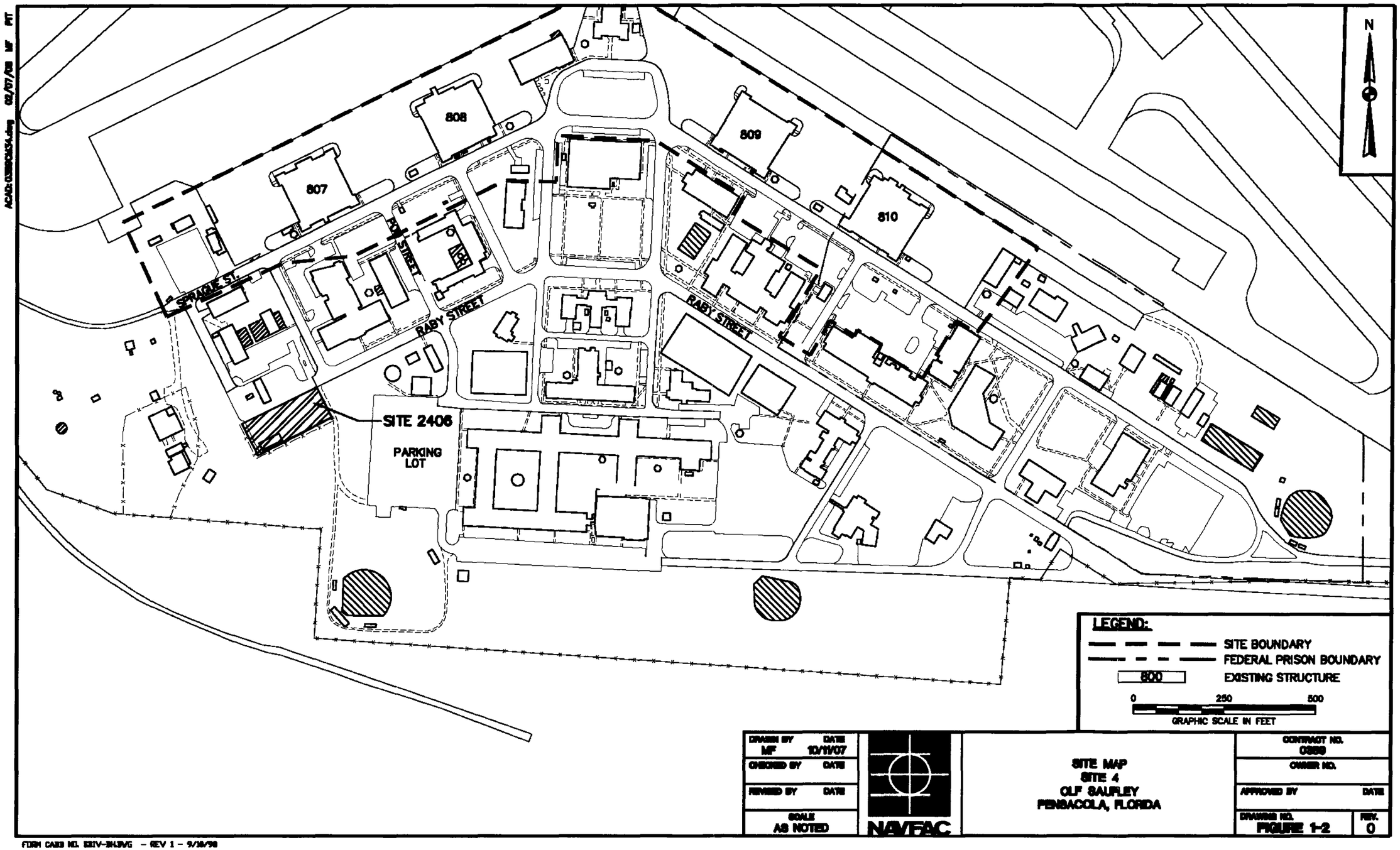
discontinued and the facility was placed in caretaker status. Between 1976 and 1979, Saufley Field was used as an outlying landing field for NAS Whiting Field. In 1979, Saufley Field was reactivated as Naval Educational and Training Program Management Support Activity (NETPMSA). Saufley Field was renamed the Naval Education and Training Professional Development and Technical Center in 1996. Saufley Field is now used primarily to train and educate Navy personnel and to house Federal prisoners. Previously, NAS Whiting Field pilots used two of the airstrips for touch and go landing exercises, but aerial training has been discontinued for over 3 years.

### 1.2.1 Site Description and History

Site 4 consists of Hangars 807, 808, 809, and 810 and the concrete and grass covered areas immediately surrounding them (Figure 1-2). The hangars are located roughly symmetrically about the control tower, Building 803. Based on a review of historic aerial photographs, these hangars were initially constructed with concrete pavement surrounding the structures on all sides with the exception of small grass covered areas surrounded by curbs located adjacent to administrative doorways. For this reason, investigation for spilled fuels, oils, metals and solvents near the hangars was focused on the locations of gasoline and used oil/solvent tanks and the wash racks.

Previously, no environmental investigations involving sampling and analysis of environmental media had been performed at Site 4. In May 1992, Naval Energy and Environmental Support Activity (NEESA) based in Port Hueneme, California submitted the "Preliminary Assessment Report, NETPMSA, Saufley Field, Escambia County, Florida." In this document, NEESA made the following general statements or observations, regarding the OLF Saufley facility:

- Between 1942 and 1976, numerous types of solvents, oils, and fuels were used at Saufley Field to support air operations.
- By volume, more high octane aviation gasoline (AVGAS) was used than any other hazardous material.
- Used solvent and used oil/solvents were the majority of hazardous wastes generated.
- Toluene, carbon tetrachloride, and trichloroethane were a few of the solvents used.
- Exact usage rates of fuels, oils, and solvents at Saufley Field are unknown.
- During aerial operations between 1942 and 1977, 14 USTs and 2 aboveground storage tanks (ASTs) were in service.
- Most of the tanks on the base were removed in late 1980.




FORM CAED NO. EZIV-SHJBVG - REV 1 - 9/10/98

Observations related especifically to Site 4 are as follows:

- When tanks designated for used oil/solvents were full, the contents were transported off base or burned by the base fire department at the fire fighting training pit north of the runways.
- Additional UST tanks used and associated with Hangars 807 and 810 included 1,000-gallon kerosene tanks (Tanks 807-C and 819-C) and 1,000-gallon gasoline tanks (Tanks 807-D and 819-D). Currently, the exact locations of the six USTs associated with the hangars are unknown.
- Used oil/solvents were placed in two 2,000-gallon capacity USTs designated Tanks 807-B and 819-B and located at Hangars 807 and 810, respectively.

### 1.2.2 Environmental Investigations in the Vicinity of Site 4

A site assessment was conducted at UST Site 2406, located southwest of Site 4 (see Figure 1-2), in April and May 1996 by NAS Pensacola Public Works Center (PWC). A total of 10 monitoring wells (9 shallow and 1 deep) were installed and soil samples were collected from boreholes during the installation of the monitoring wells. NAS Pensacola PWC concluded that excessively contaminated soil existed on site and petroleum constituents in the groundwater were present. The source was not determined, and free product was not present on site. NAS Pensacola PWC recommended the development of a Remedial Action Plan (RAP) for soil and development of a Monitoring Only Plan (MOP) to address groundwater contamination.

TtNUS has done extensive additional assessment activities as reported in the Site Assessment Report Addendum (SARA) for UST Site 2406 (TtNUS, 2003) following the PWC work. Based on the recommendations in the SARA, a RAP for free product was completed and the Remedial Action Contractor (RAC) will soon initiate a Vactruck remedial action.

It should be noted that located to the east of OLF Saufley, divided only by E Fence Rd., is the Saufley Landfill, Inc, C&D Disposal Facility administered by Louisiana Investment Group LLC. This landfill has been reported to have several management problems and has not complied with FDEP regulations. According to information available in the FDEP website (http://www.dep.state.fl.us), this landfill has a Consent of Final Judgment ordering the landfill management, Louisiana Investment Group LLC to comply immediately by controlling odors, establishing erosion control measures, paying a civil penalty, and repairing their storm-water management system. As May 9, 2008, the last information available in the FDEP website was a Consent Final Judgement dated March 28, 2008, which orders the payment of civil penalties and FDEP costs the management company of Saufley Landfill. It also sets forward an access agreement that allows personnel and contractors from FDEP to enter and close the site.

### 1.2.3 Regulatory Setting

The Navy Installation Restoration (IR) Program was designed to identify and abate or control contaminant migration resulting from past operations at naval installations, with the goal of expediting and improving environmental response actions while protecting human health and the environment. The IR program is conducted in accordance with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986 and Executive Order 12580. CERCLA requires that federal facilities comply with the act, both procedurally and substantively. Site 4 is being investigated as part of CERCLA requirements. However, due to the history of activities at Site 4 (the four hangar areas, used oil/solvent tanks, and aircraft wash rack areas), the investigation was conducted in general accordance with Chapter 62-777,Florida Administrative Code (FAC) and in general accordance with guidance provided in the Storage Tank System Closure Assessment Requirements of Chapter 62-761, FAC and CERCLA guidance. Combining regulatory guidance allows for maximization of future options relative to possible remedial actions, as well as using the most conservative cleanup approach. Therefore, analytical results were compared to Florida cleanup target levels (CTLs) (Chapter 62-777, FAC) for soil (SCTLs) or groundwater (GCTLs) and USEPA Region IX PRGs.

## 1.3 REPORT ORGANIZATION

This RI Report is organized into eight sections with supporting references and appendices:

- Section 1.0 – Introduction
- Section 2.0 – Study Area Investigation
- Section 3.0 – Physical Characteristics of the Study Area
- Section 4.0 – Nature and Extent of Contamination
- Section 5.0 – Contaminant Fate and Transport
- Section 6.0 – Human Healt Risk Assessment
- Section 7.0 – Screening Level Ecological Risk Assessment
- Section 8.0 – Summary and Conclusions

# 2.0 STUDY AREA INVESTIGATION

Soil and groundwater samples were collected to determine if chemical constituents (primarily petroleum hydrocarbons and chlorinated solvents) used in past operations at OLF Saufley are present in soils and/or groundwater at concentrations representing a risk to human health or the environment or require remediation per regulatory screening guidelines. Soil and groundwater samples were collected for off-site laboratory analysis and the analytical results were screened against appropriate federal and state screening values. As mentioned, analytical results will be compared with CTLs specified in Chapter 62-777, FAC and to the USEPA PRGs. Field activities, such as soil and groundwater sampling and monitoring well installation, were conducted following the Sampling and Analysis Plan for Site Characterization Study for Installation Restoration Sites 4 & 5 (TtNUS, 2005) and in accordance with the FDEP Standard Operating Procedures (SOPs) for Field Activities (FDEP, 2004), the USEPA Environmental Investigations Standard Operating Procedures and Quality Assurance Manual- EISOPQAM (USEPA, 2001), and the Site Specific Health and Safety Plan (TtNUS, 2006).

## 2.1 SURFACE SOIL SAMPLING

The majority of the site (approximately 90 percent) is covered with concrete due to former building locations or parking areas. Therefore, no surface soil samples were collected during the RI. During the sampling events reported in this RI, the most shallow sample was taken from the 2 to 4 foot interval, which is not considered surface soil.

## 2.2 SUBSURFACE SOIL SAMPLING

A total of 78 soil borings were advanced to collect subsurface soil samples for laboratory analysis. The soil samples were submitted to an off-site laboratory for selected VOC, SVOC, ethylene dibromide (EDB), TRPH, PCB, pesticide, herbicide, metal, and cyanide analysis. A description and rationale behind the selection of the soil boring locations follows:

- As part of the investigation, 30 soil borings were sited around the perimeter of Hangars 807 and 810. At these locations, borings were advanced to a maximum depth of 20 feet bls to investigate locations of potential contamination from former USTs and transmission lines.
- Due to past use, 24 soil borings were advanced to a maximum depth of 55 feet at the former wash rack areas of Hangars 807 and 810 to investigate for potential soil contamination.

- To further investigate potential source areas and to characterize the site, seven soil boring were advanced throughout the site to a depth up to 45 feet.
- During the construction of these monitoring wells, seven soil samples collected were co-located with the monitoring wells to further delineate the contaminants.
- Near the western perimeter of the base, 10 soil borings were advanced to a depth of 10 feet to collect samples for comparison of background inorganic analytes.

The soil screening samples were collected from various intervals depending on location, soil cover, depth-to-water, and field measurements. Soil screening samples were collected at each location from ground surface (below any pavement, if present) to the saturated zone of the shallow aquifer. Depth to groundwater at the site ranged from 32 to 57 feet bls. Field data sheets are included in Appendix A and soil boring logs with their respective flame ionization detector (FID) readings are provided in Appendix B.

After coring surface concrete or pavement, the first four feet of each soil investigation location were advanced using a hand auger. A direct-push technology (DPT) rig completed the borings to total depth. DPT samples were taken using 4 foot acetate sleeves. Soil samples were screened in the field for VOCs using a FID. This field screening method provides a qualitative evaluation of potential organic constituents in soil. Samples were collected in the locations where the FID reading indicated a possibility for VOC contamination.

The results of the sampling events will be discussed in detail in the Nature and Extent of Contamination section. However, a summary of the sample analyses is shown in Table 2-1.

## 2.3 MONITOR WELL INSTALLATION

A new permanent monitoring well network, including both shallow and deep monitoring wells, was installed during the RI for groundwater sampling. Well installation was conducted in two events. Since there was no previous sampling data, 12 screening point samples and the geophysical survey helped guide the location of the monitoring wells in the areas that could have been impacted. Information regarding well development, well test analysis, and monitoring well sheets are included in Appendix C.

The first monitoring well installation event was conducted during the months of December 2006 and January 2007. During the first phase, 28 shallow monitoring wells were installed to an approximate depth of 50 feet bls. In addition, eight deep monitoring wells were installed to a depth of at least 75 feet bls. One of the deep wells (OLFS4-MW22D-001) and one of the shallow wells (OLFS4-MW23S-001) were installed to the eastern perimeter of the facility to be used as background samples.

The second phase of monitor well installation took place in early June 2007. During this phase, 10 monitoring wells were installed at total depths ranging from 46 to 65 feet bls. In order to further define and characterize the groundwater contamination around the higher detections, locations and depths were determined using analytical results from the previous sampling event conducted in January 2007.

**TABLE 2-1**
**REMEDIAL INVESTIGATION ANALYSIS SUMMARY**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| METHOD | No. of Soil Samples Analyzed | No. of Groundwater Samples Analyzed |
|---|---|---|
| **VOCs and/or BTEX** | 63 | 57 |
| **TCL SVOCs** | 63 | 49 |
| **TCL Pest/PCBs** | 36 | 49 |
| **Appx IX OP Pest** | 11 | n/a |
| **PAHs** | n/a | 38 |
| **TAL Metals** (except mercury) | 55 | 49 |
| **TRPH** (FL PRO) | 63 | 38 |
| **Cyanide** | 45 | 38 |
| **Mercury** | 45 | 49 |
| **EDB** (SW-846 8011) | n/a | 38 |
| **Metals** (SPLP) | 5 | n/a |
| **TRPH** | n/a | 11 |
| **EDB** (USEPA 504.1) | n/a | 11 |

Notes:

| | |
|---|---|
| TCL VOCs and/or BTEX | Target compound list volatile organic compounds - SW846 Method 8260B |
| TCL SVOCs | Target compound list semivolatile organic compounds -SW846 Method 8270C |
| TCL Pest/PCBs | Target compound list pesticides and PCBs - SW846 Methods 8082 |
| Appx IX OP pest | Appendix IX organophosphorus pesticides - SW846 Method 8081A |
| PAHs | Polycyclic aromatic hydrocarbons - SW846 Method 8270C SIM |
| TAL Metals (Except Mercury) | Target analyte list metals except Mercury - SW846 Method 6010B |
| TRPH (FL-PRO) | Total Recoverable Petroleum Hydrocarbons Method Florida Petroleum Range Organics |
| Cyanide | SW846 Method 9012A |
| Mercury | SW846 Method 7471A |
| EDB (SW-846 8011) | Ethylene Dibromide SW846 Method 8011 |
| Metals (SPLP) | Metals (Synthetic Precipitation Leaching Procedure) SW846 - Method 3050B) |
| TRPH | SW846 Method 8015M |
| EDB (USEPA 504.1) | Ethylene Dibromide USEPA Method 504.1 |

All monitoring wells were installed using sonic drilling methods. The monitoring wells were installed and constructed in accordance with NAVFAC SE and FDEP guidance documents. Well construction details are provided in Table 2-2 and Appendix C.

Following well installation, the top-of-casing elevations for the new wells were surveyed using the North American Vertical Datum of 1988 (NAVD88) as a vertical datum, and the North American Datum of 1983 (NAD83) as the horizontal datum.

## 2.4 GROUNDWATER SAMPLING

During the initial sampling events, 28 shallow monitoring wells and 8 deep monitoring wells were sampled. Static water levels and total well depths were measured on January 9, 2007 and on June 11, 2007. Groundwater samples were collected from the monitoring wells between December 7, 2006 and January 8, 2007.

The second round of water sampling was conducted after the installation and development of the 10 additional monitor wells installed around June 11, 2007. The wells were purged and sampled using submersible pumps and low-flow quiescent purging technique in acccordance with existing FDEP and TtNUS SOPs. The monitoring wells were purged in accordance with FS 2212, Well Purging Techniques (FDEP, 2004). Groundwater samples were collected from June 12 through June 17, 2007 in accordance with FS 2220, Groundwater Sampling Techniques (FDEP, 2004). Water level and groundwater sampling records are included in Appendix C.

The groundwater samples collected from monitor wells during both phases of sampling were analyzed for Contract Laboratory Program (CLP) target compound list (TCL) VOCs (USEPA Method SW-846 8260B), high and low concentration SVOCs (USEPA Method SW-846 8270C and 8270C SIM), TRPH (FL-PRO and SW-846 Method 8015m), cyanide USEPA Method SW-846 9012A), EDB (USEPA Method SW-846 8011), Target Analyte List (TAL) pesticides and PCBs (SW-846 Method 8082), and TAL metals (USEPA Method SW-846 6010B). All samples were packed in ice and sent to Emperical Laboratories overnight via Federal Express.

Water quality data, including temperature, specific conductance, dissolved oxygen, turbidity, and pH were monitored during purging and well development, prior to sampling. This information is provided in Appendix C.

**TABLE 2-2**
**MONITORING WELL CONSTRUCTION DETAILS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| WELL DESIGNATION | INSTALLATION DATE | WELL DIAMETER | WELL MATERIAL | TOTAL DEPTH (feet below top of casing) | SCREENED INTERVAL (≈ feet bls) | TOP OF CASING ELEVATION (feet msl) |
|---|---|---|---|---|---|---|
| OLFS4-MW01D2 | 11/29/2006 | 2-inch ID | PVC | 129.81 | 125-130 | 81.44 |
| OLFS4-MW02D | 11/29/2006 | 2-inch ID | PVC | 79.49 | 75-80 | 81.85 |
| OLFS4-MW03S | 11/30/2006 | 2-inch ID | PVC | 59.02 | 40-60 | 82.27 |
| OLFS4-MW04D | 11/30/2006 | 2-inch ID | PVC | 79.03 | 75-80 | 83.41 |
| OLFS4-MW05S | 11/30/2006 | 2-inch ID | PVC | 55.02 | 40-55 | 82.86 |
| OLFS4-MW06S | 11/30/2006 | 2-inch ID | PVC | 55.51 | 40-55 | 82.59 |
| OLFS4-MW07S | 12/1/2006 | 2-inch ID | PVC | 54.82 | 40-55 | 82.97 |
| OLFS4-MW08S | 12/1/2006 | 2-inch ID | PVC | 55.71 | 40-55 | 83.35 |
| OLFS4-MW09S | 12/1/2006 | 2-inch ID | PVC | 51.89 | 37-52 | 83.22 |
| OLFS4-MW10D | 12/1/2006 | 2-inch ID | PVC | 84.97 | 80-85 | 83.30 |
| OLFS4-MW11S | 12/2/2006 | 2-inch ID | PVC | 39.82 | 25-40 | 83.50 |
| OLFS4-MW12S | 12/2/2006 | 2-inch ID | PVC | 45.13 | 25-45 | 83.50 |
| OLFS4-MW13S | 12/2/2006 | 2-inch ID | PVC | 45.01 | 25-45 | 83.22 |
| OLFS4-MW14D | 12/3/2006 | 2-inch ID | PVC | 79.85 | 75-80 | 81.49 |
| OLFS4-MW15S | 12/3/2006 | 2-inch ID | PVC | 56.65 | 40-55 | 82.71 |
| OLFS4-MW16S | 12/3/2006 | 2-inch ID | PVC | 54.70 | 40-55 | 83.24 |
| OLFS4-MW17S | 12/3/2006 | 2-inch ID | PVC | 55.26 | 35-55 | 83.45 |
| OLFS4-MW18S | 12/4/2006 | 2-inch ID | PVC | 55.00 | 40-55 | 82.84 |
| OLFS4-MW19S | 12/4/2006 | 2-inch ID | PVC | 55.70 | 40-55 | 83.03 |
| OLFS4-MW20S | 12/4/2006 | 2-inch ID | PVC | 44.68 | 30-45 | 83.31 |
| OLFS4-MW21S | 12/5/2006 | 2-inch ID | PVC | 44.79 | 30-45 | 83.41 |
| OLFS4-MW22D | 12/5/2006 | 2-inch ID | PVC | 90.39 | 86-91 | 90.06 |
| OLFS4-MW23S | 12/5/2006 | 2-inch ID | PVC | 39.87 | 20-40 | 90.20 |
| OLFS4-MW24S | 12/6/2006 | 2-inch ID | PVC | 55.55 | 40-55 | 82.42 |
| OLFS4-MW25S | 12/7/2006 | 2-inch ID | PVC | 55.21 | 40-55 | 82.52 |
| OLFS4-MW26D | 12/7/2006 | 2-inch ID | PVC | 81.37 | 76-81 | 81.98 |
| OLFS4-MW27S | 12/6/2006 | 2-inch ID | PVC | 54.85 | 40-55 | 82.33 |
| OLFS4-MW28S | 12/13/2006 | 2-inch ID | PVC | 45.31 | 30-45 | 81.72 |
| OLFS4-MW29D | 12/13/2006 | 2-inch ID | PVC | 79.85 | 75-80 | 82.21 |
| OLFS4-MW30S | 12/13/2006 | 2-inch ID | PVC | 39.63 | 25-40 | 82.51 |
| OLFS4-MW31S | 12/13/2006 | 2-inch ID | PVC | 39.82 | 25-40 | 83.14 |
| OLFS4-MW32S | 12/14/2006 | 2-inch ID | PVC | 39.46 | 25-40 | 82.55 |
| OLFS4-MW33S | 12/14/2006 | 2-inch ID | PVC | 39.75 | 25-40 | 82.71 |
| OLFS4-MW34S | 12/14/2006 | 2-inch ID | PVC | 39.60 | 25-40 | 83.27 |
| OLFS4-MW35S | 12/14/2006 | 2-inch ID | PVC | 36.12 | 25-40 | 82.39 |
| OLFS4-MW36S | 12/14/2006 | 2-inch ID | PVC | 39.02 | 25-40 | 82.52 |
| OLFS4-MW37S | 6/4/2007 | 2-inch ID | PVC | 64.51 | 55-65 | 82.50 |
| OLFS4-MW38S | 6/4/2007 | 2-inch ID | PVC | 65.09 | 55-65 | 82.02 |
| OLFS4-MW39S | 6/5/2007 | 2-inch ID | PVC | 54.89 | 45-55 | 82.91 |
| OLFS4-MW40S | 6/5/2007 | 2-inch ID | PVC | 64.86 | 55-65 | 82.95 |
| OLFS4-MW41S | 6/5/2007 | 2-inch ID | PVC | 64.95 | 55-65 | 84.01 |
| OLFS4-MW42S | 6/6/2007 | 2-inch ID | PVC | 46.53 | 36-46 | 82.09 |
| OLFS4-MW43S | 6/6/2007 | 2-inch ID | PVC | 51.32 | 41-51 | 81.37 |
| OLFS4-MW44S | 6/6/2007 | 2-inch ID | PVC | 54.82 | 45-55 | 81.42 |
| OLFS4-MW45S | 6/7/2007 | 2-inch ID | PVC | 61.05 | 51-61 | 80.81 |
| OLFS4-MW46S | 6/7/2007 | 2-inch ID | PVC | 55.85 | 46-56 | 83.36 |

Notes:
bls - below land surface
msl - mean sea level
Top of casing elevations in feet above mean sea level
Elevations referenced to North American Vertical Datum
ID - Internal diameter
PVC - polyvinyl chloride

## 2.5 AQUIFER TESTING

Extensive aquifer testing has been completed previously at adjacent Site 2406, which is south of Hangar 807. Therefore, additional aquifer tests were not conducted as part of the Site 4 RI, because both sites are in close proximity and share site-specific and geologic similiarities. The results of the Site 2406 slug tests have been incorporated in the Site 4 RI and it has been included in the groundwater discussion presented in Section 3.6.2. Also, tables and figures from the SARA for UST Site 2406 (TtNUS, 2003) are included in Appendix D.

## 2.6 BACKGROUND SAMPLES

Ten (10) background soil samples and two background monitoring well samples were collected and analyzed for pesticides, metals, PCBs, PAHs and VOCs. Concentration of background samples were used to determine background concentrations for the indicated parameters. Details of the results will be discussed in the Nature and Extent of Contamination section.

## 2.7 DIRECT PUSH SCREENING POINT SAMPLING

At the Hangars 807 and 810 washrack areas, 12 aqueous samples were collected in order to have an accellerated turn around analytical results regarding the contaminants present in the shallow groundwater. The accelerated analytical results were used to determine the location of monitoring wells while the field crew were still present at the site.

## 2.8 GEOPHYSICAL SURVEY

A geophysical survey was performed in the area surrounding Hangars 807 and 810. The survey included the use of a high resolution metal detector (Geonics EM-61-MK2) and a ground penetrating radar (GSSIs SIR3000). The objective of the geophysical survey was to investigate for the presence and location of any USTs in the vicinity of Hangars 807 and 810. The investigation included the area east of Hangar 807 and the area both east and west of Hangar 810.

Results of the survey are explained in the Nature and Extent Section 4.3 and a copy of the geophysical survey report is included in the Appendix E.

# 3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

Data to evaluate site conditions and characteristics were obtained from available literature and previous investigations at the OLF Saufley facility.

## 3.1 SURFACE FEATURES

OLF Saufley is located in the southeastern portion of Escambia County, Florida, approximately 1 mile northeast of Perdido Bay. The facility occupies the Coastal Plain Providence of the United States. Terrain surrounding the facility is generally flat, except in stream valleys, sloping gently toward the south. The land surface elevations on OLF Saufley range from 75 to 90 feet above mean sea level.

Site 4 lies between Sprague Avenue and the southern runways (Figure 1-2), on the eastern slope of a low area between Sprague Avenue and Raby Avenue and across the street from the entrance to the Officers' Quarters. The area covers approximately 713,000 square feet and the site elevation is approximately 80 feet above mean sea level. Additionally, there are approximately 2 feet of vertical relief across the site. Most of the site (greater than 90 percent) is paved or has buildings located on it. Grass and shrubs cover landscape islands and building lawns.

## 3.2 METEOROLOGY

Escambia County has a warm, humid-temperate climate [average temperature of 67 degrees Fahrenheit (°F)]. Along the coast, the Gulf of Mexico moderates high temperatures in the summer and low temperatures in the winter. Average total annual precipitation is about 62 inches. The greatest amount of rain falls in July and August [United States Department of Agriculture (USDA), 2004]. High intensity thunderstorms are common, producing as much as 3 to 4 inches of rainfall during a single hour. However potential recharge from heavy summer rains is reduced by high evaporation rates in the summer. Spring and fall rains are generally less intense, but longer in duration producing less surface runoff, but higher rates of infiltration and net recharge. Occasionally, short droughts occur in late spring. Also, due to its proximity to deep, warm gulf waters, the area is vulnerable to hurricanes. The last major hurricane to affect the area was hurricane "Ivan" in September 2004.

## 3.3 SURFACE WATER HYDROLOGY

OLF Saufley is bordered on the southwest by Perdido Bay and to the north by Eleven Mile Creek and Eight Mile Creek. Also, Escambia Bay lies approximately 8 miles to the southeast. Swampy areas exist adjacent to the western portion of OLF Saufley. However, sandy surface soil in the majority of the area

allows for a high portion of rainfall to infiltrate into the ground, resulting in relatively few streams. The surface topography has little dissection and the natural drainage system is poorly developed. Much of the surface drainage has been constructed or modified to accommodate structures on base. Base run-off makes its way to Perdido Bay via a man made drainage ditch.

There are two perennial streams located within the bounds of OLF Saufley. Eight Mile Creek merges with Eleven Mile Creek in the northwestern portion of the installation. Several small (less than 5 acres) freshwater impoundments, associated with the aforementioned stream system, exist in the northwest portion of the installation.

Site 4 is located within the central portion of the facility on the eastern slope of a shallow closed depression bound by paved roads on all four sides. Therefore, surface water features are not present at the site and overland runoff is to the west towards Perdido River and Perdido Bay.

## 3.4 GEOLOGY

The surficial geology of the area consists of Pleistocene marine deposits made up of light brown to tan, fine quartz sand with associated stringers and lenses of gravel and clay. Underlying these deposits, increasing with age, are the Citronelle Formation, the Miocene Coarse Clastics, the Pensacola Clay, the Tampa Formation, the Chickasawhay Limestone, the Bucatunna Clay member of the Byram Formation, the Ocala Group, the Lisbon equivalent, the Tallahatta Formation, and the Hatchetigbee Formation. The Pleistocene deposits and Citronelle formation are often impossible to differentiate, and together range in thickness from approximately 30 feet to 800 feet across the county (NEESA, 1983).

The lithologies observed during drilling of Site 4 monitoring wells are typical of the undifferentiated Pleistocene marine deposits. The first lithology penetrated was a brownish silty sand. The second lithology encountered was a silty sand with a varying clay content. This horizon usually had a "mottled" appearance. Predominantlly lighter colored material with darker laminae interspersed throughout, with color of the lighter material varying from tan to yellow. Below the second layer, the lithology was variable depending on location. Subsequent layers were similar to those already penetrated or some combination of the two. Significant clay or gravel horizons were not encountered (TtNUS, 2007).

## 3.5 SOIL

Soil at OLF Saufley is mostly of the Bonifay Series, which consists of very deep, well drained soils formed in sandy and loamy marine sediments (USDA, 2004). These types of soil occur on the summits, shoulder slopes, and side slopes in uplands. The soil mapping unit at Site 4 is the Bonifay Loamy Sand 0 to 5 percent slopes and occurs from 0 to 80 inches in undisturbed areas. Slopes are long and smooth.

Typically the surface layer is loamy dark brown sand about 3 inches thick. The substratum is yellow to reddish brown silty clayey sand with varying amounts of each at a maximum thickness of 80 inches (USDA, 2004).

The soil observed while collecting soil samples at Site 4 are comparable in texture and color of the description of the Bonifay Sand. The ground surface to the 3-foot interval at most of the soil sampling locations beneath concrete showed signs of disturbance, probably from level and fill operations during base construction.

## 3.6 GROUNDWATER HYDROLOGY

Groundwater in Escambia County occurs in three major aquifers: a shallow surficial aquifer, which is artesian and non-artesian (the sand and gravel aquifer), and two deep artisan aquifers (the upper and lower limestones of the Floridan aquifer). Because the shallow surficial aquifier is partly unconfined and recharged principally by direct infiltration of rain, this aquifier is particularly susceptible to contamination from surface sources (Musgrove et al., 1965).

### 3.6.1 Regional Hydrology

In the southern half of Escambia County, the sand, and gravel aquifer and the upper limestone of the Floridan aquifer are separated by a thick section of relatively impermeable clay; but, in the northern half the sand and gravel aquifer and the upper limestone of the Floridan aquifer are in contact with one another. The upper limestone of the Floridan aquifer is separated from the lower limestone by a thick clay bed (Musgrove et. al., 1965).

The sand and gravel aquifer is composed of sand but has numerous lenses and layers of clay and gravel. The formation also contains lenses of hardpan where the sand has been cemented by iron oxide minerals. This aquifer lies at the surface throughout Escambia County. Logs of borings from various locations throughout OLF Saufley show that the surficial sands extend from ground surface to a depth of at least 129 feet mean sea level, below which is a 15-foot thick marine clay, the continuity of which is uncertain. Underlying the clay is more sand with numerous clay lenses (Geraghty and Miller, 1986).

Water levels in the shallow aquifer range from 27 feet (near the southeastern perimeter of the facility) to approximately 50 feet bls near the western edge of Site 4. The groundwater flow has historically been toward the Gulf of Mexico and the Escambia and Perdido Rivers, however groundwater flow can vary locally due to the effect of topography or surface water bodies. Also, the aquifer recharge is predominantly from local precipitation (Trapp, 1973).

The shallow saturated permeable beds in the sand and gravel aquifer contain groundwater under nonartesian conditions, while the deeper permeable beds contain groundwater under artesian pressure, where they are confined by lenses of clay and sandy clay (NEESA, 1983).

Below the sand and gravel aquifer, the limestone layers comprise the regionally extensive Floridan aquifer, which in this area is divided into upper and lower units separated by the Bucatunna clay. The upper Floridan aquifer is an important source of water in areas east of Escambia County; however, in the Pensacola area it is highly mineralized and not used as a water supply. The lower Floridan aquifer is also highly mineralized and is designated for use as an injection zone (Geraghty and Miller, 1986).

### 3.6.2 Site Specific Hydrology

Hydrogeologic data were collected to evaluate movement of groundwater in the shallow surficial aquifer at Site 4. Depth to groundwater and groundwater elevation were used to determine the site specific groundwater flow direction and water table gradient. Groundwater flow velocity at the site was estimated using the hydraulic conductivity values reported from the field investigation at Site 2406, which is located to the south of the western portion of Site 4 on the south side of Sprague Avenue (TtNUS, 2003).

#### 3.6.2.1 Static Water Level and Groundwater Elevations

Static water level measurement data and total depths were first recorded from Site 4 monitoring wells on January 9, 2007 and June 11, 2007 (Table 3-1). The static water level measurement data and the elevations from the well top-of-casings were used to determine groundwater elevations at each well. See Appendix C – Groundwater Level Measurement Sheet.

Monitoring wells installed at Site 4 are grouped by the subsurface interval of the well screen:

- Shallow Wells (S identifier) - Screened up to 75 feet below grade
- Deep Wells (D identifier) - Screened from 75 to 130 feet below grade

On January 9, 2007, the relative groundwater elevations in the shallow monitoring wells ranged from 64.63 feet in OLFS4-MW23S on the east side of the site to 34.16 feet in OLFS4-MW27S on the west side of the site. Also, the groundwater elevations for deep monitoring wells ranged from 39.60 feet in OLFS4-MW29D to 32.66 feet at OLFS4-MW01D2 .

On June 11, 2007, static water levels were recorded during the second round of water sampling from a total of 46 monitoring wells including 10 additional wells not measured during the first event. The shallow monitoring wells ranged from 63.07 feet in OLFS4-MW23S on the east side of the site to 31.68 feet in

**TABLE 3-1**
**STATIC WATER LEVELS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| MONITORING WELL ID | TOTAL DEPTH | AQUIFER ZONE | TOP OF CASING ELEVATION | 1/9/2007 | | 6/11/2007 | |
|---|---|---|---|---|---|---|---|
| | | | | DEPTH TO WATER | GROUNDWATER ELEVATION | DEPTH TO WATER | GROUNDWATER ELEVATION |
| OLFS4-MW01D2 | 129.81 | Deep | 81.44 | 48.78 | 32.66 | 50.47 | 30.97 |
| OLFS4-MW02D | 79.49 | Deep | 81.85 | 48.01 | 33.84 | 49.58 | 32.27 |
| OLFS4-MW03S | 59.02 | Shallow | 82.27 | 46.19 | 36.08 | 46.82 | 35.45 |
| OLFS4-MW04D | 79.03 | Deep | 83.41 | 49.26 | 34.15 | 50.78 | 32.63 |
| OLFS4-MW05S | 55.02 | Shallow | 82.86 | 47.51 | 35.35 | 48.45 | 34.41 |
| OLFS4-MW06S | 55.51 | Shallow | 82.59 | 45.48 | 37.11 | 46.21 | 36.38 |
| OLFS4-MW07S | 54.82 | Shallow | 82.97 | 47.35 | 35.62 | 48.25 | 34.72 |
| OLFS4-MW08S | 55.71 | Shallow | 83.35 | 48.57 | 34.78 | 49.66 | 33.69 |
| OLFS4-MW09S | 51.89 | Shallow | 83.22 | 47.90 | 35.32 | 48.86 | 34.36 |
| OLFS4-MW10D | 84.97 | Deep | 83.30 | 44.28 | 39.02 | 46.20 | 37.10 |
| OLFS4-MW11S | 39.82 | Shallow | 83.50 | 32.73 | 50.77 | 34.84 | 48.66 |
| OLFS4-MW12S | 45.13 | Shallow | 83.50 | 35.53 | 47.97 | 38.02 | 45.48 |
| OLFS4-MW13S | 45.01 | Shallow | 83.22 | 34.18 | 49.04 | 36.78 | 46.44 |
| OLFS4-MW14D | 79.85 | Deep | 81.49 | 47.10 | 34.39 | 48.70 | 32.79 |
| OLFS4-MW15S | 56.65 | Shallow | 82.71 | 48.10 | 34.61 | 49.50 | 33.21 |
| OLFS4-MW16S | 54.70 | Shallow | 83.24 | 48.09 | 35.15 | 49.48 | 33.76 |
| OLFS4-MW17S | 55.26 | Shallow | 83.45 | 45.87 | 37.58 | 47.15 | 36.30 |
| OLFS4-MW18S | 55.00 | Shallow | 82.84 | 42.42 | 40.42 | 43.81 | 39.03 |
| OLFS4-MW19S | 55.70 | Shallow | 83.03 | 47.85 | 35.18 | 49.28 | 33.75 |
| OLFS4-MW20S | 44.68 | Shallow | 83.31 | 40.02 | 43.29 | 42.74 | 40.57 |
| OLFS4-MW21S | 44.79 | Shallow | 83.41 | 40.69 | 42.72 | 43.24 | 40.17 |
| OLFS4-MW22D | 90.39 | Deep | 90.06 | 51.21 | 38.85 | 53.55 | 36.51 |
| OLFS4-MW23S | 39.87 | Shallow | 90.20 | 25.57 | 64.63 | 27.13 | 63.07 |
| OLFS4-MW24S | 55.55 | Shallow | 82.42 | 48.24 | 34.18 | 49.73 | 32.69 |
| OLFS4-MW25S | 55.21 | Shallow | 82.52 | 46.78 | 35.74 | 47.67 | 34.85 |
| OLFS4-MW26D | 81.37 | Deep | 81.98 | 42.44 | 39.54 | 44.26 | 37.72 |
| OLFS4-MW27S | 54.85 | Shallow | 82.33 | 48.17 | 34.16 | 49.36 | 32.97 |
| OLFS4-MW28S | 45.31 | Shallow | 81.72 | 30.46 | 51.26 | 32.82 | 48.90 |
| OLFS4-MW29D | 79.85 | Deep | 82.21 | 42.61 | 39.60 | 44.61 | 37.60 |
| OLFS4-MW30S | 39.63 | Shallow | 82.51 | 31.76 | 50.75 | 34.14 | 48.37 |
| OLFS4-MW31S | 39.82 | Shallow | 83.14 | 30.96 | 52.18 | 33.80 | 49.34 |
| OLFS4-MW32S | 39.46 | Shallow | 82.55 | 30.23 | 52.32 | 32.21 | 50.34 |
| OLFS4-MW33S | 39.75 | Shallow | 82.71 | 29.31 | 53.40 | 31.84 | 50.87 |
| OLFS4-MW34S | 39.60 | Shallow | 83.27 | 31.41 | 51.86 | 34.14 | 49.13 |
| OLFS4-MW35S | 36.12 | Shallow | 82.39 | 29.32 | 53.07 | 30.93 | 51.46 |
| OLFS4-MW36S | 39.02 | Shallow | 82.52 | 29.85 | 52.67 | 32.44 | 50.08 |
| OLFS4-MW37S | 64.51 | Shallow | 82.68 | NOT MEASURED | | 50.84 | 31.68 |
| OLFS4-MW38S | 65.09 | Shallow | 82.50 | | | 48.72 | 33.80 |
| OLFS4-MW39S | 54.89 | Shallow | 82.02 | | | 46.49 | 36.03 |
| OLFS4-MW40S | 64.86 | Shallow | 82.91 | | | 48.79 | 33.73 |
| OLFS4-MW41S | 64.95 | Shallow | 82.95 | | | 43.05 | 39.47 |
| OLFS4-MW42S | 46.53 | Shallow | 84.01 | | | 30.02 | 52.50 |
| OLFS4-MW43S | 51.32 | Shallow | 82.09 | | | 33.25 | 49.27 |
| OLFS4-MW44S | 54.82 | Shallow | 81.37 | | | 32.66 | 49.86 |
| OLFS4-MW45S | 35.11 | Shallow | 81.42 | | | 33.97 | 48.55 |
| OLFS4-MW46S | 32.87 | Shallow | 80.81 | | | 32.73 | 49.79 |
| 2406-MW19S | 54.33 | Shallow | 92.55 | | | 44.83 | 37.69 |
| 2406-DMW25 | 79.73 | Deep | 83.28 | | | 49.41 | 33.11 |
| 2406-MW26 | 64.80 | Shallow | 92.33 | | | 47.62 | 34.90 |
| 2406-DMW27 | 65.25 | Shallow | 91.55 | | | 44.39 | 38.13 |
| 2406-DMW28 | 78.61 | Deep | 90.70 | | | 48.22 | 34.30 |
| 2406-DMW29 | 78.74 | Deep | 81.68 | | | 41.77 | 40.75 |
| 2406-DMW30 | 79.85 | Deep | 82.26 | | | 42.30 | 40.22 |
| 2406-MW46 | 51.93 | Shallow | 84.01 | | | 46.75 | 35.77 |
| 2406-MW47S | 56.44 | Shallow | 82.98 | | | 49.34 | 33.18 |

Notes:
Top-of-casing elevations in feet above mean sea level
Depths in feet below top-of-casing

OLFS4-MW37S. Moreover, the groundwater elevations for deep monitoring wells ranged from 37.72 feet in OLFS4-MW26D to 30.97 feet at OLFS4-MW01D2 .

#### 3.6.2.2 Groundwater Flow Direction

To evaluate the direction of groundwater flow at the water table, the groundwater elevations measured in two events (first in January 2007 and then in June 2007) from the shallow and deep monitoring wells were plotted on site maps (Figure 3-1 through Figure 3-4). Interpretation of data from the site gauging events indicate that the groundwater flow in the shallow screened groundwater interval (40-75 feet bls) is to the northwest as well as the deep screened groundwater interval (75-130 feet bls). Groundwater elevation isocontours were drawn from the plotted data. Groundwater flow direction is predicted to be perpendicular to the elevation isocontours. Interpretation of data from Site 4 indicates that overall, groundwater flow at the water table is to the northwest.

#### 3.6.2.3 Water Table Gradient

The average horizontal groundwater gradient across the site was calculated from the groundwater elevations measured in shallow monitoring wells and the estimated groundwater flow direction.

The groundwater flow gradient was determined using the following equation:

$$l = \frac{h_1 - h_2}{d}$$

where:

$l$ = the hydraulic gradient

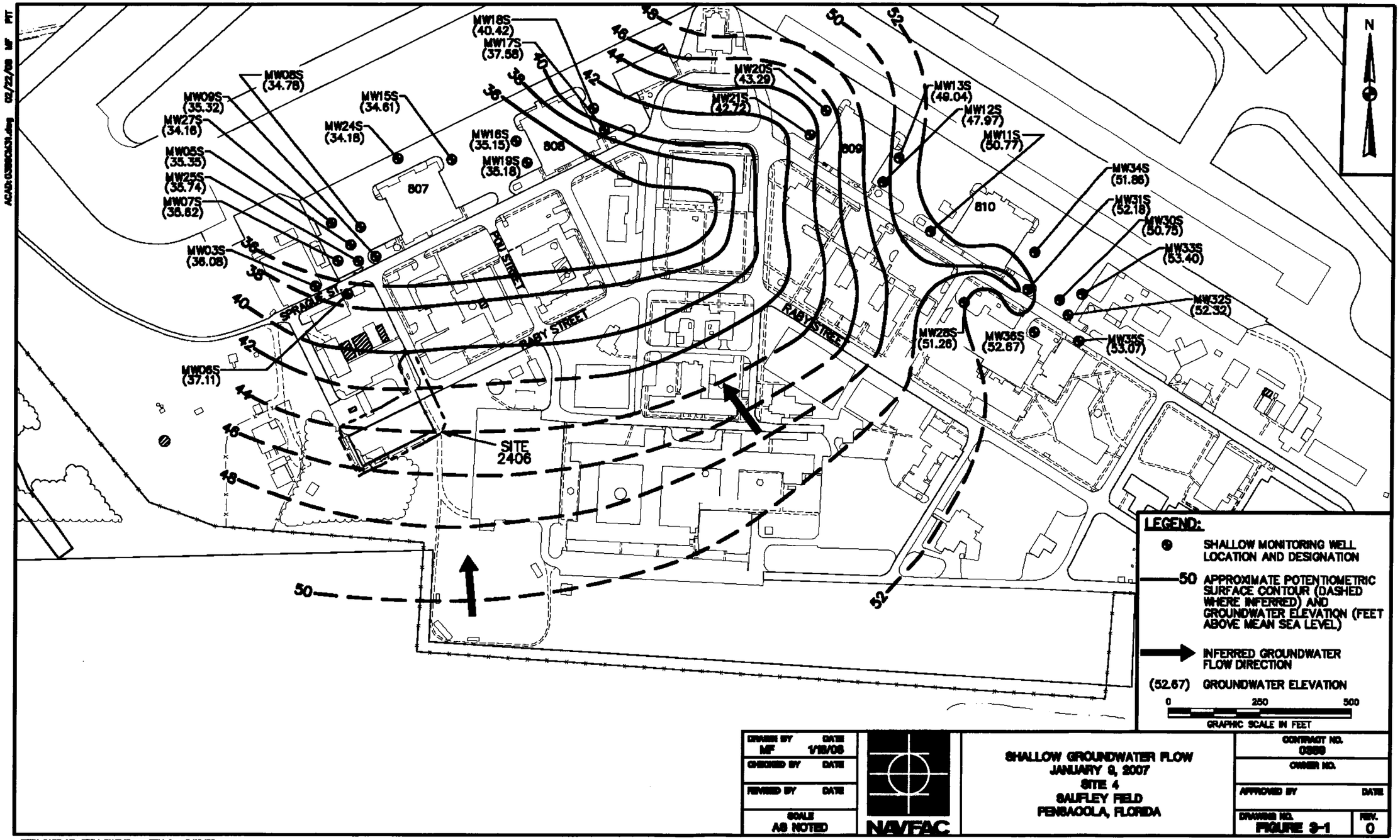
$h_1$ = the water elevation at point 1, the highest value

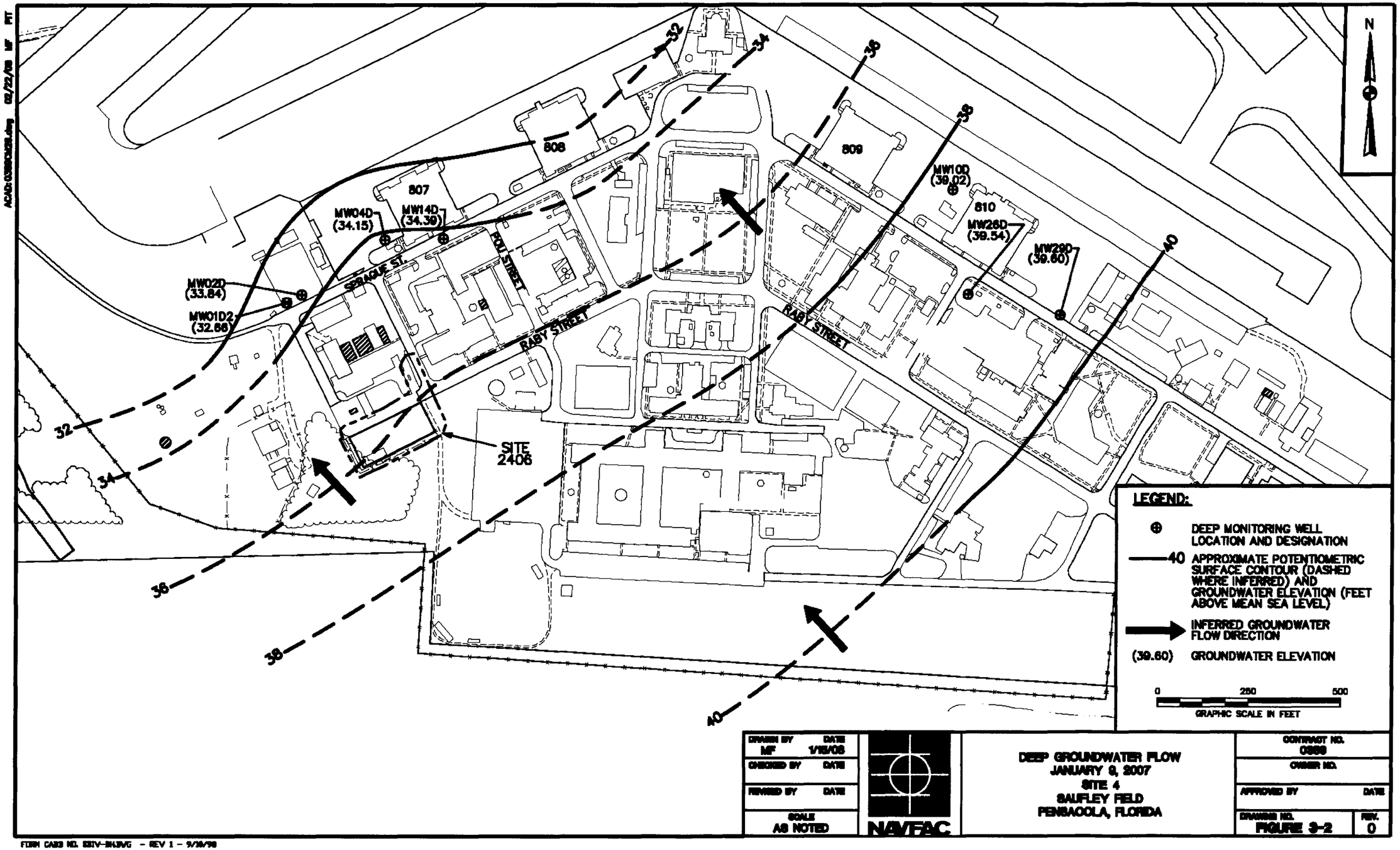
$h_2$ = the water elevation at point 2, the lowest value

$d$ = the horizontal distance between point 1 and point 2 parallel to the direction of groundwater flow

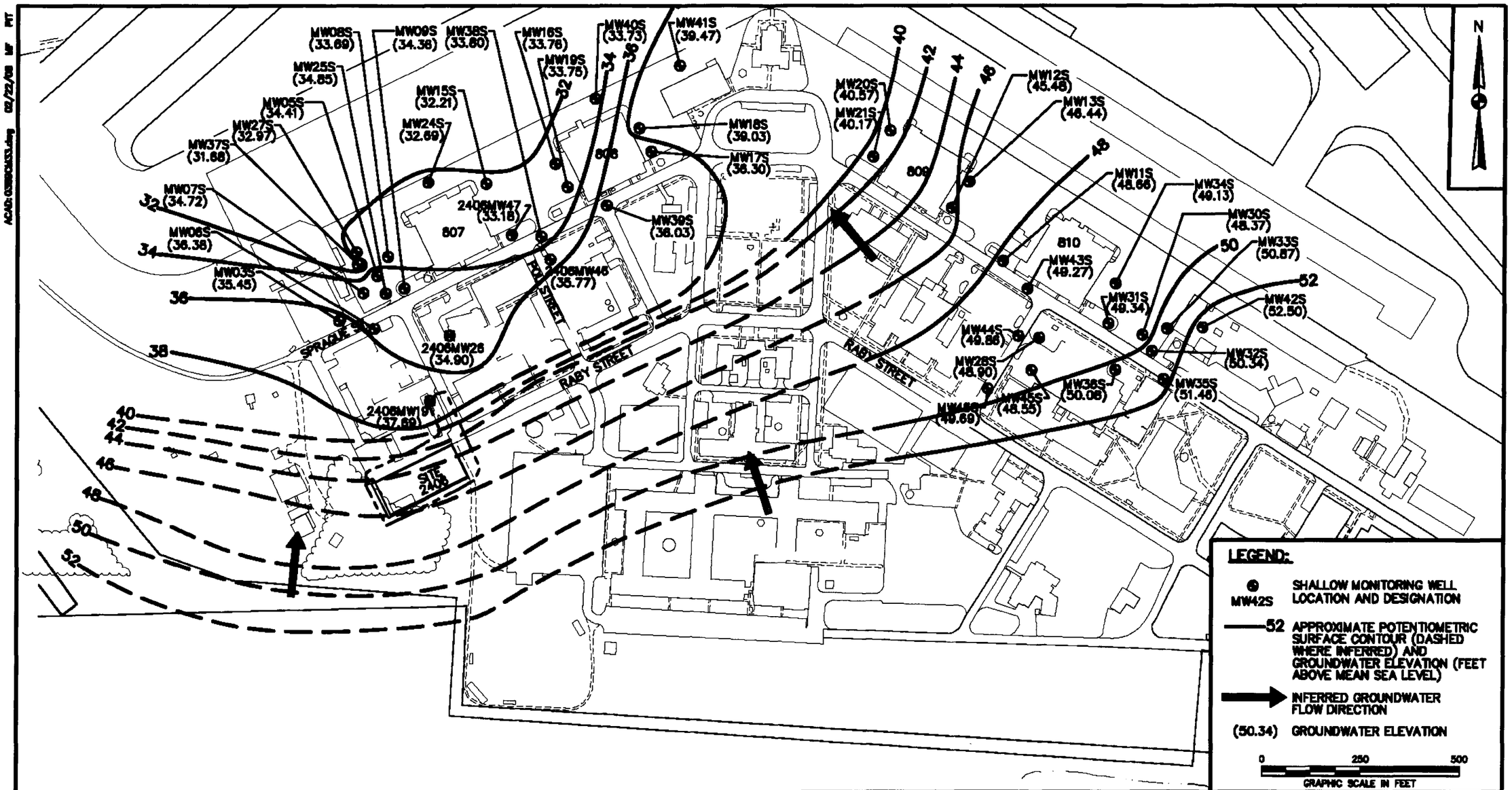
The highest and lowest groundwater elevation values measured in the water table monitoring wells were used to determine the difference in groundwater elevation across the site. The horizontal distance between the high and low groundwater elevation points was measured parallel to the estimated groundwater flow direction.

For example, on January 9, 2007, OLFS4-MW23S (64.63 feet) was the highest reported elevation and the groundwater elevation in OLFS4-MW27S (34.16 feet) was the lowest among the shallow monitoring wells. The horizontal distance between these two wells is approximately 3,713 feet. These data result in


MW18S (40.42)
MW17S (37.58)
MW20S (43.29)
MW21S (42.72)
MW13S (49.04)
MW12S (47.97)
MW11S (50.77)
MW08S (34.78)
MW09S (35.32)
MW27S (34.16)
MW15S (34.61)
MW24S (34.18)
MW16S (35.15)
MW19S (35.18)
MW05S (35.35)
MW25S (35.74)
MW07S (36.82)
MW03S (36.08)
MW06S (37.11)
MW34S (51.86)
MW31S (52.18)
MW30S (50.75)
MW33S (53.40)
MW32S (52.32)
MW28S (51.26)
MW36S (52.67)
MW35S (53.07)
807
808
809
810
SPRAGUE ST.
FOY STREET
RABY STREET
SITE 2406
N
LEGEND:
SHALLOW MONITORING WELL LOCATION AND DESIGNATION
50 APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED) AND GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
INFERRED GROUNDWATER FLOW DIRECTION
(52.67) GROUNDWATER ELEVATION
0 250 500
GRAPHIC SCALE IN FEET
DRAWN BY MF DATE 1/18/08
CHECKED BY DATE
REVISED BY DATE
SCALE AS NOTED
NAVFAC
SHALLOW GROUNDWATER FLOW
JANUARY 9, 2007
SITE 4
SAUFLEY FIELD
PENSACOLA, FLORIDA
CONTRACT NO. 0389
OWNER NO.
APPROVED BY DATE
DRAWING NO. FIGURE 3-1
REV. 0



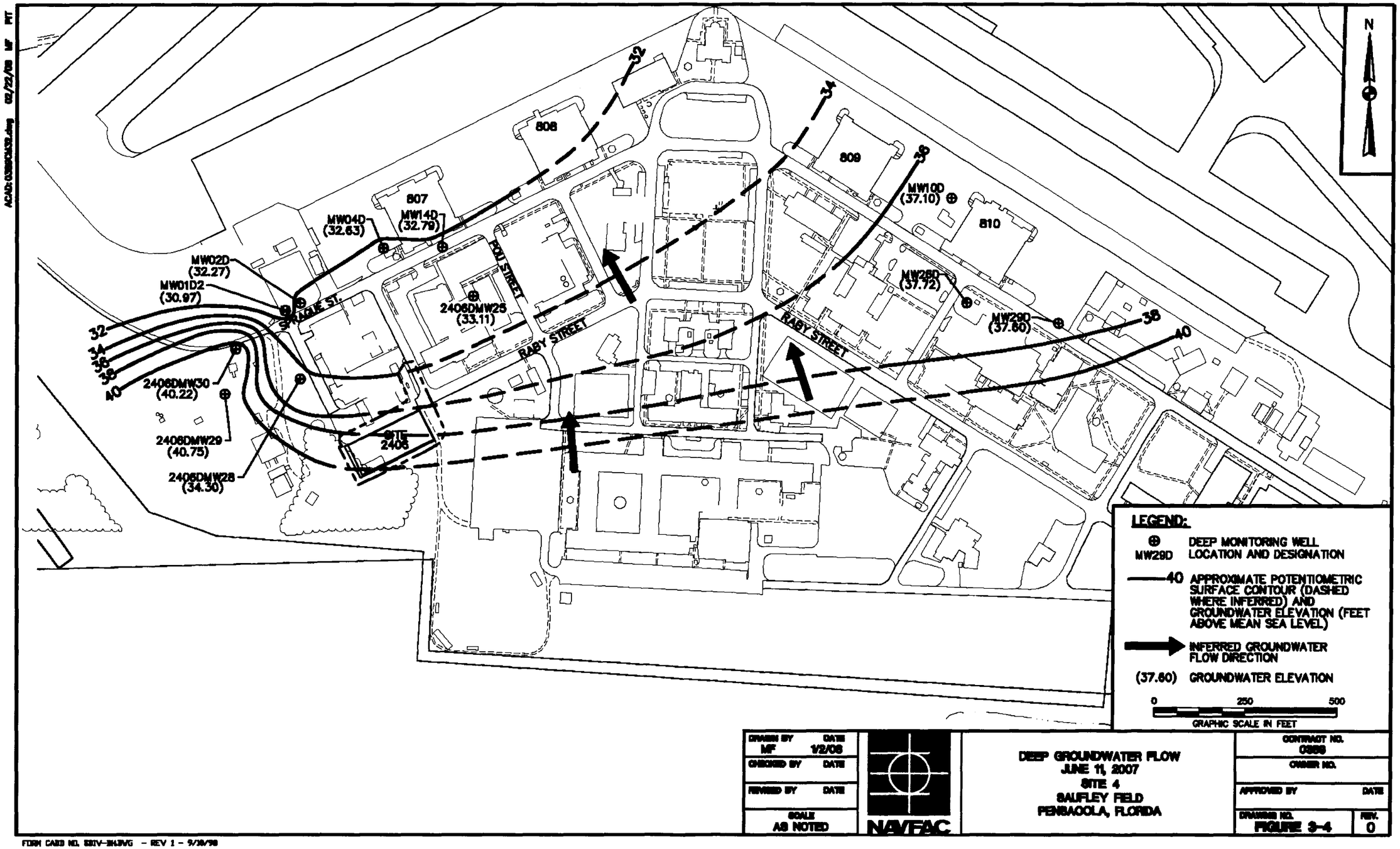

FIRM CAGE NO. 81XV-[illegible]/G - REV 1 - 9/30/98




| | | | |
|---|---|---|---|
| DRAWN BY: MF | DATE: 1/2/08 | NAVFAC | SHALLOW GROUNDWATER FLOW<br>JUNE 11, 2007<br>SITE 4<br>SAUFLEY FIELD<br>PENSACOLA, FLORIDA |
| CHECKED BY: | DATE: | | CONTRACT NO.: 0389 |
| REVISED BY: | DATE: | | OWNER NO.: |
| SCALE: AS NOTED | | | APPROVED BY: DATE: |
| | | | DRAWING NO.: FIGURE 3-3 REV.: 0 |

FORM CAD NO. EDIV-SHEET - REV 1 - 9/30/98

Rev. 1
5/12/08




| | | | |
|---|---|---|---|
| DRAWN BY MF DATE 1/2/08 | NAVFAC | DEEP GROUNDWATER FLOW<br>JUNE 11, 2007<br>SITE 4<br>SAUFLEY FIELD<br>PENSACOLA, FLORIDA | CONTRACT NO. 0389 |
| CHECKED BY DATE | | | OWNER NO. |
| REVISED BY DATE | | | APPROVED BY DATE |
| SCALE AS NOTED | | | DRAWING NO. FIGURE 3-4 REV. 0 |

FORM CADD NO. NAVV-BASIC.DWG – REV 1 – 9/30/98

the average hydraulic gradient of 0.0082 feet/foot for shallow wells. Table 3-2 shows deep and shallow monitoring wells, horizontal distance between pairs and the average hydraulic gradient.

**TABLE 3-2**
**AVERAGE HYDRAULIC GRADIENT**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| WELL PAIRS | TOTAL HORIZONTAL DISTANCE (ft) | GROUND WATER ELEVATION (ft) | DATE MEASURED 1/9/2007 | DATE MEASURED 6/11/2007 |
|---|---|---|---|---|
| OLFS4-MW01D2 | | 32.66 | | |
| OLFS4-MW29D | 2073.1 | 39.60 | | |
| AVERAGE HYDRAULIC GRADIENT (feet/foot) | | | 0.0038 | |
| OLFS4-MW23S | | 64.63 | | |
| OLFS4-MW27S | 3713 | 34.16 | | |
| AVERAGE HYDRAULIC GRADIENT (feet/foot) | | | 0.0082 | |
| OLFS4-MW01D2 | | 30.97 | | |
| OLFS4-MW26D | 1845 | 37.72 | | |
| AVERAGE HYDRAULIC GRADIENT (feet/foot) | | | | 0.0037 |
| OLFS4-MW23S | | 63.07 | | |
| OLFS4-MW37S | 3725 | 31.68 | | |
| AVERAGE HYDRAULIC GRADIENT (feet/foot) | | | | 0.0084 |

### 3.6.2.4 Vertical Gradient

The vertical groundwater gradient was estimated from the groundwater elevations measured in the shallow and deep monitoring well pairs installed at the site. The vertical gradient is determined from the difference in groundwater elevation in the adjacent shallow and deep monitoring wells and the vertical separation of the screened intervals of the monitoring wells completed in close proximity to each other.

Four well pairs, consisting of one deep and one shallow well, were selected for use in vertical gradient calculations at Site 4. Well pairs used in the study include OLFS4-MW02S/OLFS4-MW02D, OLFS4-MW09S/OLFS4-MW04D, OLFS4-MW282S/OLFS4-MW26D and OLFS4-MW32S/OLFS4-MW29D.

Vertical gradient calculations indicated a downward vertical gradient in all well pairs. Results from both water level measurement events were similar and are presented in Table 3-3. Also included in the table are the screen and depth specifications used in the vertical gradient calculations. Downward gradients are found in aquifer recharge areas. This would be expected at Site 4, which is located in a topographic high.

**TABLE 3-3**
**VERTICAL GRADIENT**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| | | | | 1/9/2007 | | 6/11/2007 | |
|---|---|---|---|---|---|---|---|
| WELL PAIRS | APPROXIMATE TOTAL WELL DEPTH | APPROXIMATE SCREENED INTERVAL | TOP OF CASING ELEVATION | DEPTH TO WATER | GROUNDWATER ELEVATION | DEPTH TO WATER | GROUNDWATER ELEVATION |
| OLFS4-MW03S | 60 | 50-60 | 82.27 | 46.19 | 36.08 | 46.82 | 35.45 |
| OLFS4-MW02D | 80 | 75-80 | 81.85 | 48.01 | 33.84 | 49.58 | 32.37 |
| **SCREEN SEPARATION (bottom to bottom)** | | 20 | **VERTICAL GRADIENT** | | **-0.112** | | **-0.154** |
| OLFS4-MW09S | 52 | 37-52 | 83.22 | 47.90 | 35.32 | 48.86 | 34.36 |
| OLFS4-MW04D | 80 | 75-80 | 83.41 | 49.26 | 34.15 | 50.78 | 32.63 |
| **SCREEN SEPARATION (bottom to bottom)** | | 28 | **VERTICAL GRADIENT** | | **-0.042** | | **-0.062** |
| OLFS4-MW28S | 45 | 30-45 | 81.72 | 30.46 | 51.26 | 23.82 | 48.90 |
| OLFS4-MW26D | 81 | 76-81 | 81.98 | 42.44 | 39.54 | 44.26 | 37.72 |
| **SCREEN SEPARATION (bottom to bottom)** | | 36 | **VERTICAL GRADIENT** | | **-0.326** | | **-0.311** |
| OLFS4-MW32S | 40 | 25-40 | 82.21 | 30.23 | 51.98 | 32.21 | 50.00 |
| OLFS4-MW29D | 80 | 75-80 | 82.55 | 42.61 | 39.94 | 44.61 | 37.94 |
| **SCREEN SEPARATION (bottom to bottom)** | | 40 | **VERTICAL GRADIENT** | | **-0.301** | | **-0.302** |

Notes:
Elevations are in feet above mean sea level
Depths in feet below top-of-casing
Negative gradients are downward, positive gradients are upward

### 3.6.2.5 Hydraulic Conductivity

Hydraulic conductivity values were not determined as part of the Site 4 investigation. Instead values and data obtained from the site assessment of UST Site 2406 are presented below (TtNUS, 2003). Site 2406 is a UST site located south of the western portion Site 4. The slug test results are summarized in Table 3-4 and additional information, such as the slug test data records, analytical plots and figures are included in Appendix D. The geometric mean of the hydraulic conductivity values for the shallow wells at the site is approximately 10.08 feet/day or 0.007 feet/minute. The hydraulic conductivity values for the deep well at the site range from 0.102 to 0.1141 feet/minute.

**TABLE 3-4**
**SLUG TEST RESULTS for UST SITE 2406**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Well Designation | Screen Length (ft) | Screened Interval (ft) | Water Column (ft) | Calculated Hydraulic Conductivities (ft/min) | | |
|---|---|---|---|---|---|---|
| OLFS-2406-DMW30 | 5 | 74.5-79.5 | 41.92 | 0.01778 | 0.01635 | 0.01694 |
| OLFS-2406-DMW31 | 5 | 74.5-79.5 | 50.93 | 0.003234 | 0.003258 | 0.003001 |
| OLFS-2406-DMW32 | 5 | 130-135 | 110.8 | 0.102 | 0.1141 | 0.1032 |

NOTES:
ft/min = feet per minute
Source: Site Assessment Report Addendum for UST Site 2406

### 3.6.2.6 Groundwater Flow Velocity

Potential movement of groundwater by natural flow in the saturated zone can be estimated by Darcy's Law, which may be expressed as:

$$V = \frac{K \times l}{\eta}$$

where:

$V$ = average velocity

$K$ = hydraulic conductivity

$\eta$ = effective porosity

$I$ = average hydraulic gradient

Data from soil borings advanced during the RI indicate that fine grained sand and silty or clayey sand are the typical lithologies at the site. Review of field data suggests that a representative effective porosity for this lithology is approximately 20 percent.

Using an average hydraulic conductivity of 10 feet per day, an average hydraulic gradient of 0.009 feet/foot, and an effective porosity value of 20 percent, the estimated average groundwater velocity for the water table zone at Site 4 was calculated at 0.45 feet per day or about 165 feet per year.

#### 3.6.2.7 Potable Water Supply Wells

In 1994, the PWC potable water treatment system at OLF Saufley included two active potable water wells. On May 9, 1994, a water sample from PW04 effluent indicated benzene concentrations of 0.032 milligrams per liter (mg/L), exceeding the FDEP drinking water standard of 0.001 mg/L. PW04 was taken off-line and was subsequently placed on quarterly sampling for one year for observation and corrective action to remove the contamination. In April 1996, potable water wells PW03 and PW04 were abandoned in-place. Currently the only source of potable water for OLF Saufley is a well field located at the NTTC Corry Station, located approximately 5.5 miles south of the installation.

## 3.7 DEMOGRAPHY AND LAND USE

OLF Saufley is located north of the city of Pensacola, Florida, in southern Escambia County. OLF Saufley is an active military facility. Currently, the primary mission of this facility is tenant support. Additional missions include emergency landing location and firefighting.

Land uses on base include training activities, equipment and materials storage, maintenance areas, recreational facilities, and residential housing for military personnel. A minimum security federal prison camp is located on the facility. Land use in the off-base areas adjacent to OLF Saufley is mainly residential. Specifically, Site 4 is located adjacent to several housing areas, but it should be noted that access to Site 4 is restricted to base personnel and maintenance workers. To the southeast of the facility, separated by E. Fence Road, the Saufley Landfill is located, which is undergoing a legal process for closure because of non compliance with FDEP regulations.

## 3.8 ECOLOGY

Site 4 is located in a developed area of the base. Ground cover at the site is predominantly asphalt or concrete. Isolated landscape islands and lawns are planted in grass and ornamental shrubs. No wetlands or large trees are present at the Site 4 surroundings. On-site wildlife is limited to occasional

birds, reptiles, rodents and stray cats. Due to lack of suitable habitat, wildlife use is assumed to be infrequent.

A list of federally listed threatened and endangered species and species of special concern for Escambia County was obtained from the website for the Ecological Services and Fisheries Resource Office of the U.S. Fish and Wildlife Service in Panama City, Florida and is included in Appendix F. Five fish, eleven amphibians/reptiles, sixteen birds, six mammals, five invertebrates and twenty-nine plants are listed as threatened, endangered, or a species of special concern for the county (Appendix F). However, the habitats listed for these special status species (i.e., estuarine, palustrine, upland forests, etc.) do not exist at Site 4 or adjacent areas; therefore, none of the special status species recorded in Escambia County would be expected at the site.

# 4.0 NATURE AND EXTENT OF CONTAMINATION

As stated previously, the goal of this RI is to provide the necessary information to characterize the site, define site dynamics and determine the risks in order to guide a remedy selection process if needed. This section presents the characterization of the site by identifying the contaminants present, evaluating the extent of the contaminants and screening the contaminants with the appropriate regulatory standards. The analytical results for soil and groundwater samples collected for this investigation were compared to the most stringent CTLs, which in this case are the CTLs established by FDEP and USEPA PRGs. Analytical summary tables and contaminant concentration maps are presented in the investigation results sections. Validation reports for the laboratory analytical results are included in Appendix G.

## 4.1 CONTAMINANT SOURCES

According to historical uses, visual observations and the results from the samples gathered, the release of contaminants at Site 4 appear to have resulted from fuel spills, leaks from solvents or petroleum related substances, and or routine maintenance activities. The origin of other contaminants (such as chromium and nickel) are unknown, as many industrial or chemical processes could be the source. Off base sources should be considered as well, because there is information of violations to the FDEP regulations and lack of proper solid waste management on the Saufley Landfill, which is in close proximity to the OLF Saufley.

## 4.2 BACKGROUND CHEMICAL CONCENTRATIONS

Background concentrations of natural occuring and non-facility related chemical constituents in subsurface soil and groundwater were determined by collecting and analyzing 10 subsurface soil samples and samples from two monitoring wells, one deep, and one shallow well, located away from any contamination sources or facility impacted areas (See Figure 4-1).

The analytical results for analytes in background subsurface soil samples (shown in Table 4-1) indicated all concentrations were below the Florida SCTLs. However, because there were detections, we can say that the composition of the soil could contribute to the detections of inorganics in the samples taken throughout the site.

Samples from the designated background monitoring wells (OLFS4-MW22D-001 and OLFS4-MW23S-001) shown in Table 4-2, were reported to contain exceedances of the residential GCTL for inorganics. The samples for the shallow background well contained the highest iron concentration of all the

Rev. 1
5/12/08

P:\GIS\SAUFLEY_OLF\APR\BASEMAP.APR BACKGROUND SOIL AND DPT LOCATIONS LAYOUT 2/11/08 SS

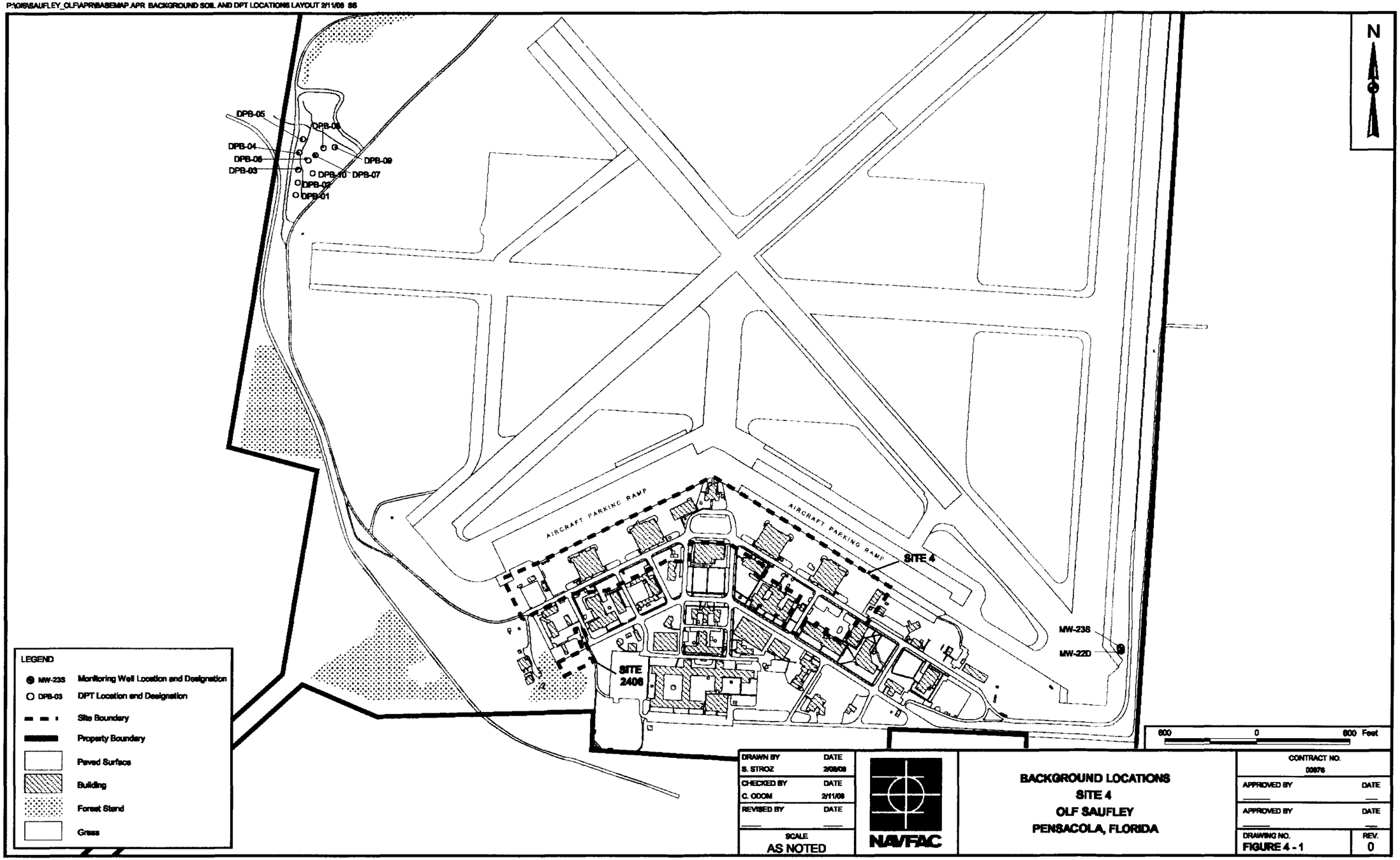


**TABLE 4-1**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES**
**BACKGROUND LOCATIONS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels<br>Target Levels<br>DE[1] / DE[2] / LE[3] (mg/kg) | USEPA Preleminary Remediation Goals<br>Remediation Goals<br>DE[1] / DE[2] / (mg/kg) | BACKGROUND SCREENING CONCENTRATION used on HHRA | OLFS4-DPB01-S10<br>DPB-01<br>5-10<br>9/12/2006 | OLFS4-DPB02-S10<br>DPB-02<br>5-10<br>9/12/2006 | OLFS4-DPB03-S10<br>DPB-03<br>5-10<br>9/12/2006 | OLFS4-DPB04-S10<br>DPB-04<br>5-10<br>9/12/2006 | OLFS4-DPB04-S10-D<br>DPB-04<br>5-10<br>9/12/2006<br>(duplicate) | OLFS4-DPB05-S10<br>DPB-05<br>5-10<br>9/12/2006 | OLFS4-DPB06-S10<br>DPB-06<br>5-10<br>9/12/2006 | OLFS4-DPB07-S10<br>DPB-07<br>5-10<br>9/12/2006 | OLFS4-DPB08-S10<br>DPB-08<br>5-10<br>9/12/2006 | OLFS4-DPB09-S10<br>DPB-09<br>5-10<br>9/12/2006 | OLFS4-DPB10-S10<br>DPB-10<br>5-10<br>9/12/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | |
| Aluminum | 80000/*/*** | 76000/100000 | 9446 | 5270 | 3890 | 2760 | 2560 | 2440 | 3800 | 4060 | 2620 | 6730 | 10400 | 5200 |
| Arsenic | 2.1/12/*** | 0.39/1.6 | **1.36** | **0.81** | **0.52** | **0.46** | 0.38 | 0.34 | **0.55** | **0.63** | 0.32 | **1.1** | **1.2** | **0.86** |
| Barium | 120/130000/1600 | 5400/67000 | 12.5 | 6.5 | 5.3 | 3.6 | 3.8 | 3.4 | 5.4 | 7 | 4.9 | 7.6 | 10.7 | 8.1 |
| Calcium | NC | NC | 112 | 54.8 U | 75.1 | 52.1 U | 50.3 U | 51 U | 53.4 U | 52.6 U | 51.3 U | 90 | 149 | 86.3 |
| Cobalt | 1700/42000/*** | 900/1900 | 0.597 | 0.32 | 0.33 | 0.25 U | 0.26 U | 0.25 U | 0.29 | 0.35 | 0.26 U | 0.31 | 0.39 | 0.61 |
| Chromium (total) | 210/470/38 | 210/450 | 7.90 | 6.3 | 3.2 | 2.1 | 1.9 | 1.9 | 2.7 | 2.9 | 2.3 | 6 | 8.2 | 3.9 |
| Copper | 150/89000/*** | 3100/41000 | 3.60 | 2.5 | 1.7 | 1.2 | 0.87 | 0.87 | 1.5 | 1.5 | 0.95 | 2.1 | 3.8 | 1.9 |
| Iron | 53000/*/*** | 23000/100000 | 5316 | 3670 | 2280 | 1660 | 1460 | 1400 | 2080 | 2320 | 1430 | 3680 | 4930 | 3100 |
| Potassium | NC | NC | 170 | 99.5 | 79.3 J | 52.1 U | 50.3 U | 51 U | 73.9 J | 96.9 J | 63.1 J | 108 J | 161 J | 115 J |
| Magnesium | NC | NC | 232 | 135 | 105 | 66.2 | 64 | 58.1 | 93.9 | 126 | 80.6 | 140 | 206 | 148 |
| Manganese | 3500/43000/*** | 1800/19000 | 36.8 | 12.2 | 13.7 | 13.8 | 15.7 | 15.7 | 17 | 20.7 | 12.1 | 33.1 | 16.7 | 29 |
| Nickel | 340/35000/130 | 23/310 | 2.93 | 2.2 | 1.2 | 0.78 | 0.84 | 0.69 | 1.2 | 1.6 | 1 | 1.6 | 2.4 | 1.9 |
| Selenium | 440/11000/5.2 | 390/5100 | ND | 0.27 U | 0.27 U | 0.26 U | 0.25 U | 0.26 U | 0.27 U | 0.26 U | 0.26 U | 0.27 U | 0.26 U | 0.25 U |
| Sodium | NC | NC | ND | 54.8 U | 53.7 U | 52.1 U | 50.3 U | 51 U | 53.4 U | 52.6 U | 51.3 U | 54.9 U | 52.9 U | 50 U |
| Lead | 400/1400/*** | 400/800 | 3.68 | 1.9 | 1.5 | 1.2 | 1.2 | 1.2 | 1.5 | 1.8 | 1.3 | 2.4 | 3.5 | 2.1 |
| Vanadium | 67/10000/980 | 78/100 | 12.6 | 7.2 | 5.2 | 3.8 | 3.5 | 3.4 | 4.9 | 5.4 | 3.5 | 9.2 | 12.8 | 7.3 |
| Zinc | 26000/630000/*** | 23000/100000 | 8.70 | 8.2 | 3.7 | 2.7 | 3.2 | 3 | 3.4 | 4 | 2.4 | 4.5 | 6.8 | 4.7 |
| Mercury | 3/17/2.1 | 23/310 | 0.123 | 0.13 U | 0.13 U | 0.14 U | 0.13 U | 0.12 U | 0.13 U | 0.13 U | 0.14 U | 0.15 U | 0.013 | 0.13 U |

[1] Direct Exposure Residential Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[2] Direct Exposure Industrial Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[3] Leachability Limit based on Groundwater from Chapter 62-777, FAC

Notes: **Bold** indicates an exceedance of regulatory limits.
* = Contaminant is not a health concern for this exposure scenario
*** = Leachability values may be derived using SPLP test to calculate site-specific SCTLs
ft bls = feet below land surface
mg/kg = milligrams per kilogram
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection
J = Indicates analyte detected at an estimated concentration
NC = No Criteria have been established for this parameter
Background concentration derived by multiplying the mean of all background sample concentrations by 2.

**TABLE 4-2**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER SAMPLES
BACKGROUND LOCATIONS
SITE 4 REMEDIAL INVESTIGATION REPORT
OLF SAUFLEY
PENSACOLA, FLORIDA**

| Sample No.<br>Sample Location<br>Collect Date | OLFS4-MW22D-001<br>MW-22-D<br>12/19/2006<br>(BACKGROUND) | OLFS4-MW23S-001<br>MW-23-S<br>12/19/2006<br>(BACKGROUND) | BACKGROUND SCREENING CONCENTRATION used in HHRA |
|---|---|---|---|
| **VOCs [1] (µg/L)** | | | |
| Acetone | 1.1 U | 8.4 U | NA |
| Benzene | 0.11 U | 0.21 J | NA |
| Bromoform | 0.24 U | 0.24 U | NA |
| Bromodichloromethane | 0.24 U | 0.24 U | NA |
| 2-Butanone | 1.2 U | 1.2 U | NA |
| Carbon Disulfide | 0.13 U | 0.13 U | NA |
| Chloroform | 0.3 U | 0.3 U | NA |
| Chloromethane | 0.4 U | 0.4 U | NA |
| Cyclohexane | 0.18 U | 0.18 U | NA |
| Dibromochloromethane | 0.08 U | 0.08 U | NA |
| 1,1 Dichloroethane | 0.15 U | 0.15 U | NA |
| cis 1,2 Dichloroethene | 0.44 U | 0.44 U | NA |
| trans 1,2 Dichloroethene | 0.4 U | 0.4 U | NA |
| Ethylbenzene | 0.14 U | 0.14 U | NA |
| Isopropylbenzene | 0.25 U | 0.33 J | NA |
| Methyl cyclohexane | 0.2 U | 0.2 U | NA |
| Trichlorofluoromethane | 0.15 U | 0.15 U | NA |
| Tetrachloroethene | 0.14 U | 0.14 U | NA |
| Toluene | 0.18 U | 0.18 U | NA |
| Vinyl Chloride | 0.19 U | 0.19 U | NA |
| Total Xylenes | 0.21 U | 0.21 U | NA |
| **SVOCs [2] (µg/L)** | | | |
| Acenaphthene | 0.01 U | 0.4 | NA |
| Acenaphthylene | 0.0088 U | 0.009 U | NA |
| Benzo (a) Anthracene | 0.011 U | 0.011 U | NA |
| Benzo (b) Fluoranthene | 0.017 U | 0.017 U | NA |
| Benzo (k) Fluoranthene | 0.014 U | 0.014 U | NA |
| Benzo (a) Pyrene | 0.0099 U | 0.01 U | NA |
| Bis(2-ethylhexyl)phthalate | 1 U | 1.1 U | NA |
| 1,1 Biphenyl | 1 U | 1.1 U | NA |
| Butylbenzylphthalate | 1 U | 1.1 U | NA |
| Caprolactam | 1.5 J | 2.7 J | NA |
| Chrysene | 0.0094 U | 0.0096 U | NA |
| Di-n-butylphthalate | 1 U | 1.1 U | NA |
| Fluoranthene | 0.012 U | 0.012 U | NA |
| Fluorene | 0.013 U | 0.15 | NA |
| 2-Methlynaphthalene | 0.017 U | 0.017 U | NA |
| 1-Methlynaphthalene | 0.01 U | 0.035 J | NA |
| Naphthalene | 0.02 U | 0.02 U | NA |
| Phenanthrene | 0.014 U | 0.015 U | NA |
| Pyrene | 0.011 U | 0.011 U | NA |

**TABLE 4-2**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER SAMPLES**
**BACKGROUND LOCATIONS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Sample No.<br>Sample Location<br>Collect Date | OLFS4-MW22D-001<br>MW-22-D<br>12/19/2006<br>(BACKGROUND) | OLFS4-MW23S-001<br>MW-23-S<br>12/19/2006<br>(BACKGROUND) | BACKGROUND SCREENING CONCENTRATION used in HHRA |
|---|---|---|---|
| **TRPHs [3] (µg/L)** | | | |
| TPH ($C_8$ - $C_{40}$) | 180 U | 550 | NA |
| **Inorganics (µg/L)** | | | |
| Aluminum | **342** | **712** | 1054 |
| Arsenic | 3 U | **3.9** | 5.4 |
| Barium | 23.2 | 316 | 339 |
| Calcium | 1000 U | 181000 | 181500 |
| Cobalt | 5 U | 5 U | ND |
| Chromium (total) | 9.7 | 16.2 | 25.9 |
| Copper | 5 U | 5 U | ND |
| Iron | **379** | **34500** | 34879 |
| Potassium | 1000 U | 35600 | 36100 |
| Magnesium | 1000 U | 17100 | 17600 |
| Manganese | 12.8 | **2790** | 2803 |
| Selenium | 5 U | 5 U | ND |
| Silver | 1 U | 1 U | ND |
| Sodium | 3380 | **31900** | 35280 |
| Nickel | 8.4 | 12.3 | 20.7 |
| Lead | 1.5 U | 9.1 | 9.85 |
| Thallium | 0.75 U | 0.75 U | ND |
| Vanadium | 5 U | 5 U | ND |
| Zinc | 10 U | 10.7 | 21.4 |
| Mercury | 0.08 U, J | 0.08 U, J | ND |
| | | | |

[1] VOCs = Volatile Organic Compounds
[2] SVOCs = Semivolatile Organic Compounds
[3] TRPHs = Total Recoverable Petroleum Hydrocarbons
Notes:

**Bold** indicates an exceedance of regulatory limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
R = rejected due to technical non-compliance
NA = not applicable
J = Compound was detected at an estimated concentration
-- = Analyte not detected above MDL in background monitor wells
µg/L = micrograms per liter
FAC = Florida Administrative Code
FL-PRO = Florida Petroleum Range Organics
Background concentration derived by multiplying the mean of all background sample concentrations by 2.

46 monitoring wells were sampled, and had considerably high levels of aluminum, manganese and sodium. This may suggest that off-base sources might have impacted the shallow groundwater at the facility. Because of the locations of these wells at the southeast perimeter of the facility, which is upgradient of any facility operations, the detected concentrations are not believed to be facility related.

## 4.3 GEOPHYSICAL SURVEY

At Site 4, a geophysical survey was completed to investigate and locate potential USTs near Hangars 807 and 810, as mentioned in previous facility-wide documents. The survey area included the east of Hangar 807 and the area both east and west of Hangar 810.

The results of the geophysical survey indicated the presence of low amplitude anomalies detected by a metal detector and the ground penetrating radar. However, the anomalies were not interpreted to represent buried USTs. The survey results concluded that no USTs are buried in the hangar site surveyed. The complete geophysical report is presented in Appendix E.

## 4.4 SOILS AND VADOSE ZONE

To evaluate the nature and extent of contaminants at Site 4, the subsurface soil analytical results were compared to the risk-based SCTLs established in 62-777, FAC for direct exposure-residential, direct exposure-industrial, and leachability based on groundwater criteria and to the USEPA Region IX direct exposure-residential and direct exposure-industrial PRGs.

### 4.4.1 Surface Soil

No surface soil samples were collected at Site 4. It has been estimated that, less than 10 percent of the ground surface is exposed in the site area. The remaining areas are covered by concrete, asphalt and buildings, or some combination of the same. The on-site concrete is up to 10-inches thick in many areas of the site. This, along with the nature and age of the contamination, alleviated the need for surface soil sampling during this part of the investigation.

### 4.4.2 Subsurface Soil

Subsurface soil samples were collected at 68 locations throughout Site 4. In the perimeter area of Hangars 807 and 810, 30 subsurface soil samples plus 2 duplicate samples were collected from 30 separate soil borings completed. There were 24 subsurface soil samples were collected from 24separate soil borings from the Hangar 807 and 810 wash rack areas. Additionally, 10 samples were taken from a background location for comparative analysis. The Site 4 sample locations were determined using information from the geophysical survey, technical expertise, and visual site assessments. The samples were collected at depths ranging from 2 to 45 feet in intervals of 2 to 4 feet. Some of the sample

collections depths were determined based on field FID headspace measurement (which are included in Appendix B). The samples were analyzed for VOCs, SVOCs, PAHs, PCBs, TRPH, metals, and cyanide.

Subsurface analytical results are summarized in Tables 4-3 through 4-7. Also, soil boring exceedances locations are detailed in Figures 4-2 through 4-5. All soil samples were collected using FDEP SOPs, USEPA EISOPQAM, and TtNUS SOPs, accordingly. Data validation reports are included in Appendix G.

#### 4.4.2.1 Volatile Organics

Only two VOCs were detected in source area samples collected at Site 4. Acetone was detected in two soil samples from Hangar 807 and 810 wash rack areas. Both detected concentrations were less than the FDEP SCTLs and the USEPA PRGs. Methyl Chloride was detected in a single sample [OLFS4-DPW16S4 at 0.270 milligrams per kilogram (mg/kg) estimated)] collected from the same area at concentrations less than the FDEP residential/industrial SCTL and the USEPA residential/industrial PRGs concentration, but exceeding the FDEP leachability criteria of 0.02 mg/kg.

#### 4.4.2.2 Semivolative Organics

A total of six SVOCs including 2-methylnaphthalene, flourene, naphthalene, 1,1-biphenyl, dibenzofuran and phenanthrene were detected in subsurface soil samples collected at Site 4. However, only one sample (OLFS4-MW33S-5) reported a SVOC (1,1-biphenyl) at an estimated concentration of 0.34 mg/kg, which was greater than the leachability to groundwater SCTL of 0.2 mg/kg. Reported concentrations of TCL SVOCs in the remaining subsurface soil samples collected for the RI were less than the leachability to groundwater SCTLs, and less than the residential FDEP SCTL and USEPA PRGs.

#### 4.4.2.3 TRPH

TRPH concentrations greater than the residential SCTL of 460 mg/kg was reported from one shallow subsurface soil samples, OLFS4-MW33S-5 (730 mg/kg), which was to the east of Hangar 810, and one screening point sample, OLFS4-DPW14-S6 (510 mg/kg). The detected concentrations exceeded the FDEP residential SCTL for TRPH and the FDEP SCTL for leaching criteria to groundwater of 340 mg/kg. The detected concentrations of TRPH in the remaining subsurface soil samples was below all regulatory standards.

#### 4.4.2.4 Pesticides/ PCB

No pesticides were detected in the subsurface samples collected for this RI in Site 4. However, one subsurface soil sample in the washrack area of Building 810 (OLFS4-DPW15-S4) reported a detection for

**TABLE 4-3**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES**
**BUILDING PERIMETERS 807 & 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels | USEPA Preleminary Remediation Goals | OLFS4-DP01-S20<br>DP-01<br>18-20<br>9/6/2006 | OLFS4-DP02-S20<br>DP-02<br>18-20<br>9/6/2006 | OLFS4-DP03-S20<br>DP-03<br>18-20<br>9/6/2006 | OLFS4-DP04-S20<br>DP-04<br>18-20<br>9/6/2006 | OLFS4-DP05-S20<br>DP-05<br>18-20<br>9/6/2006 | OLFS4-DP06-S20<br>DP-06<br>18-20<br>9/6/2006 | OLFS4-DP07-S20<br>DP-07<br>18-20<br>9/7/2006 | OLFS4-DP08-S20<br>DP-08<br>18-20<br>9/7/2006 | OLFS4-DP09-S20<br>DP-09<br>18-20<br>9/7/2006 | OLFS4-DP10-S20<br>DP-10<br>18-20<br>9/7/2006 | OLFS4-DP11-S120<br>DP-11<br>18-20<br>9/7/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DE[1] / DE[2] / LE[3] (mg/kg) | DE[1] / DE[2] / (mg/kg) | | | | | | | | | | | |
| **TRPH [4] (mg/kg)** | 460/2700/340 | NC | 11 U | 11 U | 11 U | 10 U | 11 U | 12 J | 11 U | 11 U | 11 U | 10 U | 10 U |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | |
| Arsenic | 2.1/12/*** | 0.39/1.6 | NA | NA | NA | NA | NA | NA | NA | **2** | **3.2** | **2** | NA |
| Cadmium | 82/1700/7.5 | 37/450 | NA | NA | NA | NA | NA | NA | NA | 0.054 U | 0.056 U | 0.053 U | NA |
| Chromium (total) | 210/470/38 | 210/450 | NA | NA | NA | NA | NA | NA | NA | 13.4 | 21.6 | 12.2 | NA |
| Lead | 400/1400/*** | 400/800 | NA | NA | NA | NA | NA | NA | NA | 3 | 3.8 | 2.6 | NA |

| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels | EPA Preleminary Remediation Goals | OLFS4-DP12-S20<br>DP-12<br>18-20<br>9/7/2006 | OLFS4-DP13-S20<br>DP-13<br>18-20<br>9/7/2006 | OLFS4-DP14-S20<br>DP-14<br>18-20<br>9/8/2006 | OLFS4-DP15-S20<br>DP-15<br>18-20<br>9/8/2006 | OLFS4-DP16-S6<br>DP-16<br>4-6<br>9/6/2006 | OLFS4-DP17-S10<br>DP-17<br>8-10<br>9/6/2006 | OLFS4-DP18-S6<br>DP-18<br>4-6<br>9/6/2006 | OLFS4-DP19-S12<br>DP-19<br>10-12<br>9/6/2006 | OLFS4-DP20-S10<br>DP-20<br>8-10<br>9/7/2006 | OLFS4-DP21-S10<br>DP-21<br>8-10<br>9/7/2006 | OLFS4-DP22-S18<br>DP-22<br>16-18<br>9/7/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DE[1] / DE[2] / LE[3] (mg/kg) | DE[1] / DE[2] / (mg/kg) | | | | | | | | | | | |
| **TRPH [4] (mg/kg)** | 460/2700/340 | NC | 11 U | 11 U, J | 11 U, J | 11 U, J | 12 J | 11 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | |
| Arsenic | 2.1/12/*** | 0.39/1.6 | **3.7** | NA | **2.4** | NA | NA | NA | NA | NA | NA | NA | **1.2** |
| Cadmium | 82/1700/7.5 | 37/450 | 0.05 U | NA | 0.047 U | NA | NA | NA | NA | NA | NA | NA | 0.053 U |
| Chromium (total) | 210/470/38 | 210/450 | 25.3 | NA | 12.7 | NA | NA | NA | NA | NA | NA | NA | 7 |
| Lead | 400/1400/*** | 400/800 | 4.3 | NA | 3.2 | NA | NA | NA | NA | NA | NA | NA | 1.4 |

| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels | EPA Preleminary Remediation Goals | OLFS4-DP23-S8<br>DP-23<br>6-8<br>9/7/2006 | OLFS4-DP24-S8<br>DP-24<br>6-8<br>9/7/2006 | OLFS4-DP25-S10<br>DP-25<br>8-10<br>9/8/2006 | OLFS4-DP26-S6<br>DP-26<br>4-6<br>9/8/2006 | OLFS4-DP27-S4<br>DP-27<br>2-4<br>9/9/2006 | OLFS4-DP27-S4-D<br>DP-27<br>2-4<br>9/9/2006<br>(duplicate sample) | OLFS4-DP28-S8<br>DP-28<br>2-4<br>9/8/2006 | OLFS4-DP29-S4<br>DP-29<br>2-4<br>9/8/2006 | OLFS4-DP29-S4-D<br>DP-29<br>2-4<br>9/9/2006<br>(duplicate sample) | OLFS4-DP30-S8<br>DP-30<br>6-8<br>9/8/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DE[1] / DE[2] / LE[3] (mg/kg) | DE[1] / DE[2] / (mg/kg) | | | | | | | | | | |
| **TRPH [4] (mg/kg)** | 460/2700/340 | NC | 11 U | 10 U | 12 U, J | 10 U, J | 12 J | 10 U, J | 10 U, J | 10 U, J | 11 J | 10 U, J |
| **Inorganics (mg/kg)** | | | | | | | | | | | | |
| Arsenic | 2.1/12/*** | 0.39/1.6 | NA | **1.3** | NA | NA | **0.72** | **0.62** | NA | **1.8** | **1.5** | **1.2** |
| Cadmium | 82/1700/7.5 | 37/450 | NA | 0.054 U | NA | NA | 0.054 U | 0.049 U | NA | 0.051 U | 0.053 U | 0.051 U |
| Chromium (total) | 210/470/38 | 210/450 | NA | 5.6 | NA | NA | 3.7 | 3.6 | NA | 7.6 | 6.6 | 4.8 |
| Lead | 400/1400/*** | 400/800 | NA | 2.6 | NA | NA | 5.2 | 4.7 | NA | 3 | 2.9 | 2.6 |

[1] Direct Exposure Residential Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[2] Direct Exposure Industrial Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[3] Leachability Limit based on Groundwater from Chapter 62-777, FAC.
[4] TRPH = Total Recoverable Petroleum Hydrocarbons

Notes: **Bold** indicates an exceedance of regulatory limits.
*** = Leachability values may be derived using SPLP test to calculate site-specific SCTLs
ft bls = feet below land surface
mg/kg = milligrams per kilogram
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection
J = Indicates Analyted detected at an estimated concentration
NA = Sample not analyzed for this parameter
NC = No criteria have been established for this parameter
U = Analyte not detected above laboratory Method Detection Limit (MDL)

**TABLE 4-4**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES**
**807 & 810 WASHRACK AREAS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels | USEPA Preleminary Remediation Goals | OLFS4-DPW01-S45<br>DPW-01<br>43-45<br>9/8/2006 | OLFS4-DPW02-S10<br>DPW-02<br>8-10<br>9/12/2006 | OLFS4-DPW03-S10<br>DPW-03<br>8-10<br>9/12/2006 | OLFS4-DPW04-S10<br>DPW-04<br>8-10<br>9/12/2006 | OLFS4-DPW05-S10<br>DPW-05<br>8-10<br>9/12/2006 | OLFS4-DPW06-S10<br>DPW-06<br>8-10<br>9/12/2006 | OLFS4-DPW07-S45<br>DPW-07<br>43-45<br>9/11/2006 | OLFS4-DPW08-S10<br>DPW-08<br>8-10<br>9/12/2006 | OLFS4-DPW09-S10<br>DPW-09<br>8-10<br>9/12/2006 | OLFS4-DPW10-S45<br>DPW-10<br>43-45<br>9/11/2006 | OLFS4-DPW11-S45<br>DPW-11<br>43-45<br>9/11/2006 | OLFS4-DPW12-S45<br>DPW-12<br>43-45<br>9/11/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DE[1] / DE[2] / LE[3] (mg/kg) | DE[1] / DE[2] / (mg/kg) | | | | | | | | | | | | |
| **VOCs [4] (mg/kg)** | | | | | | | | | | | | | | |
| Acetone | 11000/68000/25 | 14000/54000 | 0.0024 J | 0.002 U | 0.002 U | 0.0018 U | 0.0023 U | 0.0021 U | 0.0022 U, J | 0.002 U | 0.002 U | 0.0023 U, J | 0.0043 J | 0.0022 U, J |
| Methylene Chloride | 17/26/.02 | 9.1/21 | 0.00062 U | 0.00061 U | 0.00064 U | 0.00057 U | 0.00072 U | 0.00065 U | 0.00069 U | 0.00062 U | 0.0006 U | 0.00071 U | 0.00064 U | 0.00068 U |
| **SVOCs [5] (mg/kg)** | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | 210/2100/8.5 | #56/190 | 0.022 U | 0.045 U | 0.041 U | 0.041 U | 0.049 U | 0.041 U | 0.047 U | 0.041 U | 0.042 U | 0.045 U | 0.043 U | 0.044 U |
| Fluorene | 2600/33000/160 | 2700/26000 | 0.022 U | 0.045 U | 0.041 U | 0.041 U | 0.049 U | 0.041 U | 0.047 U | 0.041 U | 0.042 U | 0.045 U | 0.043 U | 0.044 U |
| Naphthalene | 55/300/1.2 | 56/190 | 0.022 U | 0.045 U | 0.041 U | 0.041 U | 0.049 U | 0.041 U | 0.047 U | 0.041 U | 0.042 U | 0.045 U | 0.043 U | 0.044 U |
| **TRPH [6] (mg/kg)** | 460/2700/340 | NC | 12 J | 11 U | 11 U | 10 U | 12 U, J | 10 U, J | 12 U, J | 11 U, J | 11 U, J | 12 U, J | 11 U, J | 12 U, J |
| **PCBs [7] (mg/kg)** | | | | | | | | | | | | | | |
| Aroclor 1260 | 0.5/2.6/17 | 0.22/0.74 | 0.0045 U, J | 0.0046 U | 0.0044 U | 0.0043 U | 0.0051 U | 0.0044 U | 0.0049 U, J | 0.0043 U | 0.0044 U | 0.0048 U, J | 0.0043 U, J | 0.0048 U, J |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | |
| Aluminum | 80000/*/*** | 76000/100000 | 3800 | 18800 | 9160 | 11800 | 12700 | 5740 | 1640 | 16300 | 11500 | 1440 | 1380 | 1270 |
| Arsenic | 2.1/12/*** | 0.39/1.6 | **0.93** | **2.9** | **1.4** | **1.9** | **2** | **0.9** | **2.9** | **2.5** | **1.7** | **1.8** | **0.66** | **0.8** |
| Barium | 120/130000/1600 | 5400/67000 | 6.9 | 7.8 | 4.6 | 6.5 | 4.9 | 4.9 | 2 | 7.4 | 5.9 | 1.5 | 1.2 | 1.3 |
| Calcium | NC | NC | 101 | 611 | 226 | 190 | 291 | 126 | 61.1 U | 136 | 115 | 58 U | 56.4 U | 58.7 |
| Cobalt | 1700/42000/*** | 900/1900 | 0.28 U | 0.28 | 0.29 | 0.35 | 0.31 U | 0.3 | 0.31 U | 0.32 | 0.28 | 0.29 U | 0.28 U | 0.27 U |
| Chromium (total) | 210/470/38 | 210/450 | 4.7 | 13 | 7.6 | 8.3 | 8.9 | 4.3 | 4.7 | 11.5 | 8.8 | 3.7 | 2.5 | 2.4 |
| Copper | 150/89000/*** | 3100/41000 | 1.7 | 5.5 | 2.9 | 3.6 | 3.8 | 2.2 | 1 | 5 | 3.9 | 1 | 0.71 | 0.93 |
| Iron | 53000/*/*** | 23000/100000 | 2960 | 10300 | 5270 | 6700 | 7070 | 3450 | 3090 | 9120 | 6590 | 2410 | 857 | 942 |
| Potassium | NC | NC | 215 | 123 J | 72 J | 101 J | 76.9 J | 81.5 J | 61.1 U | 109 J | 95.1 | 58 U | 56.4 U | 53.1 U |
| Magnesium | NC | NC | 131 | 157 | 92.5 | 123 | 108 | 97 | 61.1 U | 141 | 120 | 58 U | 56.4 U | 53.1 U |
| Manganese | 3500/43000/*** | 1800/19000 | 6 | 22.6 | 16.7 | 18 | 19.4 | 16.3 | 1.3 | 18.9 | 15 | 1.3 | 1 | 1.2 |
| Sodium | NC | NC | 55.8 U | 54.2 U | 54 U | 51.9 U | 61.1 U | 52.4 U | 61.1 U | 52.8 U | 53.3 U | 58 U | 56.4 U | 1090 |
| Nickel | 340/35000/130 | 1600/20000 | 1.4 | 2.3 | 1.4 | 1.8 | 1.5 | 1.3 | 0.31 U | 2.1 | 1.5 | 0.29 U | 0.28 U | 0.27 U |
| Lead | 400/1400/*** | 400/800 | 2.7 | 3.5 | 2 | 2.6 | 2.5 | 1.6 | 2.3 | 3.2 | 2.4 | 1.9 | 1.3 | 1.5 |
| Vanadium | 67/10000/980 | 78/1000 | 6.7 | 24.9 | 12.4 | 15.8 | 16.7 | 8 | 10.9 | 21.7 | 15.9 | 9.1 | 4.6 | 5.3 |
| Zinc | 26000/630000/*** | 23000/100000 | 7.6 | 6.7 | 4.4 | 5.1 | 4.9 | 3.8 | 0.61 U | 6.5 | 4.9 | 0.87 | 0.79 | 0.54 |
| Mercury | 3/17/2.1 | 23/310 | 0.15 U | 0.15 U | 0.14 U | 0.13 U | 0.16 U | 0.14 U | 0.16 U | 0.12 U | 0.14 U | 0.15 U | 0.13 U | 0.12 U |
| | | | | | | | | | | | | | | |

[1] Direct Exposure Residential Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[2] Direct Exposure Industrial Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[3] Leachability limit based on Groundwater from Chapter 62-777, FAC.
[4] VOCs = Volatile Organic Compounds
[5] SVOCs = Semivolatile Organic Compounds
[6] TRPH = Total Recoverable Petroleum Hydrocarbons
[7] PCBs = Polychlorinated Biphenyls

Notes: **Bold** indicates an exceedance of regulatory limits.
# = Naphthalene used as a surrogate
* = Contaminant is not a health concern for this exposure scenario
** = Direct esposure value is based on acute toxicity considerations
*** = Leachability values may be derived using SPLP test to calculate site-specific SCTLs
ft bls = feet below land surface
mg/kg = milligrams per kilogram
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection

J = Indicates Analyte detected at an estimated concentration
NC = No criteria have been established for this parameter
U = Analyte not detected above laboratory Method Detection Limit (MDL)

**TABLE 4-4**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES**
**807 & 810 WASHRACK AREAS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Clean-up Target Levels<br>DE[1] / DE[2] / LE[3] (mg/kg) | EPA Preleminary Remediation Goals<br>DE[1] / DE[2] / (mg/kg) | OLFS4-DPW13-S4<br>DPW-13<br>2-4<br>9/11/2006 | OLFS4-DPW14-S6<br>DPW-14<br>6-Apr<br>9/11/2006 | OLFS4-DPW15-S4<br>DPW-15<br>2-4<br>9/11/2006 | OLFS4-DPW16-S4<br>DPW-16<br>2-4<br>9/11/2006 | OLFS4-DPW17-S12<br>DPW-17<br>10-12<br>9/11/2006 | OLFS4-DPW18-S12<br>DPW-18<br>10-12<br>9/12/2006 | OLFS4-DPW19-S12<br>DPW-19<br>10-12<br>9/12/2006 | OLFS4-DPW20-S12<br>DPW-20<br>10-12<br>9/12/2006 | OLFS4-DPW21-S12<br>DPW-21<br>10-12<br>9/12/2006 | OLFS4-DPW22-S26<br>DPW-22<br>24-26<br>9/11/2006 | OLFS4-DPW23-S26<br>DPW-23<br>24-26<br>9/12/2006 | OLFS4-DPW24-S26<br>DPW-24<br>24-26<br>9/12/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOCs [4] (mg/kg)** | | | | | | | | | | | | | | |
| Acetone | 11000/68000/25 | 14000/54000 | 0.0019 U, J | 0.002 U | 0.098 U, J | 0.100 U | 0.002 U, J | 0.002 U | 0.0019 U | 0.002 U | 0.0021 U | 0.0022 U, J | 0.0021 U | 0.002 U |
| Methylene Chloride | 17/26/.02 | 9.1/21 | 0.0006 U | 0.00062 U | 0.03 U | **0.270 J** | 0.00061 U | 0.00062 U | 0.00059 U | 0.00061 U | 0.00064 U | 0.00067 U | 0.00064 U | 0.00061 U |
| **SVOCs [5] (mg/kg)** | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | 210/2100/8.5 | #56/190 | 0.043 U | 0.042 U | 1.4 | 0.042 U | 0.041 U | 0.043 U | 0.042 U | 0.043 U | 0.046 U | 0.042 U | 0.040 U | 0.041 U |
| Fluorene | 2600/33000/160 | 2700/26000 | 0.043 U | 0.042 U | 0.078 J | 0.042 U | 0.041 U | 0.043 U | 0.042 U | 0.043 U | 0.046 U | 0.042 U | 0.040 U | 0.041 U |
| Naphthalene | 55/300/1.2 | 56/190 | 0.043 U | 0.042 U | 0.350 J | 0.042 U | 0.041 U | 0.043 U | 0.042 U | 0.043 U | 0.046 U | 0.042 U | 0.040 U | 0.041 U |
| **TRPH [6] (mg/kg)** | 460/2700/340 | NC | 11 U | 10 U | **510** | 36 | 10 U | 11 U | 11 U | 17 J | 12 U | 10 U, J | 10 U | 11 U |
| **PCBs [7] (mg/kg)** | | | | | | | | | | | | | | |
| Aroclor 1260 | 0.5/2.6/17 | 0.22/0.74 | 0.0044 U | 0.0044 U | 0.0066 J | 0.0045 U | 0.0042 U | 0.0044 U | 0.0044 U | 0.0044 U | 0.0046 U | 0.0042 U, J | 0.0044 U | 0.0044 U |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | |
| Aluminum | 80000/*/*** | 76000/100000 | 6400 | 9910 | 7920 | 8120 | 12800 | 21500 | 20600 | 17600 | 20500 | 1700 | 3770 | 7210 |
| Arsenic | 2.1/12/*** | 0.39/1.6 | **0.83** | **1.4** | **1.4** | **1.3** | **2** | **3.3** | **3.3** | **2.9** | **3.1** | **0.62** | **0.7** | **1.3** |
| Barium | 120/130000/1600 | 5400/67000 | 9 | 13.6 | 18.5 | 15.4 | 8.7 | 8.1 | 7.8 | 9.7 | 9.5 | 0.55 | 1.2 | 2.2 |
| Calcium | NC | NC | 482 | 410 | 762 | 754 | 116 | 51.5 U | 104 | 77.3 | 179 | 49.2 U | 56 U | 51.1 U |
| Cobalt | 1700/42000/*** | 900/1900 | 0.58 | 0.93 | 0.77 | 0.77 | 0.26 U | 0.27 | 0.26 U | 0.41 | 0.33 | 0.25 U | 0.28 U | 0.26 U |
| Chromium (total) | 210/470/38 | 210/450 | 4.1 | 6.2 | 5.2 | 5.4 | 9.3 | 15.8 | 15.4 | 12.6 | 14.4 | 4 | 3.6 | 6.1 |
| Copper | 150/89000/*** | 3100/41000 | 2.2 | 3.5 | 3.4 | 3.1 | 4.3 | 6.9 | 6.3 | 6.1 | 6.5 | 0.7 | 1.2 | 2.3 |
| Iron | 53000/*/*** | 23000/100000 | 2660 | 5140 | 4580 | 4020 | 7100 | 11600 | 11000 | 9500 | 11000 | 1400 | 1850 | 3600 |
| Potassium | NC | NC | 60.4 | 116 | 91.6 | 107 | 132 | 173 J | 135 J | 157 J | 171 J | 49.2 U | 56 U | 51.1 U |
| Magnesium | NC | NC | 110 | 177 | 144 | 150 | 149 | 185 | 170 | 181 | 203 | 49.2 U | 56 U | 51.1 U |
| Manganese | 3500/43000/*** | 1800/19000 | 18.9 | 202 | 277 | 152 | 15.7 | 19.4 | 19.4 | 24.8 | 22.8 | 2.6 | 3.1 | 4.9 |
| Sodium | NC | NC | 54.5 U | 54.3 U | 49.8 U | 55.2 U | 52.9 U, J | 51.5 U | 52.7 U | 55.1 U | 58.2 U | 49.2 U | 56 U | 51.1 |
| Nickel | 340/35000/130 | 1600/20000 | 1.6 | 2.5 | 2.2 | 2 | 2.1 | 2.9 | 2.5 | 2.8 | 3.1 | 0.37 | 0.48 | 1 |
| Lead | 400/1400/*** | 400/800 | 2.5 | 3.3 | 4.1 | 3.2 | 3.2 | 4.6 | 4.3 | 4.5 | 4.8 | 0.6 | 0.998 | 1.7 |
| Vanadium | 67/10000/980 | 78/1000 | 7.9 | 12.6 | 10 | 10.2 | 17.5 | 29 | 27.3 | 23.4 | 27 | 2.4 | 4.7 | 9 |
| Zinc | 26000/630000/*** | 23000/100000 | 4.2 | 6.1 | 7.1 | 5.2 | 6.1 | 7.7 | 7.1 | 7.4 | 8.9 | 1.8 | 1.4 | 2.6 |
| Mercury | 3/17/2.1 | 23/310 | 0.14 U | 0.15 U | 0.019 | 0.14 U | 0.14 U | 0.12 U | 0.14 U | 0.14 U | 0.16 U | 0.14 U | 0.13 U | 0.13 U |

[1] Direct Exposure Residential Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[2] Direct Exposure Industrial Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[3] Leachability limit based on Groundwater from Chapter 62-777, FAC.
[4] VOCs = Volatile Organic Compounds
[5] SVOCs = Semivolatile Organic Compounds
[6] TRPH = Total Recoverable Petroleum Hydrocarbons
[7] PCBs = Polychlorinated Biphenyls

Notes: **Bold** indicates an exceedance of regulatory limits.
# = Naphthalene used as a surrogate
* = Contaminant is not a health concern for this exposure scenario
** = Direct esposure value is based on acute toxicity considerations
*** = Leachability values may be derived using SPLP test to calculate site-specific SCTLs
ft bls = feet below land surface
mg/kg = milligrams per kilogram
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection

J = Indicates Analyte detected at an estimated concentration
NC = No criteria have been established for this parameter
U = Analyte not detected above laboratory Method Detection Limit (MDL)

**TABLE 4-5**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES**
**SPLP RESULTS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP GCTLs[1]<br>(µg/L) | USEPA Region IX Tap Water PRGs[2]<br>(µg/L) | OLFS4-SB07-12<br>SB07<br>11-12<br>12/15/2006 | OLFS4-MW25S-10<br>MW25S<br>9-10<br>12/7/2006 | OLFS4-MW25S-40<br>MW25S<br>39-40<br>12/7/2006 | OLFS4-MW27S-10<br>MW27S<br>9-10<br>12/6/2006 | OLFS4-MW27S-45<br>MW27S<br>44-45<br>12/6/2006 |
|---|---|---|---|---|---|---|---|
| **Metals (µg/L)** | | | | | | | |
| Aluminum | 50 | 36000 | **112 J** | 75 U | 75 U | **84.4 J** | 75 U |
| Barium | 2000 | 2600 | 38.8 J | 22.1 J | 15.0 J | 34.1 J | 29.2 J |
| Calcium | NC | NC | 1210 J | 1570 J | 1000 U | 1000 U | 1000 U |
| Iron | 300 | 11000 | 30 U | 30 U | 30 U | 30 U | 35.6 J |
| Manganese | 50 | 880 | 37 | 3 U | 4 U | 29.2 | 3.4 J |
| Lead | 15 | 15 | 2 J | 2.6 J | 1.5 U | 1.7 J | 2.3 J |
| Sodium | NC | NC | 1060 J | 1000 U | 1000 U | 1000 U | 1000 U |
| Thallium | 2 | 2.4 | 0.75 U | 0.75 U | 0.77 J | 0.75 U | 0.75 U |
| Zinc | 5000 | 11000 | 31.3 | 39.1 | 10 U | 22 | 20.2 |

[1] Groundwater Cleanup Target Levels from Chapter 62-777, FAC.
[2] Preliminary Remediation Goals from USEPA Region IX PRG table.

Notes: **Bold** indicates an exceedance of FDEP limits.
ft bls = feet below land surface
µg/L = Micrograms per liter
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection
J = Indicates analyte detected at an estimated concentration
NC = No Criteria have been established for this parameter
U = Analyte not detected above laboratory Method Detection Limit (MDL)

**TABLE 4-6**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES**
**SOIL BORINGS THROUGHOUT THE SITE**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels<br>DE[1] / DE[2] / LE[3] (mg/kg) | USEPA Preleminary Remediation Goals<br>DE[1] / DE[2] / (mg/kg) | OLFS4-SB02-S10<br>SB01<br>9-10<br>12/15/2006 | OLFS4-SB02-S26<br>SB02<br>25-26<br>12/15/2006 | OLFS4-SB03-S10<br>SB03<br>9-10<br>12/15/2006 | OLFS4-SB03-S26<br>SB03<br>25-26<br>12/15/2006 | OLFS4-SB04-S10<br>SB04<br>9-10<br>12/15/2006 | OLFS4-SB04-S45<br>SB04<br>44-45<br>12/15/2006 | OLFS4-SB05-S10<br>SB05<br>9-10<br>12/15/2006 | OLFS4-SB05-S45<br>SB05<br>44-45<br>12/15/2006 | OLFS4-SB06-S16<br>SB06<br>15-16<br>12/15/2006 | OLFS4-SB07-S12<br>SB07<br>11-12<br>12/15/2006 | OLFS4-SB08-S12<br>SB08<br>11-12<br>12/15/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 80000/*/*** | 76000/100000 | 8150 | 776 | 19500 | 7170 | 3610 | 827 | 3020 | 883 | 20600 | 4630 | 11800 |
| Arsenic | 2.1/12/*** | 0.39/1.6 | **1.4** | 0.20 J | **3.3** | **1.4** | **0.60** | **2.4** | **0.55** | **2.2** | **3.1** | **0.84** | **0.97** |
| Barium | 120/130000/1600 | 5400/67000 | 5.2 | 1.2 | 4.2 | 2.3 | 3.6 | 1.2 | 2.9 | 1.2 | 4.1 | 4.6 | 4.9 |
| Calcium | NC | NC | 63.1 J | 55.4 U | 55.1 U | 53.6 U | 52.1 U | 55.8 U | 76.3 | 54.1 U | 84.5 | 50.6 U | 145 |
| Cobalt | 1700/42000/*** | 900/1900 | 0.27 U | 0.28 U | 0.28 U | 0.27 U | 0.26 U | 0.28 U | 0.34 | 0.27 U | 0.27 U | 0.25 U | 0.27 U |
| Chromium (total) | 210/470/38 | 210/450 | 6.5 J | 2.7 J | 18.8 J | 9.3 J | 2.7 J | 3.8 J | 2.0 J | 3.5 J | 16.1 J | 3.2 J | 7.5 J |
| Copper | 150/89000/*** | 3100/41000 | 2.2 J | 0.35 J | 4.2 J | 1.8 J | 1.2 J | 1.3 J | 0.91 J | 0.93 J | 4.1 J | 1.2 J | 2.3 J |
| Iron | 53000/*/*** | 23000/100000 | 5490 | 382 | 14100 | 7030 | 2660 | 2970 | 2030 | 2440 | 11900 | 3120 | 6120 |
| Potassium | NC | NC | 54.3 U | 55.4 U | 55.1 U | 53.6 U | 52.1 U | 55.8 U | 56.0 U | 54.1 U | 54.1 U | 50.6 U | 56.4 |
| Magnesium | NC | NC | 61.7 J | 55.4 U | 55.1 U | 53.6 U | 52.1 U | 55.8 U | 56.0 U | 54.1 U | 54.1 U | 51.8 J | 53.1 U |
| Manganese | 3500/43000/*** | 1800/19000 | 19.9 | 2.2 | 16.5 | 3.2 | 6.3 | 0.85 | 12.5 | 0.93 | 12.7 | 6.7 | 21.8 |
| Selenium | 440/11000/5.2 | 390/5100 | 0.27 U, J | 0.28 U | 0.28 U, J | 0.27 U, J | 0.26 U | 0.35 | 0.28 U | 0.28 | 0.27 U, J | 0.25 U | 0.27 U, J |
| Nickel | 340/35000/130 | 1600/20000 | 1 | 0.28 U | 1.2 | 0.75 | 0.71 | 0.28 U | 0.71 | 0.27 U | 1.2 | 0.88 | 1.1 |
| Lead | 400/1400/*** | 400/800 | 1.9 | 0.89 | 3.7 | 1.8 | 1.3 | 1.9 | 1.2 | 1.7 | 3.3 | 1.4 | 2.2 J |
| Vanadium | 67/10000/980 | 78/1000 | 12.5 J | 1.2 J | 35.8 J | 18.2 J | 5.6 J | 12.0 J | 4.3 J | 10.3 J | 28.5 J | 6.6 J | 14.2 J |
| Zinc | 26000/630000/*** | 23000/100000 | 2.8 | 0.55 U | 3.3 | 1.3 | 1.9 | 0.56 U | 1.7 | 0.54 U | 2.8 | 2.0 | 2.5 |

[1] Direct Exposure Residential Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[2] Direct Exposure Industrial Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[3] Leachability Limit based on Groundwater from Chapter 62-777, FAC.

Notes: **Bold** indicates an exceedance of regulatory limits.
* = Contaminant is not a health concern for this exposure scenario
** = Direct exposure value is based on acute toxicity considerations
*** = Leachability values may be derived using SPLP test to calculate site-specific SCTLs
ft bls = feet below land surface
mg/kg = milligrams per kilogram
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection
J = Indicates analyte detected at an estimated concentration
NC = No criteria have been established for this parameter
U = Analyte not detected above laboratory Method Detection Limit (MDL)

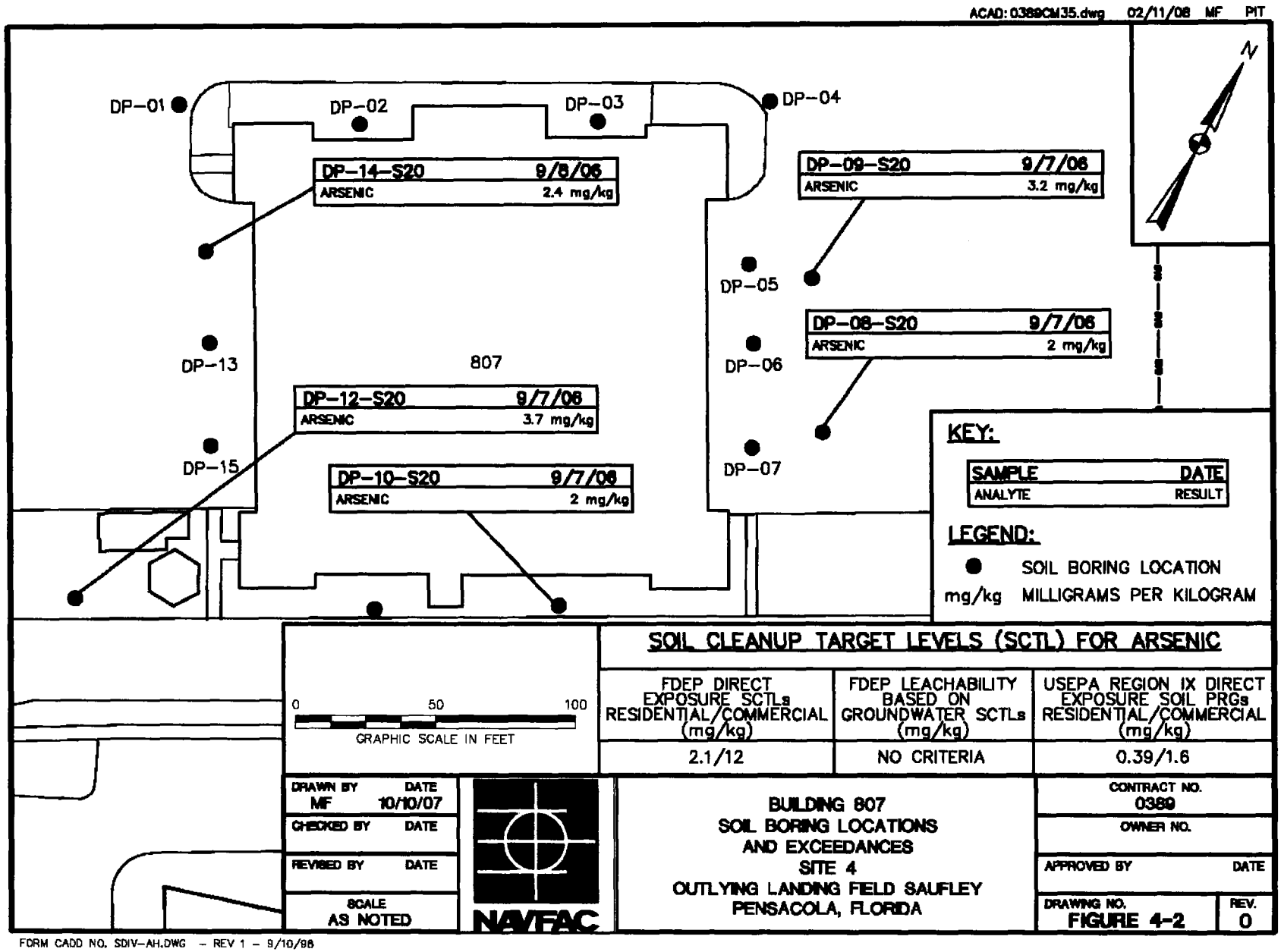
**TABLE 4-7**

**SUMMARY OF CONTAMINANTS DETECTED IN SUBSURFACE SOIL SAMPLES
MONITOR WELL SOIL SAMPLES
SITE 4 REMEDIAL INVESTIGATION REPORT
OLF SAUFLEY
PENSACOLA, FLORIDA**

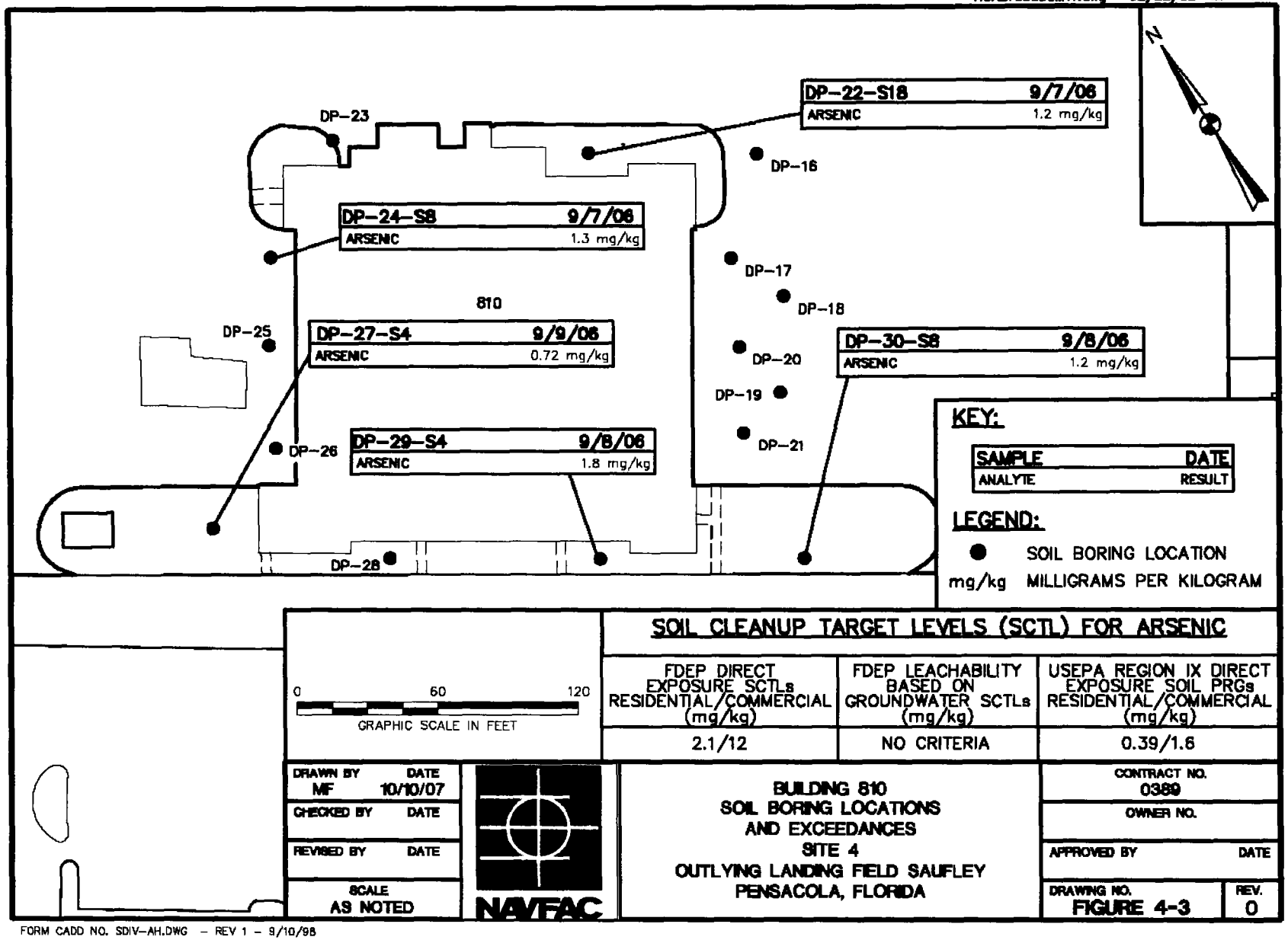
| Sample No.<br>Sample Location<br>Sample Depth (ft bls)<br>Collect Date | FDEP Soil Cleanup Target Levels<br>DE[1] / DE[2] / LE[3] (mg/kg) | USEPA Preleminary Remediation Goals<br>DE[1] / DE[2] / (mg/kg) | OLFS4-MW24-S20<br>MW24S<br>19-20<br>12/5/2006 | OLFS4-MW25-S10<br>MW25S<br>9-10<br>12/7/2006 | OLFS4-MW25-S40<br>MW25S<br>39-40<br>12/7/2006 | OLFS4-MW26-S25<br>MW26S<br>24-25<br>12/7/2006 | OLFS4-MW27-S10<br>MW27S<br>9-10<br>12/6/2006 | OLFS4-MW27-S45<br>MW27S<br>44-45<br>12/6/2006 | OLFS4-MW33-S5<br>MW33S<br>4-5<br>12/14/2006 | OLFS4-MW33-S26<br>MW33S<br>25-26<br>12/14/2006 | OLFS4-MW35-S29<br>MW35S<br>28-29<br>12/14/2006 | OLFS4-MW36-S25<br>MW36S<br>24-25<br>12/14/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SVOC[4] (mg/kg)** | | | | | | | | | | | | |
| 1,1-Biphenyl | 3000/34000/0.2 | 3000/23000 | NA | NA | 0.11 U | 0.1 U | NA | NA | **0.34 J** | 0.1 U | 0.1 U | 0.1 U |
| Dibenzofuran | 320/6300/15 | 150/1600 | NA | NA | 0.11 U | 0.1 U | NA | NA | 0.190 J | 0.1 U | 0.1 U | 0.1 U |
| Fluorene | 2600/33000/160 | 2700/26000 | NA | NA | 0.044 U | 0.041 U | NA | NA | 0.170 J | 0.041 U | 0.042 U | 0.042 U |
| 2-Methylnaphthalene | 210/2100/8.5 | 56/190* | NA | NA | 0.044 U | 0.041 U | NA | NA | 1.5 | 0.041 U | 0.042 U | 0.042 U |
| Naphthalene | 55/300/1.2 | 56/190 | NA | NA | 0.044 U | 0.041 U | NA | NA | 0.22 J | 0.041 U | 0.042 U | 0.042 U |
| Phenanthrene | 2200/36000/250 | 2300/29000** | NA | NA | 0.044 U | 0.041 U | NA | NA | 0.075 J | 0.041 U | 0.042 U | 0.042 U |
| **TRPH [5] (mg/kg)** | 460/2700/340 | NC | NA | NA | 7.6 U | 7.1 U | NA | NA | **730** | 7 U | 7.2 U | 7 U |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 80000/*/*** | 76000/100000 | 11700 | 20100 | 949 | 7010 | 3160 | 875 | 5700 | 3000 | 7200 | 8820 |
| Arsenic | 2.1/12/*** | 0.39/1.6 | **2.3** | **2.9** | 0.31 | **1.2** | **0.56** | **2.1** | **4.2** | **0.62** | **1.3** | **1.8** |
| Barium | 120/130000/1600 | 5400/67000 | 2.8 | 5.1 | 0.69 | 0.89 | 3.0 | 1.2 | 30.1 | 0.42 | 5.4 | 1.7 |
| Calcium | NC | NC | 76.4 | 141 | 75.8 | 52.9 U | 52.6 U | 56.5 U | 517 | 50.1 U | 52.9 U | 113 J |
| Cobalt | 1700/42000/*** | 900/1900 | 0.27 U | 0.27 U | 0.28 U | 0.26 U | 0.26 U | 0.28 U | 1.2 | 0.25 U | 0.42 J | 0.26 U |
| Chromium (total) | 210/470/38 | 210/450 | 14.0 | 13.4 | 1.5 | 4.7 | 2.2 | 5.1 | 3.6 | 3.0 | 7.9 | 6.3 |
| Copper | 150/89000/*** | 3100/41000 | 2.7 | 4.3 | 0.39 J | 1.5 | 0.84 J | 0.90 J | 2.2 | 0.68 J | 2.5 | 2.2 |
| Iron | 53000/*/*** | 23000/100000 | 9130 | 11400 | 1110 | 3730 | 2260 | 2850 | 10200 | 1950 | 5110 | 5350 |
| Potassium | NC | NC | 54.1 U | 63.2 J | 56.3 U | 52.9 U | 52.6 U | 56.5 U | 56.2 U | 50.1 U | 52.9 U | 51.3 U |
| Magnesium | NC | NC | 54.1 U | 70.3 J | 56.3 U | 52.9 U | 52.6 U | 56.5 U | 59.7 J | 50.1 U | 52.9 U | 51.3 U |
| Manganese | 3500/43000/*** | 1800/19000 | 8.1 | 14.4 | S | 4.3 | 5.7 | 1.8 | 588 | 2.2 | 61.7 | 6.2 |
| Nickel | 340/35000/130 | 1600/20000 | 0.78 | 1.5 | 0.28 U | 0.51 | 0.79 | 0.28 U | 0.88 | 0.25 U | 1.2 J | 0.65 |
| Lead | 400/1400/*** | 400/800 | 2.2 J | 3.2 | 0.68 | 1.1 | 1.1 | 1.4 | 4.1 | 0.62 | 2.4 | 1.4 |
| Vanadium | 67/10000/980 | 78/1000 | 22.2 | 27.0 | 4.0 | 8.4 | 4.4 | 11.8 | 7.8 | 4.4 | 9.9 | 12.4 |
| Zinc | 26000/630000/*** | 23000/100000 | 1.6 | 3.9 | 0.56 U | 1.1 | 1.7 | 0.57 U | 5.0 | 0.98 | 2.5 | 1.8 |
| Mercury | 3/17/2.1 | 23/310 | 0.14 U | 0.13 U | 0.13 U | 0.13 U | 0.12 U | 0.15 U | 0.019 | 0.13 U | 0.13 U | 0.12 U |

[1] Direct Exposure Residential Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[2] Direct Exposure Industrial Limit from Chapter 62-777, FAC or USEPA Region IX PRG table
[3] Leachability Limit based on Groundwater from Chapter 62-777, FAC.
[4] SVOCs = Semivolatile Organic Compounds
[5] TRPH = Total Recoverable Petroleum Hydrocarbons

Notes: **Bold** indicates an exceedance of FDEP limits.
* = Contaminant is not a health concern for this exposure scenario
*** = Leachability values may be derived using SPLP test to calculate site-specific SCTLs
ft bls = feet below land surface
mg/kg = milligrams per kilogram
FAC = Florida Administrative Code
FDEP = Florida Department of Environmental Protection
J = Indicates analyte detected at an estimated concentration
NC = No criteria have been established for this parameter
R = Sample rejected due to technical noncompliance
NA = Sample not analyzed for this parameter
U = Analyte not detected above laboratory Method Detection Limit (MDL)


ACAD: 0389CM35.dwg 02/11/08 MF PIT
DP-01
DP-02
DP-03
DP-04
DP-14-S20 9/5/06
ARSENIC 2.4 mg/kg
DP-09-S20 9/7/06
ARSENIC 3.2 mg/kg
DP-05
DP-08-S20 9/7/06
ARSENIC 2 mg/kg
DP-13
807
DP-06
DP-12-S20 9/7/06
ARSENIC 3.7 mg/kg
DP-15
DP-07
DP-10-S20 9/7/06
ARSENIC 2 mg/kg
N
KEY:
SAMPLE DATE
ANALYTE RESULT
LEGEND:
SOIL BORING LOCATION
mg/kg MILLIGRAMS PER KILOGRAM
0 50 100
GRAPHIC SCALE IN FEET
SOIL CLEANUP TARGET LEVELS (SCTL) FOR ARSENIC
FDEP DIRECT EXPOSURE SCTLs RESIDENTIAL/COMMERCIAL (mg/kg)
FDEP LEACHABILITY BASED ON GROUNDWATER SCTLs (mg/kg)
USEPA REGION IX DIRECT EXPOSURE SOIL PRGs RESIDENTIAL/COMMERCIAL (mg/kg)
2.1/12
NO CRITERIA
0.39/1.6
DRAWN BY MF DATE 10/10/07
CHECKED BY DATE
REVISED BY DATE
SCALE AS NOTED
NAVFAC
BUILDING 807
SOIL BORING LOCATIONS
AND EXCEEDANCES
SITE 4
OUTLYING LANDING FIELD SAUFLEY
PENSACOLA, FLORIDA
CONTRACT NO. 0389
OWNER NO.
APPROVED BY DATE
DRAWING NO. FIGURE 4-2
REV. 0
FORM CADD NO. SDIV-AH.DWG - REV 1 - 9/10/98

ACAD: 0389CM11.dwg 02/22/08 MF PIT




## SOIL CLEANUP TARGET LEVELS (SCTL) FOR ARSENIC

| FDEP DIRECT EXPOSURE SCTLs RESIDENTIAL/COMMERCIAL (mg/kg) | FDEP LEACHABILITY BASED ON GROUNDWATER SCTLs (mg/kg) | USEPA REGION IX DIRECT EXPOSURE SOIL PRGs RESIDENTIAL/COMMERCIAL (mg/kg) |
|---|---|---|
| 2.1/12 | NO CRITERIA | 0.39/1.6 |

| | |
|---|---|
| DRAWN BY MF | DATE 10/10/07 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE AS NOTED | |

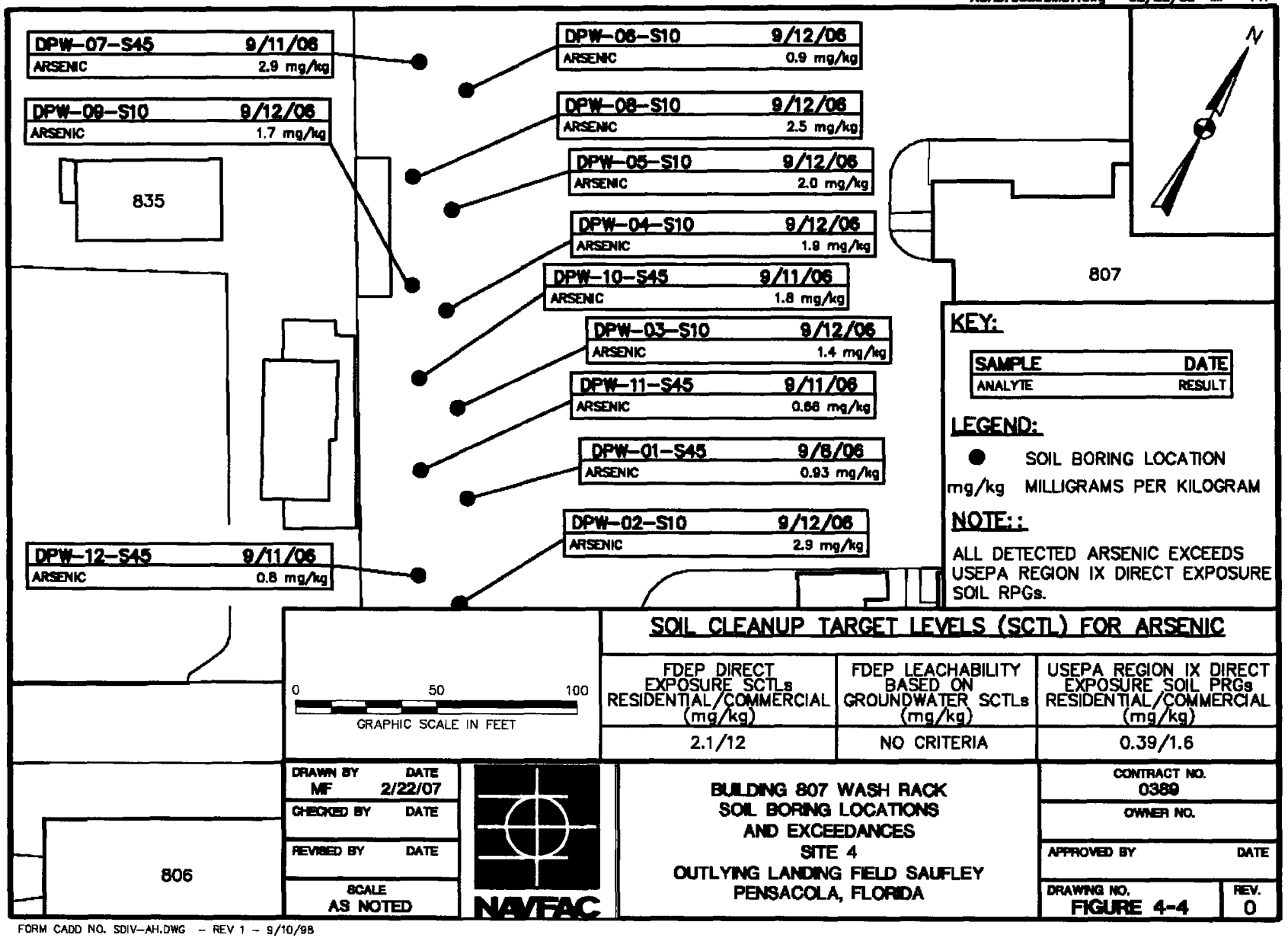
NAVFAC

**BUILDING 810**
**SOIL BORING LOCATIONS**
**AND EXCEEDANCES**
**SITE 4**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**

| | |
|---|---|
| CONTRACT NO. 0389 | |
| OWNER NO. | |
| APPROVED BY | DATE |
| DRAWING NO. FIGURE 4-3 | REV. 0 |

FORM CADD NO. SDIV-AH.DWG – REV 1 – 9/10/98

ACAD: 0389CM37.dwg 02/22/08 MF PIT




## SOIL CLEANUP TARGET LEVELS (SCTL) FOR ARSENIC

| FDEP DIRECT EXPOSURE SCTLs RESIDENTIAL/COMMERCIAL (mg/kg) | FDEP LEACHABILITY BASED ON GROUNDWATER SCTLs (mg/kg) | USEPA REGION IX DIRECT EXPOSURE SOIL PRGs RESIDENTIAL/COMMERCIAL (mg/kg) |
|---|---|---|
| 2.1/12 | NO CRITERIA | 0.39/1.6 |

| | |
|---|---|
| DRAWN BY MF | DATE 2/22/07 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE AS NOTED | |

NAVFAC

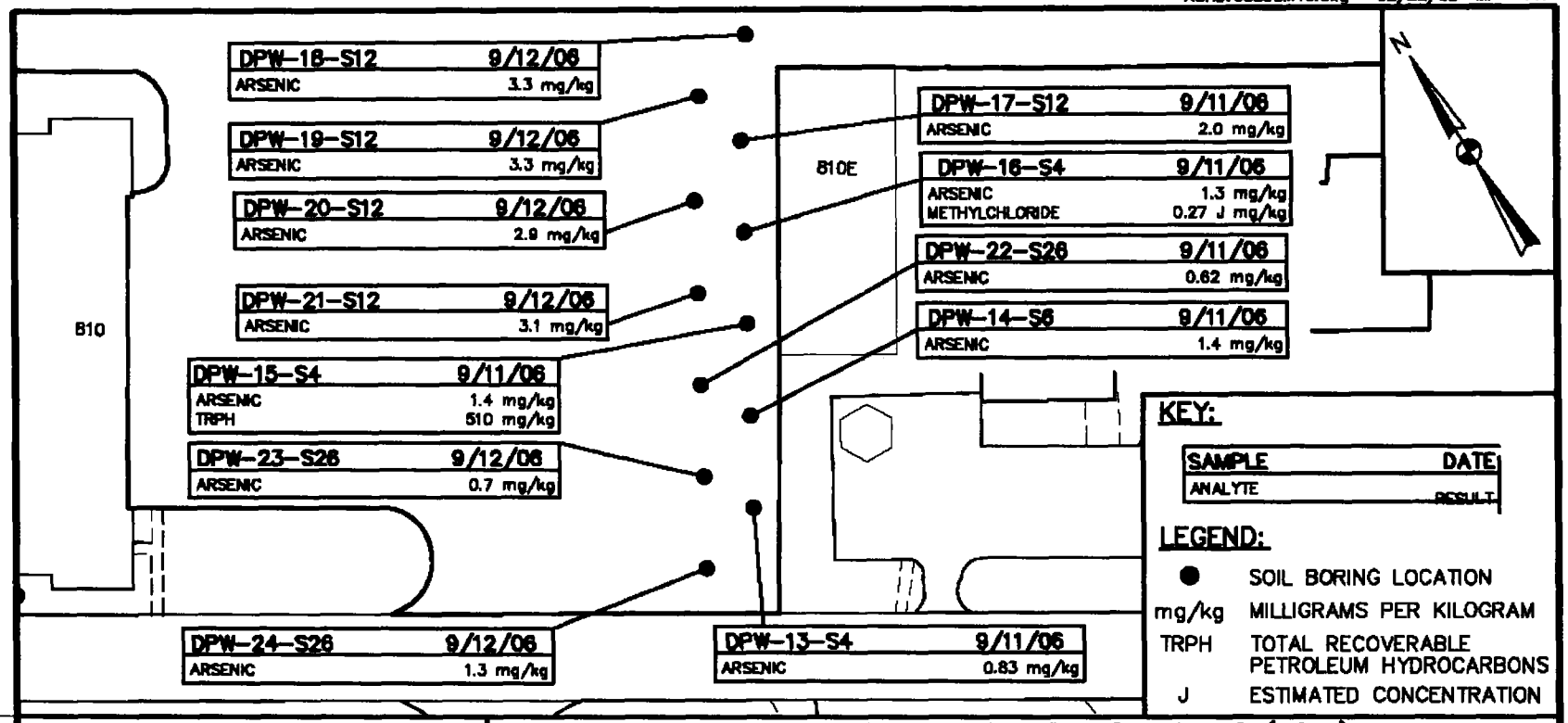
**BUILDING 807 WASH RACK**
**SOIL BORING LOCATIONS**
**AND EXCEEDANCES**
**SITE 4**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**

| | |
|---|---|
| CONTRACT NO. 0389 | |
| OWNER NO. | |
| APPROVED BY | DATE |
| DRAWING NO. FIGURE 4-4 | REV. 0 |

FORM CADD NO. SDIV-AH.DWG – REV 1 – 9/10/98

Rev. 01
5/12/08

ACAD: 0389CM40.dwg 02/22/08 MF PIT




## SOIL CLEANUP TARGET LEVELS (SCTL)

| ANALYTE | FDEP DIRECT EXPOSURE SCTLs RESIDENTIAL/COMMERCIAL (mg/kg) | FDEP LEACHABILITY BASED ON GROUNDWATER SCTLs (mg/kg) | USEPA REGION IX DIRECT EXPOSURE SOIL PRGs RESIDENTIAL/COMMERCIAL (mg/kg) |
|---|---|---|---|
| ARSENIC | 2.1/12 | NO CRITERIA | 0.39/1.6 |
| TRPH | 480/2700 | 340 | NO CRITERIA |
| METHYLENE CHLORIDE | 17/26 | 0.02 | 9.1/21 |

| | |
|---|---|
| DRAWN BY MF | DATE 10/10/07 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE AS NOTED | |

NAVFAC

BUILDING 810 WASH RACK
SOIL BORING LOCATIONS
AND EXCEEDANCES
SITE 4
OUTLYING LANDING FIELD SAUFLEY
PENSACOLA, FLORIDA

| | |
|---|---|
| CONTRACT NO. 0389 | |
| OWNER NO. | |
| APPROVED BY | DATE |
| DRAWING NO. FIGURE 4-5 | REV. 0 |

FORM CADD NO. SDIV-AH.DWG - REV 1 - 9/10/98





Rev. 1
5/12/08

Aroclor 1260 of 0.0066 mg/kg, which is considerably lower than the most stringent regulatory limit, which in this case is FDEP residential SCTL (0.5 mg/kg).

#### 4.4.2.5 Inorganics

There were 17 inorganic analytes detected in the subsurface soil samples collected at Site 4. However, arsenic was the only inorganic analyzed detected at concentrations exceeding the FDEP residential SCTLs and USEPA residential and industrial PRGs. Arsenic was detected in 53 subsurface soil samples at concentrations exceeding the most conservative standard, which is USEPA direct exposure residential of 0.39 mg/kg. In addition, 28 samples reported concentrations that exceeded USEPA direct exposure for industrial limit of 1.6 mg/kg, and 19 samples exceeded FDEP residential SCTL. Sample designations and concentrations are provided in the Table 4-8.

**TABLE 4-8**
**SUBSURFACE SOIL SAMPLE ARSENIC EXCEEDANCES**
**FDEP RESIDENTIAL SCTL (2.1 MG/KG) AND/OR USEPA RESIDENTIAL PRG (0.39 MG/KG)**
**SITE 4 – REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| SAMPLE DESIGNATION | CONCENTRATION | SAMPLE DESIGNATION | CONCENTRATION |
|---|---|---|---|
| OLFS4-DP08-S20 | 2.0 mg/kg | OLFS4-DPW17-S12 | 2.0 mg/kg |
| OLFS4-DP09-S20 | 3.2 mg/kg | OLFS4-DPW18-S12 | 3.3 mg/kg |
| OLFS4-DP10-S20 | 2.0 mg/kg | OLFS4-DPW19-S12 | 3.3 mg/kg |
| OLFS4-DP12-S20 | 3.7 mg/kg | OLFS4-DPW20-S12 | 2.9 mg/kg |
| OLFS4-DP14-S20 | 2.4 mg/kg | OLFS4-DPW21-S12 | 2.9 mg/kg |
| OLFS4-DP22-S18 | 1.2 mg/kg | OLFS4-DPW22-S26 | 0.62 mg/kg |
| OLFS4-DP24-S8 | 1.3 mg/kg | OLFS4-DPW23-S26 | 0.7 mg/kg |
| OLFS4-DP27-S4 | 0.72 mg/kg | OLFS4-DPW24-S26 | 1.3 mg/kg |
| OLFS4-DP29-S4 | 1.8 mg/kg | OLFS4-SB01-S10 | 1.4 mg/kg |
| OLFS4-DP30-S8 | 1.2 mg/kg | OLFS4-SB03-S10 | 3.3 mg/kg |
| OLFS4-SB05-S45 | 2.2 mg/kg | OLFS4-SB03-S26 | 1.4 mg/kg |
| OLFS4-DPW01-S45 | 0.93 mg/kg | OLFS4-SB04-S10 | 0.6 mg/kg |
| OLFS4-DPW02-S10 | 2.9 mg/kg | OLFS4-SB04-S45 | 2.4 mg/kg |
| OLFS4-DPW03-S10 | 1.4 mg/kg | OLFS4-SB05-S10 | 0.55 mg/kg |
| OLFS4-DPW04-S10 | 1.9 mg/kg | OLFS4-SB05-S45 | 2.2 mg/kg |
| OLFS4-DPW05-S10 | 2.0 mg/kg | OLFS4-SB06-S16 | 3.1 mg/kg |
| OLFS4-DPW06-S10 | 0.9 mg/kg | OLFS4-SB07-S12 | 0.84 mg/kg |
| OLFS4-DPW07-S45 | 2.9 mg/kg | OLFS4-SB08-S12 | 0.97 mg/kg |
| OLFS4-DPW08-S10 | 2.5 mg/kg | OLFS4-MW24-S20 | 2.3 mg/kg |
| OLFS4-DPW09-S10 | 1.7 mg/kg | OLFS4-MW25-S10 | 2.9 mg/kg |
| OLFS4-DPW10-S45 | 1.8 mg/kg | OLFS4-MW26-S25 | 1.2 mg/kg |
| OLFS4-DPW11-S45 | 0.66 mg/kg | OLFS4-MW27-S10 | 0.56 mg/kg |
| OLFS4-DPW12-S45 | 0.8 mg/kg | OLFS4-MW27-S45 | 2.1 mg/kg |
| OLFS4-DPW13-S4 | 0.83 mg/kg | OLFS4-MW33-S5 | 4.2 mg/kg |
| OLFS4-DPW14-S6 | 1.4 mg/kg | OLFS4-MW35-S29 | 1.3 mg/kg |
| OLFS4-DPW15-S4 | 1.4 mg/kg | OLFS4-MW36-S25 | 1.8 mg/kg |
| OLFS4-DPW16-S4 | 1.3 mg/kg | | |

The subsurface soil samples with exceedances for arsenic are located throughout the site and at different depths, therefore a pattern cannot be established. The site specific background concentration for arsenic is 1.36 mg/kg, which is higher than 20 of the samples that had exceedances to the FDEP SCTL and/or USEPA PRG criteria presented in Table 4-8. It should be noted that the highest concentration reported from the samples collected in Site 4 was 3.7 mg/kg, which is considerably below FDEP industrial SCTL of 12 mg/kg.

#### 4.4.2.6 Summary

According to the sampling events carried out in this RI effort, no analytes exceeded FDEP industrial SCTL. The major exceedance in the subsurface soil of Site 4 would be the arsenic detected at concentrations above the most stringent regulatory standards found throughout the site. Arsenic was detected in 53 subsurface soil samples at concentrations above FDEP residential SCTLs and USEPA residential and industrial PRGs, but below commercial/industrial SCTLs.

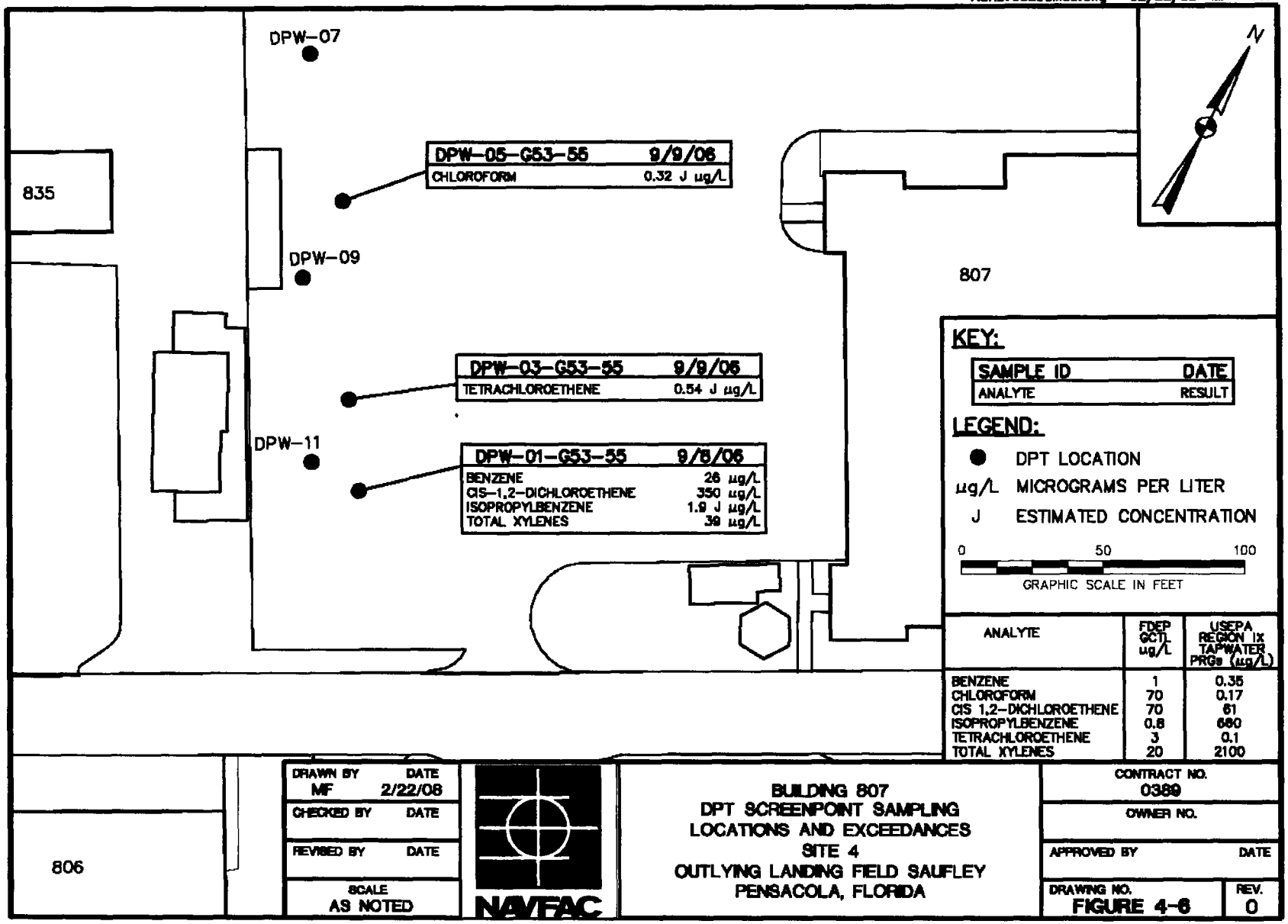
Only one subsurface soil sample and one screening point soil sample reported concentrations that exceeded the FDEP residential and leaching to groundwater SCTL criteria for TRPH (730 mg/kg and 510 mg/kg, respectively). Also, samples OLFS4-MW33S-5 and OLFS4-DPW16-S4 reported concentrations above the leaching to groundwater FDEP SCTL for 1,1-biphenyl (0.34 mg/kg) and methyl chloride [0.270 mg/kg (estimated)], respectively. These samples with exceedances were collected from soil borings in the washrack area adjacent to Building 810. However, no other analytes were reported above FDEP residential SCTLs in the subsurface samples taken from Site 4.

## 4.5 GROUNDWATER

To assist in the initial phase of monitoring well installation, 12 DPT screening point aqueous samples plus one duplicate sample were collected from the Hangar 807 and 810 washrack areas during September 2006. This sampling event was completed to obtain a better understanding of the contaminants at the site and to locate the groundwater monitoring wells with higher contaminant detections. Residential GCTL exceedances and locations are detailed in Figures 4-6 and 4-7 and the detection results are presented in Table 4-9.

The first round of groundwater sampling took place at Site 4 between December 2006 and January 2007, and consisted of installing and sampling 36 monitoring wells. Eight (8) wells were designated deep monitoring wells, with total depth ranging from 79.03 to 129.81 feet below top of casing. With total depths of ranging from 36.12 to 59.02 feet below top of casing, 28 wells were designated shallow monitoring wells. Included among the wells installed during this period are two background wells, designated OLFS4-MW-22D and OLFS4-MW-23S. These two wells were installed near the southeastern perimeter

ACAD: 0389CM39.dwg 02/22/08 MF PIT




| ANALYTE | FDEP GCTL µg/L | USEPA REGION IX TAPWATER PRGs (µg/L) |
|---|---|---|
| BENZENE | 1 | 0.35 |
| CHLOROFORM | 70 | 0.17 |
| CIS 1,2-DICHLOROETHENE | 70 | 61 |
| ISOPROPYLBENZENE | 0.8 | 660 |
| TETRACHLOROETHENE | 3 | 0.1 |
| TOTAL XYLENES | 20 | 2100 |

| | |
|---|---|
| DRAWN BY MF | DATE 2/22/08 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE | AS NOTED |

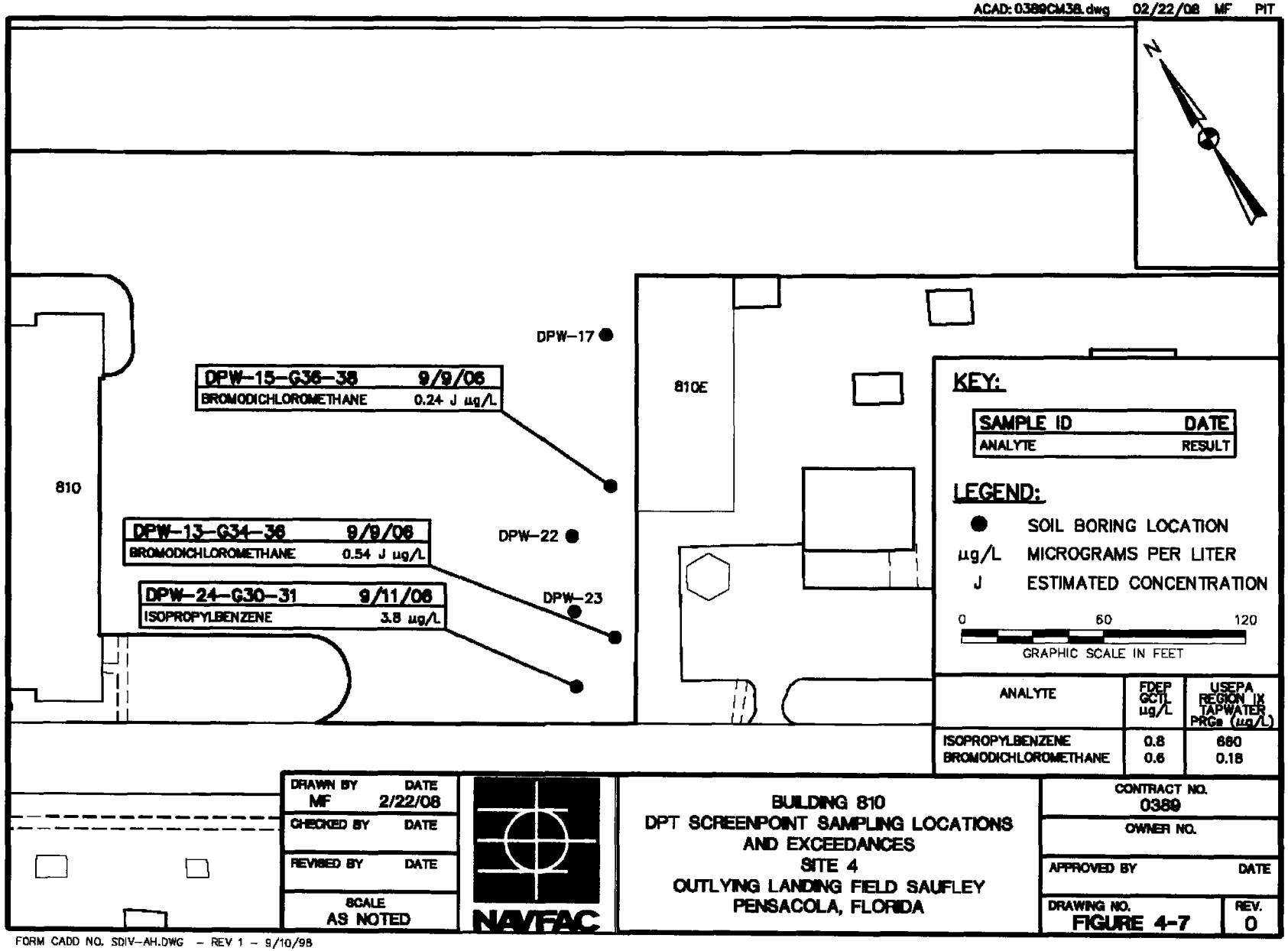
NAVFAC

**BUILDING 807**
**DPT SCREENPOINT SAMPLING LOCATIONS AND EXCEEDANCES**
**SITE 4**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**

| | |
|---|---|
| CONTRACT NO. 0389 | |
| OWNER NO. | |
| APPROVED BY | DATE |
| DRAWING NO. FIGURE 4-6 | REV. 0 |

FORM CADD NO. SDIV-AH.DWG - REV 1 - 9/10/98

ACAD: 0389CM38.dwg 02/22/08 MF PIT




FORM CADD NO. SDIV-AH.DWG - REV 1 - 9/10/98

**TABLE 4-9**

**SUMMARY OF CONTAMINANTS DETECTED IN WASH RACK SCREENPOINT GROUNDWATER SAMPLES**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**

| Sample No.<br>Sample Interval (ft bls)<br>Collect Date | FDEP GCTLs[1] (µg/L) | USEPA Region IX Tap Water PRGs[2] (µg/L) | OLFS4-DPW01-G53-55<br>53-55<br>9/8/2006 | OLFS4-DPW03-G53-55<br>53-55<br>9/9/2006 | OLFS4-DPW05-G53-55<br>53-55<br>9/9/2006 | OLFS4-DPW07-G53-55<br>53-55<br>9/11/2006 | OLFS4-DPW09-G53-55<br>53-55<br>9/10/2006 | OLFS4-DPW09-G53-55-D<br>53-55<br>9/10/2006<br>(DUPLICATE) | OLFS4-DPW11-G53-55<br>53-55<br>9/11/2006 | OLFS4-DPW13-G34-36<br>34-36<br>9/9/2006 | OLFS4-DPW15-G36-38<br>36-38<br>9/9/2006 | OLFS4-DPW17-G34-36<br>34-36<br>9/10/2006 | OLFS4-DPW22-G3<br>32-34<br>9/11/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOCs [3] (µg/L)** | | | | | | | | | | | | | |
| Acetone | 6300 | 5500 | 5.4 U | 25 J | 14 J | 24 J | 18 J | 17 J | 14 J | 52 J | 1.1 U, J | 1.1 U, J | 6.4 J |
| Benzene | 1 | 0.35 | **26** | 0.11 U | 0.11 J | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.17 J | 0.11 U | 0.11 U | 0.11 U |
| Bromodichloromethane | 0.6 | 0.18 | 1.2 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | **0.54 J** | **0.24 J** | 0.24 U | 0.24 U |
| 2-Butanone | 4200 | 7000 | 6.2 U | 3.8 J | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| Carbon Disulfide | 700 | 1000 | 0.65 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.73 J |
| Chloroform | 70 | 0.17 | 0.75 U | 0.15 U | **0.32 J** | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.16 J | 0.15 U | 0.15 U |
| Chloromethane | 2.7 | 4.6 | 0.9 U | 0.18 U | 0.18 U | 0.18 U | 0.18 J | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.3 J |
| Cyclohexane | no criteria | 10000 | 1.3 J | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 1.1 J | 0.18 U | 0.18 U | 0.18 U |
| 1,1 Dichloroethane | 70 | 810 | 27 | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| cis 1,2 Dichloroethene | 70 | 61 | **350** | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| Ethylbenzene | 30 | 1300 | 8.2 | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Isopropylbenzene | 0.8 | 660 | **1.9 J** | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| Methyl cyclohexane | no criteria | 5200 | 1 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| Tetrachloroethene | 3 | 0.1 | 0.7 U | **0.54 J** | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Toluene | 40 | 720 | 2.7 J | 0.54 J | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U |
| Total Xylenes | 20 | 210 | **39** | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U |
| | | | | | | | | | | | | | |

[1] Groundwater Cleanup Target Level as provided in Chapter 62-777, FAC.

[2] PRGs = Preliminary Remediation Goals as provided in USEPA Region IX PRG table

[3] VOCs = Volatile Organic Compounds

Notes:

**Bold** indicates an exceedance of FDEP limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
ft bls = feet below land surface
µg/L = micrograms per liter
J = Compound was detected at an estimated concentration
FAC = Florida Administrative Code

of the installation on December 13, 2006 and were sampled on December 19, 2006. Selected well locations and results from both rounds of groundwater sampling are shown in Figures 4-7, 4-8, 4-9, and 4-10.

The second sampling event occurred between June 8 and June 14, 2007. Laboratory results from the initial sampling event indicated a need for a better delineation. Therefore, a decision was made to install 10 additional monitor wells. All ten wells were designated as shallow monitoring wells, with total depths ranging from 46.53 to 65.09 feet below top of casing. After installation and development, the supplemental monitor wells were sampled. All installed wells were sampled following FDEP SOPs, USEPA EISOPQAM, and TtNUS SOPs. Prior to this study, groundwater from Site 4 had never been sampled. The groundwater samples collected during the first phase of the groundwater sampling for the RI were analyzed for the full list of TCL and TAL analytes, as well as petroleum hydrocarbons. For the second groundwater sampling event, no PCB or inorganics were analyzed. Groundwater analytical results were compared to the risk-based GCTLs established in 62-777, FAC, the USEPA Region IX Tap Water PRGs, and the reference background concentrations for metals. Table 4-10 provides a summary of analytes detected in groundwater. The OLF Saufley reference concentrations (DON, 2004) for metals in groundwater were determined from on base background wells OLFS4-MW22D and OLFS4-MW23S. The reference concentrations are facility-specific background concentrations established for OLF Saufley. The screening concentration calculations are described in section 6.1.1.2.2. (Applicable reference background concentrations are in Table 4-2).

### 4.5.1 Volatile Organics

In groundwater samples collected at Site 4, 21 VOCs were detected in the groundwater samples collected at Site 4. Additionally, 10 VOCs (benzene, bromodichloroethene, chloroform, dibromochloromethane, cis-1,2-dichloroethene, ethylbenzene, isopropylbenzene, tetrachloroethene, vinyl chloride and total xylenes) were reported at concentrations meeting or exceeding current FDEP GCTLs and USEPA Tap Water PRGs. A summary of the detections follows:

- Benzene was detected at or above the FDEP GCTL of 1 micrograms per liter (µg/L) or USEPA Tap Water PRGs of 0.35 µg/L in one screen point sample, OLFS4-DPW01-G53-55 (26 µg/L), and four samples: OLFS4-MW05S-001 (4.9 µg/L), OLFS4-MW07S-001 (0.38 µg/L estimated), OLFS4-MW8S-001 (0.93 µg/L estimated), and OLFS4-MW14D-001 (12 µg/L).

ACAD: 0389CM18.dwg 02/13/08 MF PIT

| ANALYTE | FDEP GCTL (µg/L) | USEPA REGION IX TAPWATER PRGs (µg/L) |
|---|---|---|
| BENZENE | 1 | 0.36 |
| CIS 1,2-DICHLOROETHENE | 70 | 61 |
| ISOPROPYLBENZENE | 0.8 | 660 |
| TOTAL XYLENES | 20 | 2100 |
| NAPTHALENE | 14 | 6.2 |
| ALUMINUM | 50-200** | 39000 |
| TOTAL CHROMIUM | 100 | 110* |
| IRON | 300** | 11000 |
| MANGANESE | 50** | 880 |
| NICKEL | 100 | 730 |
| BROMODICHLOROMETHANE | 0.6 | 0.18 |
| 1-METHYLNAPTHALENE | 28 | 6.2 |
| 2-METHYLNAPTHALENE | 28 | 6.2 |
| CHLOROFORM | 70 | 0.17 |
| VINYL CHLORIDE | 2 | 0.02 |
| TETRACHLOROETHENE | 3 | 0.1 |
| DIBROMOCHLOROMETHANE | 0.4 | 0.13 |

* = NO TOAL CHROMIUM VALUE AVAILABLE, SUBSTITUTE CR+++ VALUE.
** = NO FDEP GCTL, EPA SECONDARY GROUNDWATER STANARD USED.

**MW-037S (55-65) 6/19/07**
ALUMINUM 65.1 J µg/L
IRON 708 µg/L
MANGANESE 310 µg/L

**MW-27S (40-55) 1/7/07**
ALUMINUM 188 J µg/L
IRON 470 µg/L

**MW-24S (40-55) 1/8/07**
ALUMINUM 204 µg/L
CHLOROFORM 0.43 J µg/L
IRON 592 µg/L
MANGANESE 98 µg/L
TETRACHLOROETHENE 0.34 J µg/L

**MW-05S (40-55) 12/7/06**
BENZENE 4.9 µg/L
CIS 2,3-DICHLOROETHENE 77 µg/L
ISOPROPYLBENZENE 1.5 µg/L
TOTAL XYLENES 21 µg/L
NAPTHALENE 20 µg/L
ALUMINUM 752 µg/L
IRON 3470 µg/L
MANGANESE 495 µg/L
VINYL CHLORIDE 0.27 J µg/L
1-METHYLNAPTHALENE 12 µg/L
2-METHYLNAPTHALENE 8.6 µg/L

**MW-08S (40-55) 12/7/06**
ALUMINUM 755 µg/L
BROMODICHLOROMETHANE 0.54 J µg/L
BENZENE 0.38 J µg/L
DIBROMODICHLOROMETHANE 0.39 J µg/L
IRON 2040 µg/L
MANGANESE 400 µg/L

**MW-15S (40-55) 1/4/07**
ALUMINUM 172 µg/L
CHLOROFORM 0.54 J µg/L
DIBROMOCHLOROMETHANE 0.26 J µg/L
IRON 984 µg/L
MANGANESE 265 µg/L
TETRACHLOROETHENE 0.2 J µg/L
VINYL CHLORIDE 0.36 J µg/L

**MW-25S (40-55) 1/8/07**
ALUMINUM 1440 µg/L
IRON 4030 µg/L
MANGANESE 66.7 µg/L

**MW-09S (37-52) 1/8/07**
IRON 8530 µg/L
MANGANESE 847 µg/L

**MW-07S (40-55) 12/8/06**
ALUMINUM 790 µg/L
CHROMIUM 103 µg/L
IRON 7550 µg/L
MANGANESE 816 µg/L
BENZENE 0.38 J µg/L
TETRACHLOROETHENE 0.24 J µg/L

**MW-14D (75-80) 1/8/07**
BENZENE 12 µg/L
CHLOROFORM 0.34 J µg/L
IRON 664 µg/L
MANGANESE 87.2 µg/L

**MW-01D2 (125-130) 1/8/07**
ALUMINUM 336 µg/L
CHLOROFORM 0.49 J µg/L
IRON 705 µg/L
MANGANESE 54 µg/L

**MW-02D (75-80) 1/8/07**
ALUMINUM 140 µg/L
IRON 2816 µg/L
MANGANESE 78.5 µg/L

**MW-03S (40-60) 12/8/06**
ALUMINUM 180 µg/L
IRON 962 µg/L
MANGANESE 235 µg/L

**MW-06S (40-55) 12/6/06**
ALUMINUM 1510 µg/L
CHLOROFORM 349 µg/L
IRON 8870 µg/L
MANGANESE 590 µg/L
NICKEL 179 µg/L

835
807
806
2403
MW04D

N

**KEY:**

SAMPLE ID (SCREEN) DATE
ANALYTE RESULT

**LEGEND:**

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- µg/L MICROGRAMS PER LITER
- J ESTIMATED CONCENTRATION

0 60 120
GRAPHIC SCALE IN FEET

| | |
|---|---|
| DRAWN BY MF | DATE 10/12/07 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE AS NOTED | |

NAVFAC

BUILDING 807
MONITORING WELL LOCATIONS
AND EXCEEDANCES
SITE 4
OLF SAUFLEY
PENSACOLA, FLORIDA

CONTRACT NO. 0389
OWNER NO.
APPROVED BY DATE
DRAWING NO. FIGURE 4-8
REV. 0

FORM CADD NO. SDIV-SH.DWG — REV 1 — 9/10/96

ACAD: 0389CM17.dwg 02/22/08 MF PIT

MW-40S (55-65) 6/17/07

| | |
|---|---|
| ALUMINUM | 335 J µg/L |
| IRON | 606 µg/L |
| MANGANESE | 221 µg/L |

MW-41S (55-65) 6/11/07

| | |
|---|---|
| ALUMINUM | 1100 J µg/L |
| IRON | 1340 µg/L |
| MANGANESE | 270 µg/L |

MW-16S (40-55) 12/7/06

| | |
|---|---|
| ALUMINUM | 761 µg/L |
| CHROMIUM | 120 µg/L |
| IRON | 1120 µg/L |
| MANGANESE | 310 µg/L |
| DIBROMOCHLOROMETHANE | 0.38 J µg/L |
| BROMODICHLOROMETHANE | 0.29 J µg/L |

MW-18S (40-55) 12/21/06

| | |
|---|---|
| ALUMINUM | 2690 µg/L |
| ARSENIC | 3.9 µg/L |
| CHROMIUM | 139 µg/L |
| IRON | 8140 µg/L |
| MANGANESE | 159 µg/L |

MW-19S (40-55) 12/7/06

| | |
|---|---|
| ALUMINUM | 170 µg/L |
| CHROMIUM | 855 µg/L |
| IRON | 3710 µg/L |
| MANGANESE | 161 µg/L |
| NICKEL | 438 µg/L |
| DIBROMOCHLOROMETHANE | 0.38 J µg/L |
| BROMODICHLOROMETHANE | 0.35 J µg/L |

MW-17S (35-55) 12/21/06

| | |
|---|---|
| ALUMINUM | 3110 µg/L |
| ARSENIC | 5.8 µg/L |
| CHROMIUM | 138 µg/L |
| IRON | 8340 µg/L |
| MANGANESE | 209 µg/L |

MW-38S (55-65) 6/15/07

| | |
|---|---|
| CHLOROFORM | 0.7 J µg/L |
| ALUMINUM | 215 J µg/L |
| IRON | 1060 µg/L |
| MANGANESE | 1460 µg/L |

MW-39S (55-65) 6/16/07

| | |
|---|---|
| BROMODICHLOROMETHANE | 0.6 J µg/L |
| DIBROMOCHLOROMETHANE | 0.5 J µg/L |
| ALUMINUM | 116 J µg/L |
| MANGANESE | 410 µg/L |
| CHLOROFORM | 3 µg/L |

807
808
2451
847
847A
804
HEATING OIL AST/UST AREA

| ANALYTE | FDEP GCTL (µg/L) | USEPA REGION IX TAPWATER PRGs (µg/L) |
|---|---|---|
| ARSENIC | 10 | 0.045 |
| BENZENE | 1 | 0.35 |
| BROMODICHLOROMETHANE | 0.6 | 0.18 |
| DIBROMOCHLOROMETHANE | 0.4 | 0.13 |
| ALUMINUM | 50-200** | 36000 |
| TOTAL CHROMIUM | 100 | 110* |
| IRON | 300** | 11000 |
| MANGANESE | 50** | 880 |
| NICKEL | 100 | 730 |

* = NO TOAL CHROMIUM VALUE AVAILABLE, SUBSTITUTE CR+++ VALUE.
** = NO FDEP GCTL, EPA SECONDARY GROUNDWATER STANARD USED.

KEY:

SAMPLE ID (SCREEN) DATE
ANALYTE RESULT

LEGEND:

- ⊕ SHALLOW MONITORING WELL
- ⊕ DEEP MONITORING WELL
- µg/L MICROGRAMS PER LITER
- J ESTIMATED CONCENTRATION

0 60 120
GRAPHIC SCALE IN FEET

| | |
|---|---|
| DRAWN BY MF | DATE 10/12/07 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE AS NOTED | |

NAVFAC

BUILDING 808
MONITORING WELL LOCATIONS
AND EXCEEDANCES
SITE 4
OLF SAUFLEY
PENSACOLA, FLORIDA

| | |
|---|---|
| CONTRACT NO. 0389 | |
| OWNER NO. | |
| APPROVED BY | DATE |
| DRAWING NO. FIGURE 4-9 | REV. 0 |

FORM CADD NO. SDIV-SH.DWG – REV 1 – 9/10/96

ACAD:0389CM18.dwg 02/22/08 MF PIT

**MW-20S (30-45) 12/20/06**

| | |
|---|---|
| ALUMINUM | 333 ug/L |
| CHLOROFORM | 0.75 ug/L |
| MANGANESE | 173 ug/L |

**MW-10D (80-85) 12/20/06**

| | |
|---|---|
| ALUMINUM | 539 ug/L |
| IRON | 1170 ug/L |

**MW-43S (41-51) 6/13/07**

| | |
|---|---|
| ALUMINUM | 1070 J ug/L |
| IRON | 967 ug/L |
| MANGANESE | 1150 ug/L |

**MW-31S (25-40) 1/5/07**

| | |
|---|---|
| ETHYLBENZENE | 35 ug/L |
| ISOPROPYLBENZENE | 28 ug/L |
| TOTAL XYLENES | 24 ug/L |
| NAPTHALENE | 42 ug/L |
| TRPH | 8900 ug/L |
| ALUMINUM | 282 ug/L |
| IRON | 5930 ug/L |
| MANGANESE | 1880 ug/L |
| 1,1-BIPHENYL | 1.1 J ug/L |

**MW-33S (25-40) 1/5/07**

| | |
|---|---|
| ALUMINUM | 144 J ug/L |
| IRON | 3550 ug/L |
| MANGANESE | 178 ug/L |

**MW-11S (25-40) 12/20/06**

| | |
|---|---|
| ALUMINUM | 580 ug/L |
| IRON | 1710 ug/L |
| MANGANESE | 185 ug/L |

**MW-34S (25-40) 1/5/07**

| | |
|---|---|
| ALUMINUM | 245 ug/L |
| CHLOROFORM | 0.97 J ug/L |
| IRON | 3610 ug/L |
| MANGANESE | 795 ug/L |

**MW-21S (30-45) 1/7/07**

| | |
|---|---|
| ALUMINUM | 333 ug/L |
| IRON | 351 ug/L |
| MANGANESE | 283 ug/L |

**MW-42S (36-46) 6/12/07**

| | |
|---|---|
| MANGANESE | 108 ug/L |

**MW-30S (25-40) 1/4/07**

| | |
|---|---|
| ISOPROPYLBENZENE | 39 ug/L |
| IRON | 8690 ug/L |
| MANGANESE | 563 ug/L |

**MW-32S (25-40) 1/5/07**

| | |
|---|---|
| ETHYLBENZENE | 110 ug/L |
| ISOPROPYLBENZENE | 80 ug/L |
| TOTAL XYLENES | 840 ug/L |
| NAPTHALENE | 68 ug/L |
| TRPH | 6300 ug/L |
| IRON | 6780 ug/L |
| MANGANESE | 610 ug/L |

**MW-35S (25-40) 1/8/07**

| | |
|---|---|
| ALUMINUM | 197 ug/L |
| IRON | 765 ug/L |
| MANGANESE | 98.7 ug/L |

**MW-29D (75-80) 1/5/07**

| | |
|---|---|
| CHLOROFORM | 0.35 J ug/L |
| IRON | 4920 ug/L |
| MANGANESE | 130 ug/L |

**MW-36S (25-40) 1/5/07**

| | |
|---|---|
| IRON | 309 ug/L |

**MW-44S (45-55) 6/13/07**

| | |
|---|---|
| ALUMINUM | 73.2 J ug/L |
| CHLOROFORM | 0.8 J ug/L |
| MANGANESE | 1160 ug/L |

**MW-46S (46-56) 6/18/07**

| | |
|---|---|
| ALUMINUM | 494 ug/L |
| CHLOROFORM | 0.4 J ug/L |
| CHROMIUM | 330 ug/L |
| IRON | 2080 ug/L |
| MANGANESE | 1120 ug/L |
| NICKEL | 174 ug/L |

**MW-26D (30-45) 1/5/07**

| | |
|---|---|
| IRON | 12500 ug/L |
| MANGANESE | 151 ug/L |

**MW-45S (51-61) 6/15/07**

| | |
|---|---|
| ALUMINUM | 386 J ug/L |
| IRON | 624 ug/L |
| MANGANESE | 1190 ug/L |

**MW-28S (30-45) 1/8/07**

| | |
|---|---|
| ALUMINUM | 109 ug/L |
| IRON | 2750 ug/L |
| MANGANESE | 342 ug/L |

809, 810, 810E, 838, 24787, 830, 829, 826, 801, 802, 2483, 24777, 2440, MW13S, MW12S

KEY:

SAMPLE ID (SCREEN) DATE
ANALYTE RESULT

LEGEND:

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- ug/kg MICROGRAMS PER LITER
- J ESTIMATED CONCENTRATION

0 120 240
GRAPHIC SCALE IN FEET

| ANALYTE | FDEP GCTL (ug/L) | USEPA REGION IX TAPWATER PRGs (ug/L) |
|---|---|---|
| TRPH | 5000 | NO CRITERIA |
| BENZENE | 1 | 0.35 |
| CHLOROFORM | 70 | 0.17 |
| ETHYLBENZENE | 30 | 1300 |
| ISOPROPYLBENZENE | 0.8 | 660 |
| TOTAL XYLENES | 20 | 2100 |
| NAPTHALENE | 14 | 6.2 |
| ALUMINUM | 50-200** | 36000 |
| TOTAL CHROMIUM | 100 | 110* |
| IRON | 300** | 11000 |
| MANGANESE | 50** | 880 |
| NICKEL | 100 | 730 |
| 1,1-BIPHENYL | 0.5 | 300 |
| BROMODICHLOROMETHANE | 0.6 | 0.18 |

* = NO TOAL CHROMIUM VALUE AVAILABLE, SUBSTITUTE CR+++ VALUE.
** = NO FDEP GCTL, EPA SECONDARY GROUNDWATER STANARD USED.

| | |
|---|---|
| DRAWN BY MF | DATE 11/9/07 |
| CHECKED BY | DATE |
| REVISED BY | DATE |
| SCALE AS NOTED | |

NAVFAC

**BUILDING 810**
**MONITORING WELL LOCATIONS**
**AND EXCEEDANCES**
**SITE 4**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| | |
|---|---|
| CONTRACT NO. 0389 | |
| OWNER NO. | |
| APPROVED BY | DATE |
| DRAWING NO. FIGURE 4-10 | REV. 0 |

FORM CADD NO. SDIV-BH.DWG - REV 1 - 9/10/98

**TABLE 4-10**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Collect Date | FDEP GCTLs [1] (µg/L) | USEPA Region IX Tap Water PRGs [2] (µg/L) | Background Reference Concentration (2 x mean) | OLFS4-MWO1D2-001<br>MWO1D2<br>1/6/2007 | OLFS4-MWO2D-001<br>MWO2D<br>1/6/2007 | OLFS4-MWO3S-001<br>MW-03-S<br>12/6/2006 | OLFS4-MWO4D-001<br>MWO4D<br>1/4/2007 | OLFS4-MWO5S-001<br>MW-05-S<br>12/7/2006 | OLFS4-MWO6S-001<br>MW-06-S<br>12/6/2006 | OLFS4-MWO7S-001<br>MW-07-S<br>12/8/2006 | OLFS4-MWO8S-001<br>MW-08-S<br>12/7/2006 | OLFS4-MWO8S-001-D<br>MW-08-S<br>12/7/2006<br>(DUPLICATE) | OLFS4-MWO9S-001<br>MWO9S<br>1/6/2007 | OLFS4-MW10D-001<br>MW-10-D<br>12/20/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOCs [3] (µg/L)** | | | | | | | | | | | | | | |
| Acetone | 6300 | 5500 | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U, J | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| Benzene | 1 | 0.35 | NA | 0.11 U | 0.11 U | 0.11 J | 0.11 U | **4.9** | 0.26 J | **0.38 J** | **0.93 J** | **0.66 J** | 0.11 U | 0.11 U |
| Bromoform | 4.4 | 8.5 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U |
| Bromodichloromethane | 0.6 | 0.18 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | **0.54 J** | **0.24 J** | 0.24 U | 0.24 U |
| 2-Butanone | 4200 | 7000 | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| Carbon Disulfide | 700 | 1000 | NA | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 4.3 | 0.13 U |
| Chloroform | 70 | 0.17 | NA | **0.49 J** | 0.3 U | 0.15 U | 0.3 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | **1.3** | 0.3 U | 0.3 U |
| Chloromethane | 2.7 | 4.6 | NA | 0.4 U, J | 0.4 U, J | 2 U, J | 0.4 U, J | 0.18 U | 2 U, J | 2 U, J | 0.18 U | 0.18 U | 0.4 U, J | 0.4 U |
| Cyclohexane | *** | 10000 | NA | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.41 J | 0.18 U | 1.6 J | 0.18 U | 0.18 U | 0.18 U | 0.18 U |
| Dibromochloromethane | 0.4 | 0.13 | NA | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | **0.38 J** | 0.08 U | 0.08 U | 0.08 U |
| 1,1 Dichloroethane | 70 | 810 | NA | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 5.2 | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| cis 1,2 Dichloroethene | 70 | 61 | NA | 0.44 U | 0.44 U | 0.44 U | 0.44 U | **77** | 0.44 U | 1.1 | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| trans 1,2 Dichloroethene | 100 | 120 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Ethylbenzene | 30 | 1300 | NA | 0.14 U | 0.14 U | 0.14 U | 0.14 U | **4.6** | 0.14 U | 0.29 J | 0.16 J | 0.14 U | 0.14 U | 0.14 U |
| Isopropylbenzene | 0.8 | 660 | NA | 0.25 U | 0.25 U | 0.25 U | 0.25 U | **1.5** | 0.25 U | 0.39 J | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| Methyl cyclohexane | *** | 5200 | NA | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 2.2 | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| Trichlorofluoromethane | 2100 | 1300 | NA | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| Tetrachloroethene | 3 | 0.1 | NA | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | **0.24 J** | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Toluene | 40 | 720 | NA | 0.18 U | 0.18 U | 0.23 J | 0.18 U | 1.1 | 0.32 J | 0.46 J | 0.87 J | 0.54 J | 0.18 U | 0.18 U |
| Vinyl Chloride | 2 | 0.02 | NA | 0.19 U | 0.19 U | 0.19 U | 0.19 U | **0.27 J** | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U |
| Total Xylenes | 20 | 210 | NA | 0.21 U | 0.21 U | 0.21 U | 0.21 U | **21** | 0.21 U | 0.83 J | 0.73 J | 0.28 J | 0.21 U | 0.21 U |
| **SVOCs [4] (µg/L)** | | | | | | | | | | | | | | |
| Acenaphthene | 20 | 370 | NA | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.012 U | 0.011 U | 0.011 U | 0.011 U | 0.011 U | 0.011 U, J | 0.011 U |
| Acenaphthylene | 210 | 370[1] | NA | 0.0085 U | 0.0088 U | 0.0087 U | 0.0087 U | 0.01 U | 0.0094 U | 0.0092 U | 0.0092 U | 0.0094 U | 0.0094 U, J | 0.009 U |
| Benzo (a) Anthracene | 0.2 | 0.092 | NA | 0.01 U | 0.011 U | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.011 U |
| Benzo (b) Fluoranthene | 0.2 | 0.092 | NA | 0.016 U | 0.017 U | 0.016 U | 0.016 U | 0.019 U | 0.018 U | 0.017 U | 0.017 U | 0.018 U | 0.018 U | 0.017 U |
| Benzo (k) Fluoranthene | 0.5 | 0.92 | NA | 0.013 U | 0.014 U | 0.013 U | 0.013 U | 0.015 U | 0.014 U | 0.014 U | 0.014 U | 0.014 U | 0.014 U | 0.014 U |
| Benzo (a) Pyrene | 0.2 | 0.0092 | NA | 0.0095 U | 0.0099 U | 0.0097 U | 0.0097 U | 0.011 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U |
| Bis(2-ethylhexyl)phthalate | 6 | 4.8 | NA | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.4 J | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1 U, J |
| 1,1 Biphenyl | 0.5 | 300 | NA | 1.1 U | 1.1 U | 1 U | 1.1 U | 5 U, R | 5.3 U, R | 5.7 U, R | 5.3 U, R | 5.3 U, R | 1.1 U | 1 U, J |
| Butylbenzylphthalate | 140 | 7300 | NA | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.6 J | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1 U, J |
| Caprolactam | *** | 18000 | NA | 1.1 U, J | 1.1 U, J | 1 U | 1.1 U | 1 U | 1.1 U | 1.2 J | 1 U | 1.1 U | 1.1 U, J | 1 U, J |
| Chrysene | 4.8 | 9.2 | NA | 1.1 U | 0.0094 U | 0.0092 U | 0.0092 U | 0.01 U | 0.01 U | 0.0098 U | 0.0098 U | 0.01 U | 0.01 U | 0.0096 U |
| Di-n-butylphthalate | 700 | 3600 | NA | 1.1 U | 1.1 U | 1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1 U, J |
| Fluoranthene | 280 | 1500 | NA | 1.1 U | 0.012 U | 0.012 U | 0.012 U | 0.014 U | 0.013 U | 0.012 U | 0.012 U | 0.013 U | 0.013 U | 0.012 U |
| Fluorene | 280 | 240 | NA | 1.1 U | 0.013 U | 0.013 U | 0.013 U | 0.1 | 0.014 U | 0.027 J | 0.014 U | 0.014 U | 0.014 U, J | 0.013 U |
| 2-Methlynaphthalene | 28 | 6.2[(c)] | NA | 0.016 U | 0.017 U | 0.034 J | 0.016 U | **12** | 0.054 J | 0.51 | 0.32 | 0.58 | 0.018 U, J | 0.017 U |
| 1-Methlynaphthalene | 28 | 6.2[(c)] | NA | 0.01 U | 0.01 U | 0.02 J | 0.01 U | **8.6** | 0.029 J | 0.5 | 0.17 | 0.35 J | 0.011 U, J | 0.011 U |
| Naphthalene | 14 | 6.2 | NA | 0.019 U | 0.02 U | 0.05 J | 0.019 U | **20** | 0.063 | 0.16 | 0.37 | 0.89 | 0.021 U, J | 0.02 U |
| Phenanthrene | 210 | 180[(c)] | NA | 0.014 U | 0.014 U | 0.014 U | 0.014 U | 0.039 J | 0.016 U | 0.033 J | 0.021 J | 0.02 J | 0.016 U, J | 0.015 U |
| Pyrene | 210 | 180 | NA | 0.01 U | 0.011 U | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.011 U | 0.011 U | 0.014 J | 0.012 U | 0.011 U |
| **TRPHs [5] (µg/L)** | | | | | | | | | | | | | | |
| TPH ($C_9$ - $C_{40}$) | 5000 | *** | NA | 180 U | 180 U | 180 U | 0.17 U | 750 | 180 U | 180 U | 180 U | 180 U | 190 U | 190 U |
| **Metals (µg/L)** | | | | | | | | | | | | | | |
| Aluminum ** | 50 - 200 | 36000 | 342 | **336** | **140** | **180** | 75 U | **752** | **1510** | **790** | **755** | **815** | 75 U | **539** |
| Arsenic * | 10 | 0.045 | -- | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Barium * | 2000 | 2600 | 23.2 | 9.1 | 54.6 | 57.1 | 19.1 | 81.8 | 43.6 | 72.5 | 50.2 | 49.7 | 93 | 104 |
| Calcium | *** | *** | -- | 1850 | 2160 | 8850 | 1000 U | 30600 | 13600 | 38100 | 13200 | 13200 | 6770 | 3930 |
| Cobalt | 420 | 730 | -- | 5 U | 6.9 | 5 U | 5 U | 5 U | 9 | 5 U | 5 U | 5 U | 5 U | 5 U |
| Chromium (total) * | 100 | 110[(4)] | 9.7 | 8.8 | 20.5 | 27.7 | 11.5 | 79.5 | **349** | **103** | 35.3 | 19.7 | 14.8 | 22 |
| Copper ** | 1000 | 1500 | -- | 5 U | 7.7 | 5 U | 12.7 | 5 U | 10.6 | 5 U | 5 U | 5 U | 5 U | 5.7 |
| Iron** | 300 | 11000 | 379 | **705** | **2810** | **962** | 190 | **3470** | **8870** | **7550** | **2040** | **1970** | **8530** | **1170** |
| Potassium | *** | *** | -- | 1000 U | 1550 | 5630 | 1000 U | 3040 | 1000 U | 6010 | 9210 | 9010 | 1580 | 1450 |
| Magnesium | *** | *** | -- | 1000 U | 1000 U | 2810 | 1000 U | 1450 | 2350 | 4000 | 1820 | 1780 | 5500 | 4900 |
| Manganese ** | 50 | 880 | 12.8 | **54** | **78.5** | **235** | 15.1 | **495** | **590** | **816** | **400** | **398** | **847** | 46.7 |
| Selenium * | 50 | 180 | -- | 1.2 U | 1.2 U | 5 U | 1.2 U | 5 U | 5 U | 5 U | 5 U | 5 U | 1.2 U | 5 U |
| Silver ** | 100 | 180 | -- | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Sodium* | 160000 | *** | 3380 | 9640 | 5740 | 4450 | 3870 | 3760 | 3830 | 5790 | 5330 | 5270 | 4640 | 6320 |
| Nickel | 100 | 730 | 8.4 | 8.6 | 15.7 | 19.1 | 10.4 | 44 | **179** | 54.8 | 22.1 | 13.6 | 11.6 | 16.5 |
| Lead * | 15 | 15[(5)] | -- | 0.61 | 1.5 U | 0.38 U | 1.5 U | 0.56 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 0.38 U | 12.2 |
| Thallium* | 2 | 2.4 | -- | 0.75 U | 1 U | 0.75 U | 1 U | 1.3 U | 0.75 U | 0.75 U | 1 U | 0.75 U | 0.75 U | 0.75 U |
| Vanadium | 49 | 36 | -- | 5 U | 5 U | 5 U | 5 U | 5 U | 9.9 | 5 U | 5 U | 5 U | 5 U | 5 U |
| Zinc ** | 5000 | 11000 | -- | 13.3 | 34.5 | 10 U | 17.4 | 10 U | 10 U | 10 U | 10 U | 10 U | 13.4 | 17.3 |
| Mercury * | 2 | 11 | -- | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U, J |

[1] Groundwater Cleanup Target Level as provided in Chapter 62-777, Florida Administrative Code
[2] Preliminary Remediation Goals as provided in USEPA Region IX table
[3] VOCs = Volatile Organic Compounds
[4] SVOCs = Semivolatile Organic Compounds
[5] TRPHs = Total Recoverable Petroleum Hydrocarbons
Notes:
**Bold** indicates an exceedance of regulatory limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
R = Rejected due to technical non-compliance
NA = Not applicable/not analyzed for this parameter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above MDL in background monitor wells
µg/L = micrograms per liter
FAC = Florida Administrative Code
FL-PRO = Florida Petroleum Range Organics
* = Primary Standard
** = Secondary Standard
*** = No Standard

**TABLE 4-10**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Collect Date | FDEP GCTLs [1] (µg/L) | USEPA Region IX Tap Water PRGs [2] (µg/L) | Background Reference Concentration (2 x mean) | OLFS4-MW11S-001<br>MW-11-S<br>12/20/2006 | OLFS4-MW12S-001<br>MW-12-S<br>12/19/2006 | OLFS4-MW13S-001<br>MW-13-S<br>12/20/2006 | OLFS4-MW14D-001<br>MW14D<br>1/8/2007 | OLFS4-MW15S-001<br>MW15S<br>1/4/2007 | OLFS4-MW16S-001<br>MW-16S<br>12/7/2006 | OLFS4-MW17S-001<br>MW-17S<br>12/21/2006 | OLFS4-MW18S-001<br>MW-18S<br>12/21/2006 | OLFS4-MW19S-001<br>MW-19S<br>12/7/2006 | OLFS4-MW20S-001<br>MW-20S<br>12/20/2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOCs [3] (µg/L)** | | | | | | | | | | | | | |
| Acetone | 6300 | 5500 | NA | 1.1 U | 7.8 U | 2.4 U | 1.1 U | 4.2 U | 1.1 U | 1.7 U | 1.1 U,J | 1.1 U | 2.9 U |
| Benzene | 1 | 0.35 | NA | 0.11 U | 0.11 U | 0.11 U | **12** | 0.11 U | 0.19 J | 0.11 U | 0.11 U | 0.18 J | 0.11 U |
| Bromoform | 4.4 | 8.5 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U |
| Bromodichloromethane | 0.6 | 0.18 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | **0.29 J** | 0.24 U | 0.24 U | **0.36 J** | 0.24 U |
| 2-Butanone | 4200 | 7000 | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| Carbon Disulfide | 700 | 1000 | NA | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.52 J |
| Chloroform | 70 | 0.17 | NA | 0.3 U | 0.3 U | **0.47 J** | **0.34 J** | **0.54 J** | 0.15 U | 0.3 U | 0.3 U | 0.15 U | **0.75 J** |
| Chloromethane | 2.7 | 4.6 | NA | 0.4 U | 0.42 J | 0.45 J | 0.4 U,J | 0.55 J | 2 U,J | 0.4 U,J | 0.4 U,J | 0.18 U | 0.51 J |
| Cyclohexane | *** | 10000 | NA | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U |
| Dibromochloromethane | 0.4 | 0.13 | NA | 0.08 U | 0.08 U | 0.08 U | 0.08 U | **0.26 J** | **0.38 J** | 0.08 U | 0.08 U | **0.35 J** | 0.08 U |
| 1,1 Dichloroethane | 70 | 810 | NA | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| cis 1,2 Dichloroethene | 70 | 61 | NA | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| trans 1,2 Dichloroethene | 100 | 120 | NA | 0.4 U | 0.4 U | 0.45 J | 0.4 U | 48 | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Ethylbenzene | 30 | 1300 | NA | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Isopropylbenzene | 0.8 | 660 | NA | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| Methyl cyclohexane | *** | 5200 | NA | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| Trichlorofluoromethane | 2100 | 1300 | NA | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| Tetrachloroethene | 3 | 0.1 | NA | 0.14 U | 0.14 U | 0.14 U | 0.14 U | **0.2 J** | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Toluene | 40 | 720 | NA | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.23 J | 0.61 J | 0.18 U | 0.18 U | 0.26 J | 0.18 U |
| Vinyl Chloride | 2 | 0.02 | NA | 0.19 U | 0.19 U | 0.19 U | 0.19 U | **0.35 J** | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U |
| Total Xylenes | 20 | 210 | NA | 0.21 U | 0.21 U | 0.21 U | 0.41 J | 0.21 U | 0.34 J | 0.21 U | 0.21 U | 0.21 U | 0.21 U |
| **SVOCs [4] (µg/L)** | | | | | | | | | | | | | |
| Acenaphthene | 20 | 370 | NA | 0.011 U | 0.01 U | 0.011 U | 0.011 U,J | 0.011 U | 0.011 U | 0.012 U | 0.011 U | 0.011 U | 0.011 U |
| Acenaphthylene | 210 | 370[1] | NA | 0.0097 U | 0.0088 U | 0.009 U | 0.009 U,J | 0.0097 U | 0.0094 U | 0.01 U | 0.0097 U | 0.009 U | 0.009 U |
| Benzo (a) Anthracene | 0.2 | 0.092 | NA | 0.012 U | 0.03 J | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 U | 0.011 U |
| Benzo (b) Fluoranthene | 0.2 | 0.092 | NA | 0.018 U | 0.04 J | 0.017 U | 0.017 U | 0.018 U | 0.018 U | 0.019 U | 0.018 U | 0.017 U | 0.017 U |
| Benzo (k) Fluoranthene | 0.5 | 0.92 | NA | 0.015 U | 0.037 J | 0.014 U | 0.014 U | 0.015 U | 0.014 U | 0.015 U | 0.015 U | 0.014 U | 0.014 U |
| Benzo (a) Pyrene | 0.2 | 0.0092 | NA | 0.011 U | **0.03 J** | 0.01 U | 0.01 U | 0.011 U | 0.01 U | 0.011 U | 0.011 U | 0.01 U | 0.01 U |
| Bis(2-ethylhexyl)phthalate | 6 | 4.8 | NA | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1 U | 1.2 U |
| 1,1 Biphenyl | 0.5 | 300 | NA | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 5.2 U, R | 1.1 U | 1.1 U | 5 U, R | 1.2 U |
| Butylbenzylphthalate | 140 | 7300 | NA | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.6 J | 1.1 U | 1.1 U | 1 U | 1.2 U |
| Caprolactam | *** | 18000 | NA | 1.1 U | 1.4 J | 1.1 U | 1.1 U,J | 3.6 J | 3.6 J | 1.1 U | 1.1 U | 4.4 J | 1.2 U |
| Chrysene | 4.8 | 9.2 | NA | 0.01 U | 0.046 J | 0.0096 U | 0.0096 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.0096 U | 0.0096 U |
| Di-n-butylphthalate | 700 | 3600 | NA | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.4 J | 1.1 U | 1.1 U | 1 U | 1.2 U |
| Fluoranthene | 280 | 1500 | NA | 0.013 U | 0.093 | 0.012 U | 0.012 U | 0.013 U | 0.013 U | 0.014 U | 0.013 U | 0.012 U | 0.016 J |
| Fluorene | 280 | 240 | NA | 0.014 U | 0.013 U | 0.013 U | 0.013 U,J | 0.014 U | 0.02 J | 0.015 U | 0.014 U | 0.013 U | 0.013 U |
| 2-Methlynaphthalene | 28 | 6.2[(2)] | NA | 0.018 U | 0.017 U | 0.017 U | 0.017 U,J | 0.018 U | 0.063 | 0.019 U | 0.018 U | 0.025 J | 0.017 U |
| 1-Methlynaphthalene | 28 | 6.2[(2)] | NA | 0.011 U | 0.01 J | 0.011 U | 0.011 U,J | 0.011 U | 0.046 J | 0.012 U | 0.011 U | 0.015 J | 0.011 U |
| Naphthalene | 14 | 6.2 | NA | 0.022 U | 0.02 U | 0.02 U | 0.02 U,J | 0.022 U | 0.1 | 0.022 U | 0.022 U | 0.044 J | 0.02 U |
| Phenanthrene | 210 | 180[(3)] | NA | 0.016 U | 0.07 | 0.015 U | 0.015 U,J | 0.016 U | 0.068 | 0.016 U | 0.03 J | 0.015 U | 0.027 U |
| Pyrene | 210 | 180 | NA | 0.012 U | 0.06 | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 U | 0.011 U |
| **TRPHs [5] (µg/L)** | | | | | | | | | | | | | |
| TPH ($C_8$ - $C_{40}$) | 5000 | *** | NA | 190 U | 180 U | 180 U | 180 U | 330 J | 180 U | 190 U | 190 U | 180 U | 180 U |
| **Metals [6] (µg/L)** | | | | | | | | | | | | | |
| Aluminum ** | 50 | 36000 | 342 | **560** | **309** | **795** | 75 U | **172** | **761** | **3110** | **2690** | **170** | **333** |
| Arsenic * | 10 | 0.045 | -- | 3 U | **3.6** | 3 U | 3 U | 3 U | 3 U | **5.8** | **3.9** | 4 U | 3 U |
| Barium * | 2000 | 2600 | 23.2 | 29.3 | 19.7 | 54 | 24.8 | 43.3 | 30.5 | 46.4 | 47.5 | 25.4 | 44.9 |
| Calcium | *** | *** | -- | 20800 | 26000 | 24600 | 1320 | 7780 | 9790 | 13400 | 13200 | 4790 | 28600 |
| Cobalt | 420 | 730 | -- | 5 U | 5 U | 5 U | 8.1 | 31.5 | 5 U | 5 U | 5 U | 12.1 | 5 U |
| Chromium (total) * | 100 | 110[(4)] | 9.7 | 5.9 | 13.9 | 43.6 | 5.7 | 33.2 | **120** | **138** | **139** | **855** | 14.5 |
| Copper ** | 1000 | 1500 | -- | 5 U | 5 U | 5 U | 5 U | 10.2 | 5 U | 8.8 | 11.6 | 6.8 | 5 U |
| Iron** | 300 | 11000 | 379 | **1710** | 297 | **719** | **664** | **984** | **1120** | **8340** | **8190** | **3710** | 290 |
| Potassium | *** | *** | -- | 1950 | 1170 | 2590 | 1000 U | 4760 | 2640 | 16200 | 2060 | 1000 U | 1700 |
| Magnesium | *** | *** | -- | 1740 | 1000 U | 2540 | 1090 | 1320 | 1060 | 2190 | 1770 | 1900 | 2150 |
| Manganese ** | 50 | 880 | 12.8 | **185** | 28.1 | **332** | **67.2** | **265** | **310** | **209** | **159** | **161** | **173** |
| Selenium * | 50 | 180 | -- | 5 U | 5 U | 5 U | 1.2 U | 1.2 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Silver ** | 100 | 180 | -- | 1 U | 1 U | 1 U | 1 U | 4.8 | 1 U | 1 U | 1 U | 1 U | 1 U |
| Sodium | 160000 | *** | 3380 | 5970 | 3660 | 4530 | 7940 | 4240 | 4380 | 10600 | 2200 | 4310 | 3900 |
| Nickel | 100 | 730 | 8.4 | 7.1 | 9.8 | 33.7 | 8.2 | 30.2 | 68.6 | 97 | 96.2 | **438** | 11.1 |
| Lead * | 15 | 15[(5)] | -- | 1.5 U | 1.5 U | 3 | 0.38 U | 2.8 | 1.5 U | 2.7 | 4.1 | 1.5 U | 1.5 U |
| Thallium* | 2 | 2.4 | -- | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 1.3 U | 0.75 U | 0.75 U | 1 U | 0.75 U |
| Vanadium | 49 | 36 | -- | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 12.1 | 9.9 | 5 U | 5 U |
| Zinc ** | 5000 | 11000 | -- | 10 U | 10 U | 28.9 | 13.5 | 255 | 10 U | 15 | 67.9 | 10 U | 11 |
| Mercury * | 2 | 11 | -- | 0.08 U, J | 0.08 U, J | 0.08 U, J | 0.08 U | 0.08 U | 0.08 U | 0.08 U, J | 0.08 U, J | 0.08 U | 0.08 U, J |

[1] Groundwater Cleanup Target Level as provided in Chapter 62-777, Florida Administrative Code
[2] Preliminary Remediation Goals as provided in USEPA Region IX table
[3] VOCs = Volatile Organic Compounds
[4] SVOCs = Semivolatile Organic Compounds
[5] TRPHs = Total Recoverable Petroleum Hydrocarbons
Notes:
**Bold** indicates an exceedance of regulatory limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
R = Rejected due to technical non-compliance
NA = Not applicable/not analyzed for this parameter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above MDL in background monitor wells
µg/L = micrograms per liter
FAC = Florida Administrative Code
FL-PRO = Florida Petroleum Range Organics
* = Primary Standard
** = Secondary Standard
*** = No Standard

**TABLE 4-10**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Collect Date | FDEP GCTLs [1] (µg/L) | USEPA Region IX Tap Water PRGs [2] (µg/L) | Background Reference Concentration (2 x mean) | OLFS4-MW21S-001<br>MW21S<br>1/7/2007 | OLFS4-MW22D-001<br>MW-22-D<br>12/19/2006<br>(BACKGROUND) | OLFS4-MW23S-001<br>MW-23-S<br>12/19/2006<br>(BACKGROUND) | OLFS4-MW24S-001<br>MW24S<br>1/6/2007 | OLFS4-MW25S-001<br>MW25S<br>1/6/2007 | OLFS4-MW26D-001<br>MW26D<br>1/5/2007 | OLFS4-MW27S-001<br>MW27S<br>1/7/2007 | OLFS4-MW28S-001<br>MW28S<br>1/8/2007 | OLFS4-MW29D-001<br>MW29S<br>1/5/2007 | OLFS4-MW30S-001<br>MW30S<br>1/4/2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOCs [3] (µg/L)** | | | | | | | | | | | | | |
| Acetone | 6300 | 5500 | NA | 2.4 U | 1.1 U | 8.4 U | 1.1 U | 1.1 U | 1.1 U | 7.9 U | 2.1 U | 3.7 U | 2.5 U |
| Benzene | 1 | 0.35 | NA | 0.11 U | 0.11 U | 0.21 J | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| Bromoform | 4.4 | 8.5 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U |
| Bromodichloromethane | 0.6 | 0.18 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U |
| 2-Butanone | 4200 | 7000 | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| Carbon Disulfide | 700 | 1000 | NA | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| Chloroform | 70 | 0.17 | NA | 0.3 U | 0.3 U | 0.3 U | **0.43 J** | 0.3 U | 0.3 U | 0.3 U | 0.3 U | **0.35 J** | 0.3 U |
| Chloromethane | 2.7 | 4.6 | NA | 0.5 J | 0.4 U | 0.4 U | 0.4 U, J | 0.4 U, J | 0.42 J | 0.4 U, J | 0.4 U, J | 0.4 U, J | 0.4 U, J |
| Cyclohexane | *** | 10000 | NA | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.76 J |
| Dibromochloromethane | 0.4 | 0.13 | NA | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U |
| 1,1 Dichloroethane | 70 | 810 | NA | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| cis 1,2 Dichloroethene | 70 | 61 | NA | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.61 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| trans 1,2 Dichloroethene | 100 | 120 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 3.2 |
| Ethylbenzene | 30 | 1300 | NA | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Isopropylbenzene | 0.8 | 660 | NA | 0.25 U | 0.25 U | 0.33 J | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | **39** |
| Methyl cyclohexane | *** | 5200 | NA | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 1.4 |
| Trichlorofluoromethane | 2100 | 1300 | NA | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| Tetrachloroethene | 3 | 0.1 | NA | 0.14 U | 0.14 U | 0.14 U | **0.34 J** | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| Toluene | 40 | 720 | NA | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U |
| Vinyl Chloride | 2 | 0.02 | NA | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U |
| Total Xylenes | 20 | 210 | NA | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.66 J |
| **SVOCs [4] (µg/L)** | | | | | | | | | | | | | |
| Acenaphthene | 20 | 370 | NA | 0.011 U, J | 0.01 U | 0.4 | 0.012 U, J | 0.011 U | 0.01 U | 0.011 U, J | 0.011 U, J | 0.01 U | 0.011 U |
| Acenaphthylene | 210 | 370[1] | NA | 0.0097 U, J | 0.0088 U | 0.009 U | 0.01 U, J | 0.0092 U | 0.0088 U | 0.0094 U, J | 0.0097 U, J | 0.0088 U | 0.0092 U |
| Benzo (a) Anthracene | 0.2 | 0.092 | NA | 0.012 U | 0.011 U | 0.011 U | 0.018 J | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.011 U | 0.011 U |
| Benzo (b) Fluoranthene | 0.2 | 0.092 | NA | 0.018 U | 0.017 U | 0.017 U | 0.019 U | 0.017 U | 0.017 U | 0.018 U | 0.018 U | 0.017 U | 0.017 U |
| Benzo (k) Fluoranthene | 0.5 | 0.92 | NA | 0.015 U | 0.014 U | 0.014 U | 0.015 U | 0.014 U | 0.014 U | 0.014 U | 0.015 U | 0.014 U | 0.014 U |
| Benzo (a) Pyrene | 0.2 | 0.0092 | NA | 0.011 U | 0.0099 U | 0.01 U | 0.11 U | 0.01 U | 0.0099 U | 0.01 U | 0.012 U | 0.0099 U | 0.01 U |
| Bis(2-ethylhexyl)phthalate | 6 | 4.8 | NA | 1 U | 1 U | 1.1 U | 1.2 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U |
| 1,1 Biphenyl | 0.5 | 300 | NA | 1 U | 1 U | 1.1 U | 1.2 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U |
| Butylbenzylphthalate | 140 | 7300 | NA | 1 U | 1 U | 1.1 U | 1.2 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U |
| Caprolactam | *** | 18000 | NA | 1 U, J | 1.5 J | 2.7 J | 1.2 U, J | 1 U, J | 1.1 U, J | 1.1 U, J | 1.1 U, J | 1.1 U, J | 1 U, J |
| Chrysene | 4.8 | 9.2 | NA | 0.01 U | 0.0094 U | 0.0096 U | 0.027 J | 0.0098 U | 0.0094 U | 0.01 U | 0.01 U | 0.0094 U | 0.0098 U |
| Di-n-butylphthalate | 700 | 3600 | NA | 1 U | 1 U | 1.1 U | 1.2 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U |
| Fluoranthene | 280 | 1500 | NA | 0.013 U | 0.012 U | 0.012 U | 0.038 J | 0.012 U | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.046 J |
| Fluorene | 280 | 240 | NA | 0.014 U, J | 0.013 U | 0.15 | 0.015 U, J | 0.014 U | 0.013 U | 0.014 U, J | 0.014 U, J | 0.013 U | 0.014 U |
| 2-Methlynaphthalene | 28 | 6.2[2c] | NA | 0.018 U, J | 0.017 U | 0.017 U | 0.019 U, J | 0.036 J | 0.017 U | 0.018 U, J | 0.018 U, J | 0.017 U | 2.6 |
| 1-Methlynaphthalene | 28 | 6.2[2c] | NA | 0.011 U, J | 0.01 U | 0.035 J | 0.012 U, J | 0.15 | 0.01 U | 0.011 U, J | 0.011 U, J | 0.01 U | 1.3 |
| Naphthalene | 14 | 6.2 | NA | 0.022 U, J | 0.02 U | 0.02 U | 0.022 U, J | 0.021 U | 0.12 | 0.021 U | 0.022 U, J | 0.056 | 0.021 U |
| Phenanthrene | 210 | 180[3] | NA | 0.016 U, J | 0.014 U | 0.015 U | 0.016 U, J | 0.015 U | 0.014 U | 0.016 U | 0.016 U, J | 0.014 U | 0.038 J |
| Pyrene | 210 | 180 | NA | 0.012 U | 0.011 U | 0.011 U | 0.045 J | 0.011 U | 0.011 U | 0.012 U | 0.012 U | 0.011 U | 0.040 J |
| **TRPHs [5] (µg/L)** | | | | | | | | | | | | | |
| TPH ($C_8$ - $C_{40}$) | 5000 | *** | NA | 210 U | 180 U | 550 | 190U | 170 U | 180 U | 180 U | 180 U | 180 U | 3700 |
| **Metals [6] (µg/L)** | | | | | | | | | | | | | |
| Aluminum ** | 50 | 36000 | 342 | **333** | **342** | **712** | **204** | **1440** | 75 U | **188** | **109** | 75 U | 75 U |
| Arsenic * | 10 | 0.045 | -- | 3 U | 3 U | **3.9** | 3 U | **4** | 3 U | 3 U | 3 U | 3 U | 3 U |
| Barium * | 2000 | 2600 | 23.2 | 22.8 | 23.2 | 316 | 12.4 | 23.4 | 67.9 | 41.4 | 46.9 | 83 | 14.8 |
| Calcium | *** | *** | -- | 7130 | 1000 U | 181000 | 6410 | 18600 | 21900 | 13200 | 50500 | 6130 | 18000 |
| Cobalt | 420 | 730 | -- | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Chromium (total) * | 100 | 110[4] | 9.7 | 38.6 | 9.7 | 16.2 | 40.7 | 81.2 | 3.4 | 28.7 | 6.8 | 8.8 | 5.6 |
| Copper ** | 1000 | 1500 | -- | 14.8 | 5 U | 5 U | 5.9 | 22.3 | 5 U | 13.6 | 5 U | 5 U | 5 U |
| Iron** | 300 | 11000 | 379 | **351** | **379** | **34500** | **592** | **4030** | **12500** | **470** | **2750** | **4920** | **8690** |
| Potassium | *** | *** | -- | 1370 | 1000 U | 35600 | 2020 | 1710 | 7250 | 1740 | 4920 | 1870 | 1000 U |
| Magnesium | *** | *** | -- | 1840 | 1000 U | 17100 | 1000 U | 1340 | 9610 | 2260 | 6470 | 4420 | 1670 |
| Manganese ** | 50 | 880 | 12.8 | **283** | 12.8 | **2790** | **98** | **68.7** | **151** | 17.1 | **342** | **130** | **563** |
| Selenium * | 50 | 180 | -- | 1.2 U | 5 U | 5 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.4 | 1.2 U |
| Silver ** | 100 | 180 | -- | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Sodium | 160000 | *** | 3380 | 3890 | 3380 | **31900** | 3110 | 3010 | 11400 | 2830 | 7100 | 4060 | 2680 |
| Nickel | 100 | 730 | 8.4 | 35.4 | 8.4 | 12.3 | 32.4 | 53.9 | 7 | 20.6 | 6.2 | 12.1 | 6.1 |
| Lead * | 15 | 15[5] | -- | 1.3 | 1.5 U | 9.1 | 0.39 | 1.6 | 0.38 U | 0.68 | 0.39 | 0.44 | 0.73 |
| Thallium* | 2 | 2.4 | -- | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U | 0.75 U |
| Vanadium | 49 | 36 | -- | 5 U | 5 U | 5 U | 5 U | 5 | 5 U | 5 U | 5 U | 5 U | 5 U |
| Zinc ** | 5000 | 11000 | -- | 89.3 | 10 U | 10.7 | 37.9 | 25.5 | 13 | 36.4 | 14.7 | 21.4 | 29.7 |
| Mercury * | 2 | 11 | -- | 0.08 U | 0.08 U, J | 0.08 U, J | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U |

[1] Groundwater Cleanup Target Level as provided in Chapter 62-777, Florida Administrative Code
[2] Preliminary Remediation Goals as provided in USEPA Region IX table
[3] VOCs = Volatile Organic Compounds
[4] SVOCs = Semivolatile Organic Compounds
[5] TRPHs = Total Recoverable Petroleum Hydrocarbons
Notes:
**Bold** indicates an exceedance of regulatory limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
R = Rejected due to technical non-compliance
NA = Not applicable/not analyzed for this parameter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above MDL in background monitor wells
µg/L = micrograms per liter
FAC = Florida Administrative Code
FL-PRO = Florida Petroleum Range Organics
* = Primary Standard
** = Secondary Standard
*** = No Standard

**TABLE 4-10**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Collect Date<br>Sample Depth (ft bls) | FDEP GCTLs [1] (µg/L) | USEPA Region IX Tap Water PRGs [2] (µg/L) | Background Reference Concentration (2 x mean) | OLFS4-MW31S-001<br>MW31S<br>1/5/2007 | OLFS4-MW32S-001<br>MW32S<br>1/5/2007 | OLFS4-MW33S-001<br>MW33S<br>1/5/2007 | OLFS4-MW34S-001<br>MW34S<br>1/5/2007 | OLFS4-MW35S-001<br>MW35S<br>1/8/2007 | OLFS4-MW35S-001-D<br>MW35S<br>1/8/2007<br>(DUPLICATE) | OLFS4-MW36S-001<br>MW36S<br>1/5/2007 | OLFS4-MW37S-001<br>MW37S<br>6/14/2007 | OLFS4-MW37S-001-D<br>MW37S<br>6/14/2007<br>(DUPLICATE) | OLFS4-MW38S-001<br>MW38S<br>6/15/2007 | OLFS4-MW39S-001<br>MW39S<br>6/16/2007 | OLFS4-MW40S-001<br>MW40S<br>6/17/2007 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOCs [3] (µg/L)** | | | | | | | | | | | | | | | |
| Acetone | 6300 | 5500 | NA | 14 U | 16 U | 1.1 U, J | 2.9 U | 1.5 U | 1.1 U | 1.1 U | 6 J | 8 J | 5 J | 4 J | 4 J |
| Benzene | 1 | 0.35 | NA | 0.2 J | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.4 U | **1** | 0.4 U | 0.4 U | 0.4 U |
| Bromoform | 4.4 | 8.5 | NA | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.3 U | 0.3 U | 0.3 U | 0.4 J | 0.3 U |
| Bromodichloromethane | 0.6 | 0.18 | NA | 0.24 U | 1.2 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.3 U | 0.3 U | 0.3 U | **0.6 J** | 0.3 U |
| 2-Butanone | 4200 | 7000 | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 2 U | 2 U | 4 J | 2 U | 2 U |
| Carbon Disulfide | 700 | 1000 | NA | 0.13 U | 0.65 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Chloroform | 70 | 0.17 | NA | 00.3 U | 00.3 U | 00.3 U | **0.97 J** | 00.3 U | 00.3 U | 00.3 U | 0.4 U | 0.4 U | **0.7 J** | **3** | 0.4 U |
| Chloromethane | 2.7 | 4.6 | NA | 0.4 U, J | 0.4 U, J | 0.4 U, J | 0.4 U, J | 0.4 U, J | 0.4 U, J | 0.4 U, J | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U |
| Cyclohexane | *** | 10000 | NA | 0.27J | 4.2 J | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U |
| Dibromochloromethane | 0.4 | 0.13 | NA | 0.08 U | 0.4 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.3 U | 0.3 U | 0.3 U | **0.5 J** | 0.3 U |
| 1,1 Dichloroethane | 70 | 810 | NA | 0.15 U | 0.75 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| cis 1,2 Dichloroethene | 70 | 61 | NA | 0.44 U | 2.2 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| trans 1,2 Dichloroethene | 100 | 120 | NA | 1.1 | 2 U | 0.4 U | 0.58 J | 0.4 U | 0.4 U | 0.4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Ethylbenzene | 30 | 1300 | NA | **35** | **110** | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Isopropylbenzene | 0.8 | 660 | NA | **28** | **80** | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Methyl cyclohexane | *** | 5200 | NA | 1.2 | 16 | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Trichlorofluoromethane | 2100 | 1300 | NA | 0.15 U | 0.75 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.16 J | 0.4 U, J | 0.4 U, J | 0.4 U | 0.4 U, J | 0.4 U, J |
| Tetrachloroethene | 3 | 0.1 | NA | 0.14 U | 0.7 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Toluene | 40 | 720 | NA | 0.25 J | 4.8 J | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.18 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Vinyl Chloride | 2 | 0.02 | NA | 0.19 U | 0.95 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Total Xylenes | 20 | 210 | NA | **24** | **840** | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| **SVOCs [4] (µg/L)** | | | | | | | | | | | | | | | |
| Acenaphthene | 20 | 370 | NA | 0.01 U | 0.014 J | 0.01 U | 0.011 U, J | 0.011 U, J | 0.011 U, J | 0.011 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Acenaphthylene | 210 | 370[11] | NA | 0.86 | 0.0092 U | 0.0085 U | 0.0092 U, J | 0.0092 U, J | 0.0092 U, J | 0.0092 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Benzo (a) Anthracene | 0.2 | 0.092 | NA | 0.011 U | 0.011 U | 0.0095 U | 0.011 U | 0.011 U | 0.011 U | 0.011 U | 3 U | 2 U | 2 U | 3 U | 3 U |
| Benzo (b) Fluoranthene | 0.2 | 0.092 | NA | 0.016 U | 0.017 U | 0.016 U | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 4 U | 3 U | 3 U | 4 U | 4 U |
| Benzo (k) Fluoranthene | 0.5 | 0.92 | NA | 0.013 U | 0.014 U | 0.013 U | 0.014 U | 0.014 U | 0.014 U | 0.014 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Benzo (a) Pyrene | 0.2 | 0.0092 | NA | 0.0098 U | 0.01 U | 0.0095 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Bis(2-ethylhexyl)phthalate | 6 | 4.8 | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 8 U, J | 8 U, J | 8 U, J | 8 U, J | 8 U, J |
| 1,1 Biphenyl | 0.5 | 300 | NA | **1.1 J** | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Butylbenzylphthalate | 140 | 7300 | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 6 U, J | 6 U, J | 6 U, J | 6 U, J | 6 U, J |
| Caprolactam | *** | 18000 | NA | 1.1 U, J | 1.8 J | 1.1 U | 1.1 U, J | 1 U, J | 1.1 U,J | 1.1 U,J | 9 U | 9 U | 9 U | 9 U | 9 U |
| Chrysene | 4.8 | 9.2 | NA | 0.0093 U | 0.0098 | 0.009 U | 0.0098 U | 0.0098 U | 0.0098 U | 0.0098 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Di-n-butylphthalate | 700 | 3600 | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| Fluoranthene | 280 | 1500 | NA | 0.012 U | 0.028 J | 0.012 U | 0.041 J | 0.012 U | 0.012 U | 0.012 U | 8 U | 8 U | 8 U | 8 U | 8 U |
| Fluorene | 280 | 240 | NA | 0.013 U | 0.015 J | 0.012 U | 0.014 U, J | 0.014 U, J | 0.014 U, J | 0.014 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| 2-Methlynaphthalene | 28 | 6.2[10] | NA | 5.3 | 2.5 | 0.016 U | 0.017 U, J | 0.017 U, J | 0.017 U, J | 0.017 U | 4 U | 4 U | 4 U | 4 U | 4 U |
| 1-Methlynaphthalene | 28 | 6.2[10] | NA | 3.2 | 1.1 | 0.01 U | 0.011 U, J | 0.011 U, J | 0.011 U, J | 0.011 U | NA | NA | NA | NA | NA |
| Naphthalene | 14 | 6.2 | NA | **42** | **68** | 0.019 U | 0.021 U, J | 0.021 U, J | 0.021 U, J | 0.1 | 3 U | 3 U | 3 U | 3 U | 3 U |
| Phenanthrene | 210 | 180[3] | NA | 0.014 U | 0.037 J | 0.014 U | 0.015 U, J | 0.015 U, J | 0.015 U, J | 0.015 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Pyrene | 210 | 180 | NA | 0.011 U | 0.011 U | 0.01 U | 0.012 J | 0.011 U | 0.011 U | 0.011 U | 7 U | 6 U | 6 U | 7 U | 7 U |
| | | | | | | | | | | | | | | | ND |
| **TRPHs [5] (µg/L)** | | | | | | | | | | | | | | | |
| TPH ($C_8$ - $C_{40}$) | 5000 | *** | NA | **8900** | **6300** | 190 U | 190 U | 180 U | 180 U | 180 U | 300 U | 300 U | 300 U | 290 U | 300 U |
| **Metals [6] (µg/L)** | | | | | | | | | | | | | | | |
| Aluminum ** | 50 | 36000 | 342 | **262** | 75 U | **144** | **245** | **197** | **226** | 75 U | **65.1 J** | 31.3 J | **215 J** | **116 J** | **335 J** |
| Arsenic * | 10 | 0.045 | -- | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U | 2.3 U | 0.83 U | 1.8 U | 0.83 U | 1.4 U |
| Barium * | 2000 | 2600 | 23.2 | 58.4 | 15.9 | 15 J | 18.9 | 13.3 | 13.2 | 27.6 | 62.1 | 61.8 | 48.4 | 30.5 | 16.6 |
| Calcium | *** | *** | -- | 17100 | 17700 | 15100 | 22300 | 18500 | 18600 | 28200 | 4180 | 4290 | 10200 | 11000 | 2450 |
| Cobalt | 420 | 730 | -- | 5.4 | 5 U | 5 U | 9.8 | 5 U | 5 U | 5 U | 6.3 | 7 | 11.8 | 2.5 | 3.1 |
| Chromium (total) * | 100 | 110[4] | 9.7 | 14.6 | 4.8 | 25.7 | 18 | 14.6 | 15.9 | 6.4 | 5.4 | 2.8 | 6.2 | 9.3 | 22.1 |
| Copper ** | 1000 | 1500 | -- | 5 U | 5 U | 11.3 J | 5 U | 5.1 | 5 U | 5 U | 4.9 U | 3.8 U | 4.2 U | 2 U | 13.6 U |
| Iron** | 300 | 11000 | 379 | **5930** | **6780** | **3550** | **3610** | **765** | **819** | **309** | **708** | **668** | **1060** | 285 | **608** |
| Potassium | *** | *** | -- | 2100 | 1000 U | 1000 U | 1370 | 1000 U | 1000 U | 2800 | 2010 | 1940 | 2100 | 1430 | 545 |
| Magnesium | *** | *** | -- | 4690 | 1890 | 1710 | 2400 | 1800 | 1790 | 3440 | 3860 | 3980 | 2780 | 1980 | 789 |
| Manganese ** | 50 | 880 | 12.8 | **1860** | **610** | **178** | **795** | **98.7** | **97.6** | 12.5 | **310** | **340** | **1460** | **410** | **221** |
| Selenium * | 50 | 180 | -- | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.3 | 1.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| Silver ** | 100 | 180 | -- | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.46 U | 0.46 U | 0.46 U | 0.46 U | 0.46 U |
| Sodium | 160000 | *** | 3380 | 3650 | 2580 | 2510 | 4020 | 2640 | 2600 | 3870 | 4250 | 4210 | 11400 | 9580 | 2870 |
| Nickel | 100 | 730 | 8.4 | 10.6 | 6.3 | 22.4 | 13.2 | 15.7 | 15.6 | 8.3 | 8.7 | 8.3 | 6.5 | 9.3 | 12.8 |
| Lead * | 15 | 15[5] | -- | 0.64 | 0.38 U | 1.1 | 0.59 | 0.38 U | 0.38 U | 0.38 U | 0.91 U | 1.8 | 0.91 U | 0.91 U | 1.4 |
| Thallium* | 2 | 2.4 | -- | 0.99 | 0.75 U | 0.75 U | 0.75 U | 0.82 | 0.75 U | 0.75 U | 0.84 U | 1.2 U | 0.71 U | 0.71 U | 0.79 U |
| Vanadium | 49 | 36 | -- | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 0.58 U | 0.7 U | 1 U | 1 U | 1.8 U |
| Zinc ** | 5000 | 11000 | -- | 10 U | 11.4 | 38.8 | 33.7 | 12.5 | 12.9 | 15.3 | 10 U | 9.7 U | 7.4 U | 4.6 U | 12 |
| Mercury * | 2 | 11 | -- | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.08 U | 0.01 U | 0.01 U | 0.04 U | 0.01 U | 0.01 U |

[1] Groundwater Cleanup Target Level as provided in Chapter 62-777, Florida Administrative Code
[2] Preliminary Remediation Goals as provided in USEPA Region IX table
[3] VOCs = Volatile Organic Compounds
[4] SVOCs = Semivolatile Organic Compounds
[5] TRPHs = Total Recoverable Petroleum Hydrocarbons

Notes:

**Bold** indicates an exceedance of regulatory limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
R = Rejected due to technical non-compliance
NA = Not applicable/not analyzed for this parameter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above MDL in background monitor wells
µg/L = micrograms per liter
FAC = Florida Administrative Code
FL-PRO = Florida Petroleum Range Organics

* = Primary Standard
** = Secondary Standard
*** = No Standard

**TABLE 4-10**

**SUMMARY OF CONTAMINANTS DETECTED IN GROUNDWATER**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OUTLYING LANDING FIELD SAUFLEY**
**PENSACOLA, FLORIDA**



| Sample No.<br>Sample Location<br>Collect Date<br>Sample Depth (ft bls) | FDEP GCTLs [1] (µg/L) | USEPA Region IX Tap Water PRGs [2] (µg/L) | Background Reference Concentration (2 x mean) | OLFS4-MW41S-001<br>MW41S<br>6/11/2007 | OLFS4-MW42S-001<br>MW42S<br>6/12/2007 | OLFS4-MW43S-001<br>MW43S<br>6/13/2007 | OLFS4-MW44S-001<br>MW44S<br>6/14/2007 | OLFS4-MW45S-001<br>MW45S<br>6/15/2007 | OLFS4-MW46S-001<br>MW46S<br>6/16/2007 |
|---|---|---|---|---|---|---|---|---|---|
| **VOCs [3] (µg/L)** | | | | | | | | | |
| Acetone | 6300 | 5500 | NA | 3 U | 3 J | 7 J | 6 J | 10 J | 22 J |
| Benzene | 1 | 0.35 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Bromoform | 4.4 | 8.5 | NA | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Bromodichloromethane | 0.6 | 0.18 | NA | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| 2-Butanone | 4200 | 7000 | NA | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Carbon Disulfide | 700 | 1000 | NA | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Chloroform | 70 | 0.17 | NA | 0.4 U | 0.4 U | 0.4 U | **0.8 J** | 0.4 U | **0.4 J** |
| Chloromethane | 2.7 | 4.6 | NA | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U |
| Cyclohexane | *** | 10000 | NA | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U |
| Dibromochloromethane | 0.4 | 0.13 | NA | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| 1,1 Dichloroethane | 70 | 810 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| cis 1,2 Dichloroethene | 70 | 61 | NA | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| trans 1,2 Dichloroethene | 100 | 120 | NA | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Ethylbenzene | 30 | 1300 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Isopropylbenzene | 0.8 | 660 | NA | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Methyl cyclohexane | *** | 5200 | NA | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Trichlorofluoromethane | 2100 | 1300 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Tetrachloroethene | 3 | 0.1 | NA | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Toluene | 40 | 720 | NA | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Vinyl Chloride | 2 | 0.02 | NA | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Total Xylenes | 20 | 210 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| **SVOCs [4] (µg/L)** | | | | | | | | | |
| Acenaphthene | 20 | 370 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Acenaphthylene | 210 | 370[(1)] | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Benzo (a) Anthracene | 0.2 | 0.092 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Benzo (b) Fluoranthene | 0.2 | 0.092 | NA | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U |
| Benzo (k) Fluoranthene | 0.5 | 0.92 | NA | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Benzo (a) Pyrene | 0.2 | 0.0092 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Bis(2-ethylhexyl)phthalate | 6 | 4.8 | NA | 8 U, J | 8 U, J | 8 U, J | 8 U, J | 8 U, J | 8 U, J |
| 1,1 Biphenyl | 0.5 | 300 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Butylbenzylphthalate | 140 | 7300 | NA | 6 U, J | 6 U | 6 U | 6 U | 6 U, J | 6 U, J |
| Caprolactam | *** | 18000 | NA | 9 U | 9 U | 9 U | 9 U | 9 U | 9 U |
| Chrysene | 4.8 | 9.2 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Di-n-butylphthalate | 700 | 3600 | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| Fluoranthene | 280 | 1500 | NA | 8 U | 8 U | 8 U | 8 U | 8 U | 8 U |
| Fluorene | 280 | 240 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| 2-Methlynaphthalene | 28 | 6.2[(2)] | NA | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U |
| 1-Methlynaphthalene | 28 | 6.2[(2)] | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 14 | 6.2 | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Phenanthrene | 210 | 180[(3)] | NA | 3 U | 3 U | 3 U | 3 U | 3 U | 3 U |
| Pyrene | 210 | 180 | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| **TRPHs [5] (µg/L)** | | | | | | | | | |
| TPH ($C_8$ - $C_{40}$) | 5000 | *** | NA | 300 U | 300 U | 300 U | 390 J | 330 J | 300 J |
| **Metals [6] (µg/L)** | | | | | | | | | |
| Aluminum ** | 50 | 36000 | 342 | **1100 J** | 40.2 J | **1070 J** | **73.2 J** | **366 J** | **494 J** |
| Arsenic * | 10 | 0.045 | -- | 0.95 U | 0.85 U | 2 U | 2 U | 2.2 U | 0.97 U |
| Barium * | 2000 | 2600 | 23.2 | 16.4 | 16.8 | 74.6 | 93.2 | 119 | 96 |
| Calcium | *** | *** | -- | 3080 | 14700 | 47400 | 48300 | 93400 | 90700 |
| Cobalt | 420 | 730 | -- | 3.6 | 1.7 | 5.4 | 6.7 | 5.3 | 9.3 |
| Chromium (total) * | 100 | 110[(4)] | 9.7 | 3.5 | 1.5 U | 3.1 | 9.1 | 7.2 | **330** |
| Copper ** | 1000 | 1500 | -- | 9.7 U | 0.93 U | 9.1 U | 1.2 U | 11.2 U | 15.9 U |
| Iron** | 300 | 11000 | 379 | **1340** | 58.6 | **967** | 128 | **624** | **2080** |
| Potassium | *** | *** | -- | 737 | 814 | 5520 | 6270 | 11200 | 26800 |
| Magnesium | *** | *** | -- | 816 | 1780 | 6960 | 5520 | 8260 | 8240 |
| Manganese ** | 50 | 880 | 12.8 | **270** | **108** | **1150** | **1160** | **1190** | **1120** |
| Selenium * | 50 | 180 | -- | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 2.3 U | 1.7 U |
| Silver ** | 100 | 180 | -- | 0.46 U | 0.46 U | 0.46 U | 0.46 U | 0.46 U | 0.46 U |
| Sodium | 160000 | *** | 3380 | 7580 | 3660 | 20400 | 12400 | 43500 | 58700 |
| Nickel | 100 | 730 | 8.4 | 2.5 U | 1.6 U | 2.8 | 9.6 | 7.3 | **174** |
| Lead * | 15 | 15 | -- | 1.6 | 0.91 U | 1.4 | 0.91 U | 0.92 | 1.6 |
| Thallium* | 2 | 2.4 | -- | 1.3 U | 0.73 U | 1.5 U | 1.4 U | 1.1 U | 0.71 U |
| Vanadium | 49 | 36 | -- | 2.7 | 0.66 U | 1.2 U | 0.57 U | 1.9 U | 3.7 |
| Zinc ** | 5000 | 11000 | -- | 12.1 J | 4.9 U | 8.8 U | 6.8 U | 6.9 U | 7.9 U |
| Mercury * | 2 | 11 | -- | 0.01 U | 0.01 U | 1.1 | 0.01 U | 0.01 U | 0.01 U |

[1] Groundwater Cleanup Target Level as provided in Chapter 62-777, Florida Administrative Code
[2] Preliminary Remediation Goals as provided in USEPA Region IX table
[3] VOCs = Volatile Organic Compounds
[4] SVOCs = Semivolatile Organic Compounds
[5] TRPHs = Total Recoverable Petroleum Hydrocarbons
Notes:
**Bold** indicates an exceedance of regulatory limits.
U = Analyte not detected above laboratory Method Detection Limit (MDL)
R = Rejected due to technical non-compliance
NA = Not applicable/not analyzed for this parameter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above MDL in background monitor wells
µg/L = micrograms per liter
FAC = Florida Administrative Code
FL-PRO = Florida Petroleum Range Organics
* = Primary Standard
** = Secondary Standard
*** = No Standard

- Bromodichlormethane was detected at or above the FDEP GCTL of 0.6 µg/L or USEPA Tap Water PRG of 0.18 µg/L in two screen point samples, OLFS4-DPW13-G34-36(0.54 µg/L estimated) and OLFS4-DPW15-G36-38 (0.24 µg/L estimated). Additionally, exceedances were reported in four monitoring well samples, OLFS4-MW08S-001 (0.54 µg/L), OLFS4-MW16S-001 (0.29 µg/L estimated), OLFS4-MW19S-001 (0.36 µg/L estimated), and OLFS4-MW39S-001 (0.6 µg/L estimated).

- Cloroform was reported above USEPA Tap Water PRG of 0.17 µg/L in one screen point sample, OLFS4-DPW05-G53-55 (0.32 µg/L estimated) and in 12 samples, OLFS4-MW01D2-001 [0.49 µg/L (estimated)], OLFS4-MW13S-001 [0.47 µg/L (estimated)], OLFS4-MW14D-001 [0.34 µg/L (estimated)], OLFS4-MW15S-001 [0.54 µg/L (estimated)], OLFS4-MW20S-001 [0.75 µg/L (estimated)], OLFS4-MW24S-001 [0.43 µg/L (estimated)], OLFS4-MW29S-001 [0.35 µg/L (estimated)], OLFS4-MW34S-001 (0.97 µg/L estimated), OLFS4-MW38S-001 [0.7 µg/L (estimated)], OLFS4-MW39S-001 (3.0 µg/L), OLFS4-MW44S-001 [0.8 µg/L (estimated)], OLFS4-MW46S-001 [0.7 µg/L (estimated)], None of the reported quantities exceeded FDEP GCTL for chloroform of 70 µg/L.

- Cis-1,2-dichloroethene was detected above the GCTL of 70 µg/L in one screen point sample OLFS4-DPW01-G53-55 (350 µg/L) and 1 of 57 monitoring well samples OLFS4-MW05S-001 (77 µg/L).

- Dibromochloromethane was detected at or above the GCTL of 0.4 µg/L or the USEPA Tap Water PRG of 0.13 µg/L in five samples: OLFS4-MW08S-001 [0.38 µg/L (estimated)], OLFS4-MW15S-001 [0.26 µg/L (estimated)], OLFS4-MW16S-001 [0.38 µg/L (estimated)], OLFS4-MW19S-001 [0.35 µg/L (estimated)], and OLFS4-MW39S-001 [0.6 µg/L (estimated)], and in one screen point sample OLFS4-DPW01-G53-55 (1.0 µg/L).

- Ethylbenzene was detected above the GCTL of 30 µg/L in 2 of 57 monitoring well samples, OLFS4-MW31S-001 (35 µg/L) and OLFS4-MW32S-001 (110 µg/L). No samples exceeded the USEPA Tap Water PRG of 1300 µg/L.

- Isopropylbenzene was detected above the GCTL of 0.8 µg/L in two screen point samples OLFS4-DPW01-G53-55 (1.9 µg/L, estimated) and OLFS4-DPW24-G30-31 (3.8 µg/L), and 4 of 57 monitoring well samples; OLFS4-MW05S-001 (1.5 µg/L), OLFS4-MW30S-001 (39 µg/L), OLFS4-MW31S-001 (28 µg/L) and OLFS4-MW32S-001 (80 µg/L). No samples exceeded the USEPA Tap Water PRG of 660 µg/L.

- Tetrachloroethene was detected above USEPA Tap Water PRG of 0.1 µg/L in one screen point sample, OLFS4-DPW03S-G53-55 (0.54 µg/L estimated), and in three samples: OLFS4-MW24S-

001 (0.34 µg/L estimated), OLFS4-MW15S-001 (0.2 µg/L estimated), and OLFS4-MW07S-001 (0.24 µg/L estimated).

- Vinyl chloride was reported above USEPA Tap Water PRG of 0.2 µg/L in two samples, OLFS4-MW15S-001 [0.36 µg/L (estimated)] and OLFS4-MW05S-001 [0.27 µg/L (estimated)]. No samples had detections above the FDEP GCTL of 2 µg/L.

- Total xylenes were detected above the FDEP GCTL of 20 µg/L in 3 of 57 samples: OLFS4-MW05S-001 (21 µg/L), OLFS4-MW31S-001 (24 µg/L), and OLFS4-MW32S-001 (840 µg/L) and in one screen point sample, OLFS4-DPW01-G53-55 (39 µg/L). No samples exceeded the USEPA Tap Water PRG of 210 µg/L.

### 4.5.2 Semivolatile Organics

During groundwater sampling at Site 4, 19 SVOCs were detected. Five of the compounds (benzo(a)pyrene, 1,1-biphenyl, 2-methylnaphthalene, 1-methylnaphthalene, and naphthalene) were detected at concentrations above FDEP GCTLs and/or USEPA Tap Water PRGs.

- Benzo(a)pyrene was reported above the USEPA Tap Water PRG of 0.0092 µg/L in one sample, OLFS4-MW12S-001 (0.03 µg/L estimated).

- 1,1-biphenyl was detected above the 0.5 µg/L FDEP GCTL in one sample OLFS4-MW31S-001 (1.1 µg/L estimated),

- 1-Methylnaphthalene was detected above the USEPA Tap Water PRG of 6.2 µg/L in one sample, OLFS4-MW05S-001 (8.6 µg/L).

- 2- Methylnaphthalene was reported above the USEPA Tap Water PRG of 6.2 µg/L in one sample, OLFS4-MW05S-001 (12 µg/L),

- Naphthalene was detected above the FDEP GCTL of 14 µg/L and the USEPA Tap Water PRG of 6.2 µg/L in 3 of 45 monitoring well samples; OLFS4-MW05S-001 (20 µg/L), OLFS4-MW31S-001 (42 µg/L), and OLFS4-MW32S-001 (68 µg/L).

### 4.5.3 TRPH

TRPH was detected in nine monitoring wells during groundwater sampling event. However, only 2 of 45 monitoring well samples had concentrations that exceeded the FDEP GCTL of 5,000 µg/L. The samples that reported the exceedances include OLFS4-MW31S-001 (8,900 µg/L) and OLFS4-MW32S-001 (6,300 µg/L).

### 4.5.4 Pesticides and PCBs

No pesticides or PCBs were detected in the monitoring well samples collected at Site 4.

### 4.5.5 Inorganics

In groundwater samples collected at Site 4, 20 inorganic analytes were detected. Six (6) of the analytes (aluminum, arsenic, chromium, iron, manganese, and nickel) were detected at concentrations exceeding Florida GCTLs and/or the USEPA Tap Water PRGs. The remaining analytes (barium, calcium, cobalt, copper, lead, magnesium, potassium, selenium, silver, sodium, lead, thallium, vanadium and zinc) were either detected at concentrations less than the Florida GCTLs or are metals that do not have standards because they are considered nutrients. Analytes reported at concentrations greater than screening criteria are discussed below.

The FDEP GCTL for nickel is 100 µg/L. For the samples collected in the study area, 3 of 45 samples [OLFS4-MW06S-001 (179 µg/L), OLFS4-MW19S-001 (438 µg/L), and OLFS4-MW46S-001 (174 µg/L)] reported concentrations of nickel exceeding the GCTL. The site specific groundwater background screening concentration for nickel is 20.7 µg/L, which is less than the FDEP GCTL.

The FDEP GCTL for chromium is 100 µg/L. For the samples collected in the study area, 7 of 45 groundwater samples showed concentrations of chromium exceeding the GCTL. The groundwater samples with reported exceedances of chromium include: OLFS4-MW06S-001 (349 µg/L), OLFS4-MW07S-001 (103 µg/L), OLFS4-MW16S-001 (120 µg/L), OLFS4-MW17S-001 (138 µg/L), OLFS4-MW18S-001 (139 µg/L), OLFS4-MW19S-001 (855 µg/L), and OLFS4-MW46S-001 (330 µg/L). The site specific groundwater background screening concentration for chromium is 25.9 µg/L, which is less than the FDEP GCTL.

USEPA Tap Water PRG for arsenic is 0.045 µg/L. Four (4) groundwater samples collected in Site 4 monitoring wells reported concentrations above the PRG. OLFS4-MW12S-001 (3.6 µg/L), OLFS4-MW17S-001 (5.8 µg/L), OLFS4-MW18S-001 (3.9 µg/L), OLFS4-MW25S-001 (4 µg/L) exceeded the USEPA Tap Water PRG for arsenic. However, none of the groundwater samples exceeded the FDEP GCTL of 10 µg/L. The site specific groundwater background screening concentration for arsenic is 5.4 µg/L, which is less than the FDEP GCTL.

Iron concentrations greater than the FDEP GCTL of 300 µg/L were reported from 38 of 45 groundwater samples. Sample designations and concentrations are provided in Table 4-11. However, it should be noted that the reported exceedances of iron in 2 of the 38 samples, OLFS4-MW21S-001 (351 µg/L) and OLFS4-MW36S-001 (309 µg/L), were less than the site specific groundwater background screening concentration for iron, which is 34,879 µg/L.

**TABLE 4-11**
**IRON EXCEEDANCES (GCTL 300 µg/L) IN GROUNDWATER**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| SAMPLE DESIGNATION | CONCENTRATION | | SAMPLE DESIGNATION | CONCENTRATION |
|---|---|---|---|---|
| OLFS4-MW01D-001 | 705 µg/L | | OLFS4-MW25S-001 | 4,030µg/L |
| OLFS4-MW02D-001 | 2,810µg/L | | OLFS4-MW26D-001 | 12,500 µg/L |
| OLFS4-MW03S-001 | 962 µg/L | | OLFS4-MW27S-001 | 470 µg/L |
| OLFS4-MW05S-001 | 3,470 µg/L | | OLFS4-MW28S-001 | 2,750 µg/L |
| OLFS4-MW06S-001 | 8,870 µg/L | | OLFS4-MW29D-001 | 4,920 µg/L |
| OLFS4-MW07S-001 | 7,550 µg/L | | OLFS4-MW30S-001 | 8,690 µg/L |
| OLFS4-MW08S-001 | 2,040 µg/L | | OLFS4-MW31S-001 | 5,930 µg/L |
| OLFS4-MW09S-001 | 8,530 µg/L | | OLFS4-MW32S-001 | 6,780 µg/L |
| OLFS4-MW10D-001 | 1,170 µg/L | | OLFS4-MW33S-001 | 3,550 µg/L |
| OLFS4-MW11S-001 | 1,710 µg/L | | OLFS4-MW34S-001 | 3,610 µg/L |
| OLFS4-MW13S-001 | 719 µg/L | | OLFS4-MW35S-001 | 765 µg/L |
| OLFS4-MW14D-001 | 664 µg/L | | OLFS4-MW36S-001 | 309 µg/L |
| OLFS4-MW15S-001 | 984 µg/L | | OLFS4-MW37S-001 | 708 µg/L |
| OLFS4-MW16S-001 | 1,120 µg/L | | OLFS4-MW38S-001 | 1,060 µg/L |
| OLFS4-MW17S-001 | 8,340 µg/L | | OLFS4-MW40S-001 | 608 µg/L |
| OLFS4-MW18S-001 | 8,190 µg/L | | OLFS4-MW41S-001 | 1,340 µg/L |
| OLFS4-MW19S-001 | 3,710 µg/L | | OLFS4-MW43S-001 | 967 µg/L |
| OLFS4-MW21S-001 | 351 µg/L | | OLFS4-MW45S-001 | 624 µg/L |
| OLFS4-MW24S-001 | 592 µg/L | | OLFS4-MW46S-001 | 2,080 µg/L |

Aluminum concentrations greater than the GCTL of 50 µg/L were reported throughout the site in 35 samples. Sample locations and concentrations are provided in the Table 4-12 below. However, 14 of the 35 samples detected aluminum below the site specific groundwater background screening concentration of 1,054 µg/L.

Manganese concentrations greater than the GCTL of 50 µg/L were reported from 39 of 45 groundwater samples. Sample designations and concentrations are provided in Table 4-13. The site specific groundwater background screening concentration for manganese is 2,803 µg/L, which is higher than the FDEP GCTL. One of the background well had the maximum detection for manganese (OLFS4-MW23S-001, 2790 µg/L) of the sampling event for Site 4.

**TABLE 4-12**
**ALUMINUM EXCEEDANCES (GCTL 50 µg/L) IN GROUNDWATER**
**SITE 4 - OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| SAMPLE DESIGNATION | CONCENTRATION | | SAMPLE DESIGNATION | CONCENTRATION |
|---|---|---|---|---|
| OLFS4-MW01D2-001 | 336 µg/L | | OLFS4-MW24S-001 | 204 µg/L |
| OLFS4-MW02D-001 | 140 µg/L | | OLFS4-MW25S-001 | 1,440 µg/L |
| OLFS4-MW03S-001 | 180 µg/L | | OLFS4-MW27S-001 | 188 µg/L |
| OLFS4-MW05S-001 | 752 µg/L | | OLFS4-MW28S-001 | 109 µg/L |
| OLFS4-MW06S-001 | 1,510 µg/L | | OLFS4-MW31S-001 | 262 µg/L |
| OLFS4-MW07S-001 | 790 µg/L | | OLFS4-MW33S-001 | 144 µg/L |
| OLFS4-MW08S-001 | 755 µg/L | | OLFS4-MW34S-001 | 245 µg/L |
| OLFS4-MW10D-001 | 539 µg/L | | OLFS4-MW35S-001 | 197 µg/L |
| OLFS4-MW11S-001 | 560 µg/L | | OLFS4-MW37S-001 | 65.1 µg/L - estimated |
| OLFS4-MW12S-001 | 309 µg/L | | OLFS4-MW38S-001 | 215 µg/L - estimated |
| OLFS4-MW13S-001 | 795 µg/L | | OLFS4-MW39S-001 | 116 µg/L - estimated |
| OLFS4-MW15S-001 | 172 µg/L | | OLFS4-MW40S-001 | 335 µg/L - estimated |
| OLFS4-MW16S-001 | 761 µg/L | | OLFS4-MW41S-001 | 1,100 µg/L - estimated |
| OLFS4-MW17S-001 | 3,110 µg/L | | OLFS4-MW43S-001 | 1,070 µg/L - estimated |
| OLFS4-MW18S-001 | 2,690 µg/L | | OLFS4-MW44S-001 | 73.2 µg/L - estimated |
| OLFS4-MW19S-001 | 170 µg/L | | OLFS4-MW45S-001 | 366 µg/L - estimated |
| OLFS4-MW20S-001 | 333 µg/L | | OLFS4-MW46S-001 | 494 µg/L - estimated |
| OLFS4-MW21S-001 | 333 µg/L | | | |

**TABLE 4-13**
**MANGANESE EXCEEDANCES (GCTL 50 µg/L) IN GROUNDWATER**
**SITE 4 - OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| SAMPLE DESIGNATION | CONCENTRATION | | SAMPLE DESIGNATION | CONCENTRATION |
|---|---|---|---|---|
| OLFS4-MW01D2-001 | 54 µg/L | | OLFS4-MW26D-001 | 151 µg/L |
| OLFS4-MW02D-001 | 78.5 µg/L | | OLFS4-MW28S-001 | 342 µg/L |
| OLFS4-MW03S-001 | 235 µg/L | | OLFS4-MW29D-001 | 130 µg/L |
| OLFS4-MW05S-001 | 495 µg/L | | OLFS4-MW30S-001 | 563 µg/L |
| OLFS4-MW06S-001 | 590 µg/L | | OLFS4-MW31S-001 | 1,860 µg/L |
| OLFS4-MW07S-001 | 816µg/L | | OLFS4-MW32S-001 | 610 µg/L |
| OLFS4-MW08S-001 | 400 µg/L | | OLFS4-MW33S-001 | 178 µg/L |
| OLFS4-MW09S-001 | 847 µg/L | | OLFS4-MW34S-001 | 795 µg/L |
| OLFS4-MW11S-001 | 185 µg/L | | OLFS4-MW35S-001 | 98.7 µg/L |
| OLFS4-MW13S-001 | 332 µg/L | | OLFS4-MW37S-001 | 310 µg/L |
| OLFS4-MW14D-001 | 67.2 µg/L | | OLFS4-MW38S-001 | 1,460 µg/L |
| OLFS4-MW15S-001 | 265 µg/L | | OLFS4-MW39S-001 | 410 µg/L |
| OLFS4-MW16S-001 | 310 µg/L | | OLFS4-MW40S-001 | 221 µg/L |
| OLFS4-MW17S-001 | 209 µg/L | | OLFS4-MW41S-001 | 270 µg/L |
| OLFS4-MW18S-001 | 159 µg/L | | OLFS4-MW42S-001 | 108 µg/L |
| OLFS4-MW19S-001 | 161 µg/L | | OLFS4-MW43S-001 | 1,150 µg/L |
| OLFS4-MW20S-001 | 173 µg/L | | OLFS4-MW44S-001 | 1,160 µg/L |
| OLFS4-MW21S-001 | 283 µg/L | | OLFS4-MW45S-001 | 1,190 µg/L |
| OLFS4-MW24S-001 | 98 µg/L | | OLFS4-MW46S-001 | 1,120 µg/L |
| OLFS4-MW25S-001 | 68.7µg/L | | | |

### 4.5.6 Summary

Groundwater samples collected at Site 4 were analyzed for the full suite of TCL and TAL analytes and petroleum hydrocarbons. No pesticides or PCBs were detected in the samples taken from the monitoring wells at the site.

There were 10 VOC constituents detected above the Florida GCTLs for groundwater or USEPA Tap Water PRGs. Four (4) samples had exceedances for benzene, 12 samples had exceedances of chloroform, 4 samples had exceedances for bromodichloroethene, 1 sample exceeded the GCTL for cis-1,2-dichloroethene, 5 samples had exceedances of dibromochloromethane, 2 samples showed exceedances of ethylbenzene, 4 samples had exceedances of isopropylbenzene, 3 samples had exceedances of tetrachloroethene, 2 samples had exceedances of vinyl chloride, and 3 samples had exceedances of total xylenes for VOCs.

There were 5 SVOC constituents detected above the Florida GCTL and/or USEPA Tap Water PRG. Four of the SVOCs (1,1-biphenyl, benzo(a)pyrene, 2-methylnaphthalene, and 1-methylnaphthalene) had exceedances on only 1 of the 46 monitoring wells samples. Naphthalene was detected above the FDEP GCTL and USEPA PRGs in three samples and two monitoring wells samples reported TRPH concentrations that exceeded the FDEP GCTL.

Wide ranges of metals were reported in groundwater samples collected at Site 4. More than 35 of the samples taken had exceedances to the FDEP GCTL of iron, aluminum and manganese. Additionally, various samples had exceedances for chromium and nickel, above the FDEP GCTL.

## 4.6 SURFACE WATER AND SEDIMENTS

Surface water and sediment samples were not collected for the RI at Site 4, because no surface water bodies are present at the site. The topography forms a plateau at the site and precipitation rapidly runs off due to the paved surfaces covering the site. Rainfall infiltration is limited to pavement cracks and seams and limited landscaping areas scattered throughout the site. A small pond approximately 1,100 feet to the south of site is the nearest surface water feature. A 5,000 feet long drainage ditch lies approximately 1,000 feet from the site. This ditch is downgradient of site hydrogeologically and also at a lower elevation downslope from the site. Water in this drainage ditch flows southwesterly and eventually empties into Perdido Bay. However, based on observations made on the site and technical expertise, the pathway has many obstacles that impede direct flow from Site 4 directly to a surface water body

## 4.7 AIR

Air samples were not collected for the RI because the concrete and building foundation present cover 90 percent of the site and forms an effective cap that would limit a exposure pathway. Contaminants detected in subsurface soil, including metals and SVOCs, are not especially volatile and are not expected to vaporize. Air monitoring was conducted during the soil investigation due to the potential for dust/particulate exposure. Because of the landscaping covering areas of site not occupied by buildings, little dust is generated under normal conditions. However, there is a potential for particulate exposure if the soil is heavily disturbed (e.g., during an excavation).

# 5.0 CONTAMINANT FATE AND TRANSPORT

The behavior of contaminants released into the environment, particularly the potential for a contaminant to migrate from the release area and persist in an environmental medium, can influence whether the release will result in an adverse human health or ecological effect. The fate and transport discussion for this RI report is limited to the groups of chemicals that were detected during the RI sampling event at concentrations greater than the CTLs established by the State of Florida.

## 5.1 POTENTIAL ROUTES OF MIGRATION

The movement of contaminants in the environment will be controlled by certain properties of the contaminant and the availability of suitable pathways for contaminant movement.

### 5.1.1 Physical and Chemical Factors Affecting Contaminant Mobility

The following properties can be used to evaluate the potential environmental mobility and fate of site contaminants:

- Specific gravity
- Vapor pressure
- Water solubility
- Octanol/water partition coefficient
- Organic carbon partition coefficient
- Henry's Law constant
- Bioconcentration factor
- Mobility index

Table 5-1 presents the physical and chemical properties of most of the organic compounds detected at Site 4. The relative mobilities of metals as a function of environmental conditions are provided in Table 5-2.

### 5.1.2 Specific Gravity

Specific gravity is the ratio of the weight of a given volume of pure chemical at a specified temperature to the weight of the same volume of water at a given temperature. Specific gravity is used to determine whether a chemical will have a tendency to float or sink in water when present as a pure chemical or at very high concentrations. Non-aqueous phase chemicals with a specific gravity greater than 1 will tend to sink, and chemicals with a specific gravity less than 1 will tend to float. Of the chemicals detected at

**TABLE 5-1**
**ENVIRONMENTAL FATE AND TRANSPORT PARAMETERS FOR ORGANIC CHEMICALS**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Chemical | Specific Gravity (@ 20/4°C)[1] | Vapor Pressure (mm Hg)[1] | Solubility (mg/L)[1] | Octanol/Water Partition Coefficient[1] | Organic Carbon Partition Coefficient[2] | Henry's Law Constant (atm-m3/mole)[1] | Bioconcentration Factor (mg/L/mg/kg)[2] | Mobility Index log((solubility*VP)/$K_{oc}$) |
|---|---|---|---|---|---|---|---|---|
| **KETONES** | | | | | | | | |
| Acetone | 0.7899 | 2.66E+2 (25°C) | 6.00E+05 | 5.75E-01 | 7.08E+03 (10) | 4.276E-05 (25°C) | 3.81E-1(6) | 4.35E+00 |
| 2-Butanone | 0.805[5] | 98.0(25°C)[5] | .353(10°C)[5] | 0.29*[5] | 4.5-50*[5] | 4.16-6.11E-05 (25°C)*[5] | <1*[5] | -0.16 - 0.89 |
| **MONOCYCLIC AROMATICS** | | | | | | | | |
| Benzene | 0.8765 | 9.50E+01 | 1780(20°C) | 2.13 | 5.89E+01 | 5.55E-03 | 3.70E+01 | 3.45E+00 |
| Bromoform | 2.8899 | 5.6E+00(25°C) | 3.2E+03(25°C) | 2.3 | 2.06E+00 | 5.32E-04(25°C) | 14*[6] | 3.94E+00 |
| Ethylbenzene | 0.8054 | 1.0E+2 (25°C) | 2.75E+05 | 1.82E+00 | 4.44E+0(9) | 4.66E-05 (25°C) | 9.3E-1(6) | 6.79E+00 |
| Carbon Disulfide | 1.2632 | 2.98E+02 | 2.90E+03 | 1.45E+04 | 4.57E+01 (10) | 1.921E-02 (25°C) | 2.6E+1 (6) | 4.28E+00 |
| Chloroform | 1.4832 | 1.60E+02 | 9.3E+3 (25°C) | 9.33E+01 | 3.98E+01 (10) | 3.39E-03 (25°C) | 2.60E+01 | 4.57E+00 |
| Cyclohexane[5] | 0.7781[5] | 77(20° C)[5] | 55(25° C)[5] | 3.44[5] | 482*[5] | 0.195(25°C) +[5] | 240 +[5] | 3.31E+00 |
| Dibromochloromethane | 2.451 | 15(10.5°C) | 2.7E+03(20°C) | 2.09 | 84[6] | 7.83E-04(25°C) | 9*[6] | 2.68E+00 |
| **HALOGENATED ALIPHATICS** | | | | | | | | |
| 1,1 Dichloroethane | 1.1757 | 2.34E+2 (25°C) | 5.50E+03 | 1.67E+01 | 3.13E+01 (10) | 5.871E-3 (25°C) | 1.90E+01 | 4.61E+00 |
| cis-1,2 Dichloroethene | 1.2837 | 2.02E+2 (25°C) | 8.00E+02 | 1.58E+02 | 3.55E+01 (10) | 4.08E-3 (24.8°C) | 1.4E+1(3) | 3.66E+00 |
| trans-1,2 Dichloroethene | 1.2565 | 331(25°C) | 600(20° C) | 1.48 | 330*[6] | 6.673E-03(25°C) | 8*[6] | 2.78E+00 |
| Bromodichloromethane | 1.980 | 50(20°C) | 4500(0°C) | 1.88 | 35-251*[6] | 0.00212(25°C) | 7*[6] | 2.95-3.81 |
| Isopropylbenzene | 0.8618 | 3.2(20°C) | 50(20°C) | 3.66 | 820*[6] | 0.0146(25°C) | 35[6] | -7.10E-01 |
| Methyl cyclohexane | 0.7694[6] | 46(25°)[6] | 14.0(25°)[6] | 3.61[6] | NA | 0.43(25°)[6] | NA | NA |
| Trichlorofluoromethane | 1.494(17.2/4°C) | 687(20°C) | 1100(25°C) | 2.53 | 97*[6] | 0.0583(25°C) | 49*[6] | 3.89E+00 |
| Tetrachloroethene | 1.6227 | 19(25°C) | 150(25°C) | 2.53 | 200-237[6] | 0.02685(25°C) | 26-77[6] | 1.08 - 1.15 |
| Toluene | 0.8669 | 2.8E+1 (25°C) | 5.15E+02 | 4.90E+02 | 1.82E+02 (10) | 5.92E-3 (25°C) | 1.48E+02 | 1.90E+00 |
| Vinyl chloride | 0.9106 | 2580(20°C) | 1100(25°C) | 0.60 | 57*[6] | 0.0278(25°C) | <10[6] | 9.49E+00 |
| Total Xylenes | 0.86104-0.8801 | 1E+1 (27.3-32.1°C) | 1.6E+2-1.75E+2(5) | 5.89E+2-1.58E+3 | 3.63E+02-4.07E+02(10) | 4.184E-3-6.662E-3 (25°C) | 7.5E+1-1.59E+2(6) | 6.44E-01-6.33E-01 |
| Trichloroethene | 1.47 | 5.78E+01 | 1.10E+3 (25°C) | 2.00E+02 | 1.10E+02 [3] | 1.03E-02 | 8.10E+01 | 4.57 |
| **PAH** | | | | | | | | |
| Acenaphthene | 1.07 | 5.00E-03 | 4.24E+02 | 8.32E+03 | 7.08E+03 | 1.55E-04 | 1.10E+03 | -3.52 |
| Acenaphthylene | 1.02 | 2.30E-02 | 1.61E+01 | 1.17E+04 | 2.00E+03 | 1.14E-04 | 3.80E+02 | -3.73 |
| Benzo(a)anthracene | 1.274 | 5.00E-09 | 1E-2 (24°C) | 4.07E+05 | 3.98E+05 [3] | 6.60E-07 | 5.30E+04 | -15.90 |
| Benzo(b)fluoranthene | NA | 5.00E-07 | 1.2E-3 (25°C) | 3.72E+06 | 1.23E+06 [3] | 1.20E-05 | 1.40E+05 | -15.31 |
| Benzo(k)fluoranthene | NA | 9.59E-11 | 5.5E-4 (25°C) | 6.92E+06 | 1.23E+06 [3] | 1.04E-03 | 1.40E+05 | -19.37 |
| Benzo(a)pyrene | 1.351 | 5.00E-09 | 3.8E-3 (25°C) | 9.55E+05 | 1.02E+06 [3] | 4.9E-7 (25°C) | 1.40E+05 | -16.73 |
| 1,1 Biphenyl | 1.041[5] | .00964(25°C)[5] | 7.48(25°C)[6] | 4.09[5] | 1400[5] | 0.0003[5] | 436[5] | -4.29 |
| Caprolactam | 1.02(75/4°C)[6] | 0.0019(25°C)[6] | 5.25E+6[6] | 0.66[6] | 57[6] | 5.4E-11[6] | 3.2+[6] | 0.85 |
| Chrysene | 1.274 (20°C) | 6.3E-9 (25°C) | 6E-3 (25°C) | 4.07E+05 | 3.98E+05 [3] | 1.05E-6 (25°C) | 5.30E+04 | -16.02 |
| Dibenzo(a,h)anthracene | 1.282 | 1.00E-10 | 5E-4 (25°C) | 9.33E+05 | 3.80E+06 [3] | 7.3E-8 (25°C) | 6.90E+05 | -19.88 |
| Dibenzofuran | | | | | | | | |
| Fluoranthene | 1.252 | 5.0E-6 (25°C) | 2.65E-1 (25°C) | 2.14E+05 | 1.07E+05 [3] | 6.5E-6 (25°C) | 1.20E+04 | -10.91 |
| Fluorene | 1.202 | 1.00E+01 | 1.98E+00 | 1.62E+04 | 1.38E+04 | 6.36E-05 | 3.80E+03 | -2.84 |
| Indeno(1,2,3-cd)pyrene | NA | 1E-10 (25°C) | 6.20E-02 | 4.57E+07 | 3.47E+06 [3] | 6.95E-8 (25°C) | 3.50E+05 | -17.75 |
| 1-Methylnaphthalene | 1.0202 | 5.39E-02 | 2.58E+01 | 7.41E+03 | 7.30E+02 | 2.60E-04 | 1.3E+02-6.8E+02 | -2.72 |
| 2-Methylnaphthalene | 1.0058 | 1E+1 (105°C) | 2.6E+1 (25°C) | 7.24E+03 | 7.27E+2 [4] | 4.99E-4 (25°C) | 5.10E+02 | -0.45 |
| Naphthalene | 1.162 | 8.2E-2 (25°C) | 3E+1 (25°C) | 2.34E+03 | 2.00E+03 [3] | 4.83E-4 (25°C) | 4.20E+02 | -2.91 |
| Phenanthrene | 0.980 (4°C) | 1E+0 (118.2°C) | 8.16E-1 (21°C) | 2.88E+04 | 1.40E+04 | 3.93E-5 (25°C) | 4.70E+03 | -4.23 |
| Pyrene | 1.271 (23/4°C) | 2.5E+0 (200°C) | 1.6E-1 (26°C) | 1.51E+05 | 1.05E+05 [3] | 5.1E-6 (25°C) | 1.20E+04 | -5.42 |
| **PHTHALATE ESTERS** | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 0.99 (20/20°C) | 1.2E+0 (200°C) | 4E-1 (25°C) | 2.00E+05 | 1.51E+07 [3] | 3.00E-07 | 2.30E+08 | -7.50 |
| Butylbenzylphtalate | 1.113 | 8.60E-06 | 7.10E-01 | 6.92E+04 | 5.75E+04 | 1.26E-06 | 7.72E+02 | -9.97E+00 |
| Di-n-butylphtalate | 1.047 (20/20°C) | 1E-1 (115°C) | 4E+2 (25°C) | 1.58E+05 | 3.39E+04 (10) | 2.8E-7 (25°C) | 4.70E+04 | -2.93E+00 |
| **PESTICIDES** | | | | | | | | |
| Alpha BHC | 2.91 | 4.50E-05 | 2.00E+00 | 6.50E+03 | 1.90E+03 | 1.06E-05 | 1.10E+02 | -8.32 |
| Beta BHC | 2.91 | 3.26E-05 | 2.40E-01 | 6.30E+03 | 2.90E+03 | 7.43E-07 (25°C) | 4.00E+04 | -8.57 |
| Heptachlor | 1.57(9°C) | 0.0003(25°C) | 0.056 (25°C) | 4.40E+00 | 13,330-661,000[6] | 1.48E-03 | 200-37000[6] | -10.60 - -8.90 |

Notes:
NA - Not Available
(1) USEPA, September 1992a, Handbook of RCRA Groundwater Monitoring Constituents: Chemical and Physical Properties.
(2) USEPA, December 1982, Aquatic Fate Process Data for Organic Priority Pollutants.
(3) USEPA, July 1996, Soil Screening Guidance.
(4) Lyman et al., 1990; Equation 4-5, Handbook of Chemical Property Estimation Methods.
(5) "Chemical Facts." Online. http://www.epa.gov/chemicals/s_cycloh.txt. April 4, 2007.
(6) "Hazardous Substances Data Bank." Online. http://chem.sis.nlm.nih.gov/chemidplus/jsp/common/PhysicalProperties.jsp?calledFrom=lite February. February 15, 2008

* estimated value
+ calculated value

**TABLE 5-2**
**RELATIVE MOBILITIES OF INORGANICS AS A FUNCTION OF ENVIRONMENTAL CONDITIONS (Eh,pH)**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| | Environmental Conditions | | | |
|---|---|---|---|---|
| Relative Mobility | Oxidizing | Acidic | Neutral/Alkaline | Reducing |
| Very High | | | Se | |
| High | Se, Zn | Se, Zn, Cu, Ni, Hg,Ag | | |
| Medium | Cu, Ni, Hg, Ag, As, Cd | As, Cd | As, Cd | |
| Low | Pb, Ba, Se | Pb, Ba, Be | Pb, Ba, Be | |
| Very Low | Fe, Cr | Cr | Cr, Zn, Cu, Ni, Hg, Ag | Cr, Se, Zn, Cu, Ni, Hg, Pb, Ba, Be, Ag |

Notes:

As = Arsenic
Ag = Silver
Ba = Barium
Be = Beryllium
Cd = Cadmium
Cr = Chromium
Cu = Copper
Fe = Iron
Hg = Mercury
Ni = Nickel
Pb = Lead
Se = Selenium
Zn = Zinc
Eh = Standard Redox Potential

Source: Swartzbaugh, et al. Remediating Sites Contaminated with Heavy Metals. Hazardous Materials Control, November/December 1992.

Site 4 SVOCs and metals generally have a specific gravity greater than 1. Most VOCs have a specific gravity less than 1. TRPH has components that are both. Based upon data collected, contaminants exist at a high enough concentration for specific gravity to become a factor in fate and transport.

### 5.1.3 Vapor Pressure

Vapor pressure provides an indication of the rate at which a chemical volatilizes from both soil and water. Chemicals with higher vapor pressures are expected to enter the atmosphere much more readily than chemicals with lower vapor pressures. Volatization is a significant loss process for VOCs in surface water or surface soil and is of primary importance at environmental interfaces such as surface soil/air and surface water/air. Volatization is not as important when evaluating contaminated groundwater and subsurface soils that are not exposed to the atmosphere. Vapor pressures of SVOCs are low and

volatization is not significant for metals. Concrete and asphalt overburden, as well as the nature of the subsoil, greatly minimize any role vapor pressure would have in fate and transport in Site 4.

### 5.1.4 Water Solubility

The rate at which a chemical may be leached from a solid matrix (soil, waste deposit) by infiltrating precipitation is proportional to its water solubility. More soluble chemicals are more readily leached than less soluble chemicals. The water solubilities presented in Table 5-1 indicate that SVOCs are not especially water soluble. Conversely, water solubilities of VOCs detected at Site 4 range from high to extremely low.

The solubility of inorganics is strongly influenced by their valence state(s) and forms (hydroxides, oxides, carbonates, etc.). The solubility is also dependent on pH, Eh (redox potential), temperature, and other ionic species in solution (the Debye-Huckel theory). The solubility products reported in the literature vary with the type of complex formed, but generally it can be noted that, for example, cadmium and copper complexes are more soluble than lead and nickel complexes.

Contaminants detected in the groundwater at Site 4 are present at concentrations high enough to allow water solublility to play a role in their fate and transport. In addition, the depth of the groundwater and the nature of the aquifer are important factors in contaminant fate and transport.

### 5.1.5 Octanol/Water Partition Coefficient

The octanol/water partition coefficient ($K_{ow}$) is a measure of the equilibrium partitioning of chemicals between octanol and water. A linear relationship between the $K_{ow}$ and the uptake of chemicals by fatty tissues of animal and human receptors (the bioconcentration factor) has been established. It is also useful in characterizing the sorption of compounds by organic soils where experimental values are not available. SVOCs are more likely to partition to fatty tissues than the more soluble VOCs. The $K_{ow}$ is also used to estimate bioconcentration factors in aquatic organisms.

### 5.1.6 Organic Carbon Partition Coefficient

The organic carbon partition coefficient ($K_{oc}$) indicates the tendency of a chemical to adhere to soil particles containing organic carbon. Chemicals with a high $K_{oc}$ generally have low water solubilities and vice versa. This parameter may be used to infer the relative rates at which the more mobile chemicals (ketones, monocyclic aromatics, and halogenated aliphatics) partition to groundwater. Most SVOCs and some TRPH components are relatively immobile in the soil and are preferentially bound to the soil. These compounds are not as likely to be transported in the dissolved phase by groundwater to the same extent

as compounds with higher water solubilities. However, these preferentially bound chemicals are easily transported by erosional processes when they are present in surface soils and the soil particles to which they have adsorbed are mobilized.

### 5.1.7 Henry's Law Constant

Both the vapor pressure and the water solubility are of use in determining volatization rates from surface water bodies and from groundwater. The ratio of these two parameters, the Henry's Law constant, is used to calculate the equilibrium chemical concentrations in the vapor (air) phase versus the liquid (water) phase for the dilute solutions commonly encountered in environmental settings. Volatization is the tendency for some chemicals, particulary VOCs, to change from a liquid or absorbed state to a gas. In general, chemicals having a Henry's Law constant of less than $1 \times 10^{-5}$ atm-$m^3$/mole should volatilize very little and be present only in minute amounts in the atmosphere or soil gas. For chemicals with a Henry's Law constant greater than $5 \times 10^{-3}$ atm-$m^3$/mole volatization and diffusion in soil gas could be significant.

However, for Site 4, various factors obstaculize the volatization of the detected contaminants. Paved surfaces throughout more than 90 percent of the site prevent volatization from the subsurface soils. Also, the inorganics found in the groundwater, because they have a low Henry's Constant, do not volatilize readily from water to air.

### 5.1.8 Bioconcentration Factor

The bioconcentration factor (BCF) represents the ratio of aquatic-animal-tissue concentration to water concentration. The ratio is both contaminant and species specific. When site-specific values are not measured, literature values are used or the BCF is derived from the octanol/water coefficient. Many of the SVOCs and metals will bioconcentrate at levels three to five orders of magnitude greater than those concentrations found in the water. VOCs are not as readily bioconcentrated.

### 5.1.9 Distribution Coefficient

The tendency for chemicals to absorb to and desorb from materials in the medium or media through the which the chemicals are being transported is called sorption. The conventional measure of sorption for a chemical is the soil-water distribution coefficient ($K_d$). The distribution coefficient ($K_d$) is a measure of the equilibrium distribution of a chemical or ion in soil/water systems. The distribution of organic chemicals is a function of both the $K_{oc}$ and the amount of organic carbon in the soil. For ions (e.g., metals), $K_d$ is the ratio of the concentration adsorbed on soil surfaces to the concentration in water. Distribution coefficients for metals vary over several orders of magnitude because the $K_d$ is dependent on the size and charge of the ion and the soil properties governing exchange sites on soil surfaces. Coulomb's Law predicts that the

ion with the smallest hydrated radius and the largest charge will be preferentially accumulated over ions with larger radii and smaller charges. In general, chemicals with a $K_{oc}$ greater than 10,000 mL/g (such as SVOCs) have high degrees of absorption and consequentially low mobility, whereas chemicals with a $K_{oc}$ lower than 1,000 mL/g (such as VOCs) have lower degrees of absorption and consequently higher mobility.

### 5.1.10 Mobility Index

The mobility index (MI) is a quantitative assessment of chemical mobility in the environment based on the water solubility (S), vapor pressure (VP), and the $K_{oc}$ of a given material (McCall, et. al., 1983):

$$MI = \log \frac{(S \times VP)}{K_{oc}}$$

The MI for a given chemical is evaluated using the following scale (Ford and Gurba, 1984):

| Relative MI | Mobility Description |
|---|---|
| > 5 | extremely mobile |
| 0 to 5 | very mobile |
| -5 to 0 | slightly mobile |
| -10 to –5 | immobile |
| < -10 | very immobile |

Lighter molecular weight SVOCs, such as naphthalene, have MIs ranging from -5 to 0 and are considered slightly mobile, and the heavier molecular weight PAHs [e.g., benzo(a)pyrene] are classified as very immobile having MIs less than -10 (Table 5-1).

### 5.1.11 Potential Pathways for Contaminant Migration

Based on the evaluation of existing conditions at Site 4, the following potential contaminant transport pathways may exist at the site:

- Leaching of soil contaminants to groundwater
- Migration of groundwater contaminants
- Volatization from soil or groundwater

### 5.1.12 Leaching of Soil Contaminants to Groundwater

Contaminants that adhere to soil particles or have accumulated in soil pore spaces can be remobilized and transported to the groundwater as a result of infiltration or precipitation. The rate and extent of this leaching are influenced by:

- The depth of the water table (depth to groundwater at Site 4 generally ranges from 30 to 50 feet bls)
- Amount of precipitation (the average rainfall for Escambia County is 62 inches per year)
- Rate of infiltration (infiltration is greatly reduced in the site by having concrete cover at more than 90 percent of the site)
- The physical and chemical properties of the soil (pH slightly acidic and only in one well it was measured above 7)
- The physical and chemical properties of the contaminant

The mobility of chemicals at Site 4 will influenced by the depth of the water table, low rate of infiltration due to surface cover and decreased permeability at the water table due to clay content. Two of the contaminants with CTL exceedances identified at Site 4 (metals and SVOCs) generally have physical and chemical properties that result in low mobility and higher persistence in the environment. The VOCs that were detected at Site 4 generally have a higher mobility and a lower persistence in the environment.

### 5.1.13 Migration of Groundwater Contaminants

Contaminants can migrate in either a dissolved phase or as an immiscible liquid. A contaminant that is present in water above its solubility concentration will form an immiscible liquid. Based on the specific gravity of the contaminant, it will either float or sink in the water. In the case of chlorinated solvents (e.g., chloroform), the contaminant will sink in the water because it has a higher specific gravity than water. Subsurface transport of the immiscible contaminants is governed by a set of factors different from those of dissolved contaminants.

The groundwater data at Site 4 do not provide evidence of immiscible contaminants at concentrations exceeding water solubility levels. Solvents were detected at concentrations less than their water solubilities. Therefore, the migration of groundwater contaminants, for the most part, is likely governed by factors that govern the movement of dissolved contaminants. Three general processes govern the migration of dissolved constituents in groundwater: advection, dispersion, and retardation. Advection is a process by which solutes are carried by groundwater movement. Dispersion is a mixing of contaminated and uncontaminated water during advection. Retardation is a slowing of contaminant migration caused by the reaction of the solute with the aquifer soil.

Contaminant concentrations may be affected by one or more mechanisms during transport. Volatization or precipitation may physically transform contaminants. Contaminants may be chemically transformed through photolysis, hydrolysis, or oxidation/reduction. Contaminants may also be biologically transformed by biodegradation.

Hydrogeologic data were collected to evaluate movement of groundwater in the shallow surficial aquifer at Site 4. These data were used to estimate the site specific groundwater flow direction and groundwater flow velocity.

### 5.1.14 Volatilization from Soil or Groundwater

Chemicals in soil can migrate into ambient air either as vapors or by adhering to particulate matter (dusts). Chemicals that have a significant volatility are likely to enter ambient air as vapors. These chemicals are generally considered to be compounds with Henry's Law Constants greater than $1.0x10^{-5}$ and molecular weights less than 200. Chemicals with lower Henry's Law Constants and higher molecular weights are more likely to enter ambient air on particulate matter carried by winds.

Once in groundwater, volatile chemicals may migrate or they may volatilize through the capillary zone and overlying soil layers into ambient air or inside buildings. Chemicals in the vapor phase may migrate horizontally or vertically and can enter buildings through cracks in the foundation or through foundation walls. Once inside buildings, the air concentrations in buildings are subject to various factors, such as building dimensions and ventilation rates. Upon entering ambient air, the vapors are not expected to persist for long periods of time having half-lives in the atmosphere typically measured in hours or a few days. The air concentrations of vapors in ambient air are likely to be quickly diluted by the action of winds. Vapors may also be released directly to ambient air from soil or groundwater during excavation activities.

Four of the contaminants previously detected in soil and groundwater samples at Site 4 (metals, pesticides, PCBs, and SVOCs) are not especially volatile and are not expected to vaporize into the air. However, VOCs encountered on site could volatilize and enter the atmosphere. Because of the sandy soil at the site and concrete cover, little dust was generated under normal conditions. However, there is a potential for particulate exposure in areas without grass if the soil is heavily disturbed (e.g during an excavation).

## 5.2 CONTAMINANT PERSISTENCE

The mobility and persistence of the chemicals that exceeded criteria at the site are determined by their physical, chemical, and biological interaction with the environment. Mobility is the potential for a chemical to migrate from a site, and persistence is a measure of how long a chemical will remain in the

environment. The life span of the contaminants once released to the environment is controlled by the susceptibility of the contaminant to certain chemical and biological processes that may degrade the contaminants and reduce their remaining mass.

### 5.2.1 VOCs

In general, VOCs are subject to both aerobic and anaerobic degradation. This process is an elimination reaction that results in the formation of an ethene from a saturated halogenated compound. Research indicates that microbial degradation of highly chlorinated VOCs is a relatively slow process. Hydrolysis and photolysis are generally not considered to be significant fate processes for VOCs. Volatization is only significant at the air-soil or air-water interface. Compounds may volatilize rapidly to the atmosphere from soil or surface water due to low soil adsorption; however, due to the lack of surface water and the extensive concrete cover in the site, this will not be the case. Adsorption should not be considered as an important fate for these types of compounds when compared to more hydrophobic compounds. BCF factors indicate that these compounds should not bioaccumulate.

### 5.2.2 SVOCs

SVOCs as a class of compounds, and PAHs in particular, are considered to be persistent in the environment. SVOCs in soil are much more likely to bind to soil and be transported via mass transport mechanisms than to go into solution. PAHs are subject to degradation via aerobic bacteria, but may be relatively persistent in the absence of microbial population or macronutrients such as phosphorus and nitrogen. Landspreading applications have indicated that PAHs are highly amenable to microbial degradation in soil. The rate of degradation is influenced by temperature, pH, oxygen concentrations, initial chemical concentrations, and moisture. Photolysis, hydrolysis, and oxidation are not important fate processes for the degradation of PAHs in soil. Unless PAHs are found at high concentrations, they are not likely to bioaccumulate.

### 5.2.3 Metals

Metals are highly persistent environmental contaminants. They do not biodegrade, photolyze, or hydrolyze. Metals released to the environment generally adsorb to the soil matrix (as compared to being part of the soil structure) and bioaccumulate. Because metals are frequently incorporated into the soil matrix and remain bound to particulate matter, they also migrate from the source areas via bulk movement processes (erosion).

### 5.2.4 Pesticides

Due to their tendency to sorb to organic matter, chlorinated pesticides are highly persistant in many soils. Volatization, photolysis, and aerobic and anaerobic degradation are all significant modes of degradation for pesticides. Organochlorine pesticides bioaccumulate in animals.

### 5.2.5 Polychlorinated biphenyls (PCBs)

Persistance of PCBs in the environment depends upon the degree of chlorination. Generally, the greater the degree of chlorination, the more persistant the compound will be in the environment. Volatilazation is the primary degradation factor for PCBs dissolved in water. In addition to the degree of chlorination, factors contributing to the biodegrability of PCBs include concentration, microbes present, available nutrients, and temperature.

## 5.3 CONTAMINANT MIGRATION

The mobility of the contaminants, once released to the environment, is controlled by the physical properties of the contaminant, which determine whether the contaminant partitions to more mobile media (air or groundwater) or less mobile media (soil or sediment particles). This would mean that either the contaminant is able to migrate by itself, or adheres to media which makes the contaminant less likely to migrate.

### 5.3.1 VOCs

VOCs, as the name implies, are generally volatile compounds and are typically considered to be fairly soluble in water with a low capacity for retention by soil organic carbon; therefore, these organic compounds are frequently detected in groundwater. The high volatility and water solubility of these chemicals dominate their fate in the environment. These chemicals may migrate through the soil column after being released by a spill event or by subsurface waste burial as infiltrating precipitation solubilizes them. Some fraction of these chemicals is retained by the soil, but most will continue migrating downward to the water table. Upon reaching the water table, migration occurs primarily in the direction of the horizontal hydraulic gradient.

Compounds with specific gravities greater than that of water are often used in various industrial applications such as degreasing. If a large or persistant enough spill of these solvents occurs, these chemicals may also migrate as a bulk liquid, but will not stop at the water table (i.e., these chemicals will mix with or sink into the aquifer).

### 5.3.2 SVOCs

SVOCs are generally considered to be fairly immobile chemicals in the environment because they are large molecules with high organic carbon partition coefficients and low solubilities when compared to the volatile organics. However, some of the lighter molecular weight PAHs (a subgroup of SVOCs), such as naphthalene, are more water soluble and environmentally mobile. SVOC compounds in the soil generally do not migrate vertically to a great extent and are more likely to adhere to soil particles and be removed from the site via surface runoff and erosional processes.

PAHs generally have very low solubilities, vapor pressures, and Henry's Law constant and high $K_{oc}$s and $K_{ow}$s. The low-molecular-weight PAHs (e.g., acenaphthene, anthracene, fluorene, and phenanthrene) may volatilize from surface waters, and the high-molecular-weight PAHs [e.g., benzo(a)pyrene, benz(a)anthracene, chrysene, etc.] are less likely to volatilize. PAHs in soil are much more likely to bind to soil and be transported via mass transport mechanisms than to go into solution.

### 5.3.3 Metals

The mobility of metals is influenced primarily by their physical and chemical properties, in combination with the physical and chemical characteristics of the soil matrix. Factors that assist in predicting the mobility of inorganic species are the soil/pore water pH, soil/pore water oxidation reduction potential of groundwater (Eh), and cation exchange capacity. The mobility of metals generally increases with decreasing soil pH and cation exchange capacity (Table 5-2).

Because inorganics are frequently incorporated into the soil matrix and remain bound to particulate matter, they also migrate from the source areas via bulk movement processes (erosion). The larger, non-colloidal soil particles (greater than 0.45 micron) are not generally considered to be mobile in groundwater. Metals are also more mobile under acidic conditions. Site 4 groundwater is slightly acidic, therefore, it is possible for metals to migrate vertically through the soil column and reach the groundwater. However, with the detected metals concentrations in the subsurface soil, this does not appear to be happening in Site 4.

### 5.3.4 Pesticides

Because pesticides sorb to organic matter, sandy soils have less of an attenuating effect on pesticides. At such locations, these compounds may enter groundwater more readily than areas with increased organic content. As a result of the lipophilicity of pesticides, they have a tendency to enter and remain in the food chain. Upon entering the food chain, these compounds can biocncentrate in lower trophic level organisms and may be transferred and magnified in higher trophic level organisms. Regardless, pesticides were not detected in the subsurface and groundwater sampled in Site 4.

### 5.3.5 PCBs

PCBs in soil adsorb strongly to soil particles. The tendency of these compounds to adhere to soil particles correlates directly to the degree of chlorination. PCBs in general do not significantly leach in saturated soils. PCBs in water are most likely to adsorb to the sediments. Therefore, PCB concentrations will be higher in sediments than in the water column. For Site 4, only one subsurface sample reported detection of Aroclor 1260, which was collected from the washrack area of Building 810. However, the reported concentration was below the most stringent regulatory limit.

# 6.0 HUMAN HEALTH RISK ASSESSMENT

This section presents the HHRA for subsurface soil and groundwater at Site 4. The objective of the risk assessment is to determine whether detected concentrations of chemicals in subsurface soil and groundwater pose significant threats to potential human receptors under current and/or future land use. The potential risks to receptors are estimated based on the assumption no further actions are taken to control contaminant releases or prevent receptor exposure.

## 6.1 HUMAN HEALTH RISK ASSESSMENT PROTOCOL

The following USEPA, FDEP, and Navy guidance documents and regulations were used to develop the HHRA methodology and to evaluate potential risks for each site:

- Conducting Human Health Risk Assessments under the Environmental Restoration Program, Department of the Navy, February 2001.
- Navy Policy on the Use of Chemical Background Levels, Department of the Navy, January 2004.
- Technical Report: Development of Soil Cleanup Target Levels for Chapter 62-777, FAC, FDEP, February 2005.
- State of Florida Chapter 62-780, FAC, Contaminated Site Cleanup Criteria, April 2005.
- Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part A), USEPA, December 1989.
- Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors, USEPA, March 1991.
- Guidance for Data Usability in Risk Assessment (Part A), USEPA, April 1992c.
- Supplemental Guidance to RAGS: Calculating the Concentration Term, USEPA, May 1992d.
- Preliminary Review Draft: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure, USEPA, May 1993.
- Soil Screening Guidance: Technical Background Document, USEPA, July 1996.

- Exposure Factors Handbook, USEPA, August 1997b.

- Supplemental Guidance to RAGS: Region IV Bulletins, Human Health Risk Assessment, USEPA Region 4, May 2000.

- Role of Background in the CERCLA Cleanup Program, USEPA, April 2002.

- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites, USEPA, and December 2002a.

- Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, USEPA, December 2002b.

- Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance, Dermal Risk Assessment), USEPA, July 2004.

The components of a HHRA are addressed in the following sections:

- Data Evaluation Protocol [including data usability assessment; chemical of potential concern (COPC)] selection)
- Exposure Assessment
- Toxicity Assessment
- Risk Characterization
- Uncertainty Analysis

The risk assessment presented in this report considers both USEPA and FDEP policies and guidelines available for conducting HHRAs. Quantitative risk estimates are developed for receptor exposure to subsurface soil and groundwater using the "risk-ratio" approach defined in Section 6.3.3. USEPA Region IV supports the use of this technique. Additionally, comparisons of site soil and groundwater concentrations to FDEP CTLs recommended in FDEP Chapter 62-780, FAC are provided (Section 6.6). This rule presents a phased risk-based corrective action process that is iterative and tailors site rehabilitation tasks to site-specific conditions and risks.

### 6.1.1 Data Evaluation Protocol

Data evaluation, the first component of a baseline HHRA, is a two-step, medium-specific task involving the compilation and evaluation of analytical data. The first step involves the compilation of the analytical

database and an evaluation of data usability for purposes of HHRA. The second step of the data evaluation is the selection of a medium-specific list of COPCs, which are used to quantitatively or qualitatively determine potential human health risks for site media. COPCs are selected primarily based on a toxicity screen (i.e., a comparison of site contaminant concentrations to conservative toxicity screening values) and a background screen (i.e., a comparison of site concentrations to background concentrations). In addition, as discussed below, factors such as frequency of detection are considered in some cases. The results of the COPC selection process are presented in Section 6.2.

#### 6.1.1.1 Data Usability

Data collected from the field investigation were used to assess risks to potential human receptors. The data were validated according to USEPA National Validation Functional Guidelines for Organic Data Review (USEPA, 1999c), the Laboratory and Data Validation Functional Guidelines for Evaluation of Inorganic Analysis (USEPA, 1994c), and TtNUS SOPs.

Only the fixed-based analytical results from the field investigations were used in the quantitative risk evaluation. All detected concentrations with "J" qualifiers are considered positive detections and were used in the risk evaluation. Data with "U" and "UJ" qualifiers and data qualified because of blank contamination were retained and evaluated as nondetects. Field measurements and data regarded as unreliable (i.e., qualified as "R" during the data validation process) were not used in the quantitative risk assessment.

No surface soil samples (0 to 2 feet bls) were collected during the RI field investigations, consequently only subsurface soil and groundwater are evaluated in this HHRA.

#### 6.1.1.2 Selection COPCs for Quantitative Risk Assessment

The selection of COPCs is a qualitative screening process used to limit the number of chemicals and exposure routes quantitatively evaluated in the baseline HHRA to those site-related constituents that dominate overall potential risks. Screening, primarily by risk-based concentrations and base-wide background levels, is used to focus the risk assessment on meaningful chemicals and exposure routes.

In most cases, a chemical is selected as a COPC and retained for further quantitative risk evaluation if the maximum detection in a sampled medium exceeds the selected risk-based concentration(s) (i.e., the COPC screening level) and the chemical is determined to be present at concentrations exceeding background. This second condition applies only to those chemicals for which background comparison is possible and appropriate (e.g., metals). Background data are not available for organic chemicals.

Chemicals eliminated from further evaluation at this time are assumed to present minimal risks to potential human receptors.

6.1.1.2.1 COPC Screening Levels

Several types of screening concentrations were used to identify COPCs for subsurface soil and groundwater at Site 4. The screening concentrations are as follows:

Soil

Screening concentrations based on the following criteria were used to select COPCs for subsurface soil:

- USEPA Region 9 PRGs for Residential Soil (USEPA Region 9, October 2004b)
- Florida SCTLs for Direct Contact (FDEP, April 2005b)
- Florida SCTLs for Leachability Based on Groundwater Criteria (FDEP, April 2005b)

Groundwater

Screening concentrations based on the following USEPA and State of Florida criteria were used to select COPCs for groundwater:

- USEPA Region 9 PRGs for Tap Water (USEPA Region 9, October 2004b). The Region 9 Tap Water PRGs are based on the cumulative effects of ingestion, dermal contact, and inhalation (for volatiles).
- USEPA Maximum Contaminant Levels (MCLs) (USEPA, August 2006)
- Florida Groundwater Cleanup Target Levels (CTLs) (FDEP, April 2005b). The Florida Groundwater CTLs are based on ingestion only. Note that some the Groundwater CTLs are calculated risk-based values while others are standards such as primary and secondary MCLs.

Most of the Region 9 PRGs and State of Florida SCTLs are based on a Hazard Quotient (HQ) of 1.0 (i.e., a no adverse non-carcinogenic effect level) or a cancer risk level of $1 \times 10^{-6}$ (i.e., a one-in-one million probability of developing cancer), but are adjusted (lowered) to reflect cumulative risk issues (e.g., Region 9 PRGs are typically adjusted to reflect a HQ of 0.1).

In the risk assessment conducted according to USEPA methodology, the screening levels for both carcinogens and non-carcinogens were developed using the guidance provided in the USEPA Region 4 Human Health Risk Assessment Bulletins -- Supplement to RAGS (USEPA Region 4, May 2000). In this approach, the risk-based USEPA Region 9 screening concentrations correspond to a HQ of 0.1 (for noncarcinogens) or an incremental lifetime cancer risk (ILCR) of $1 \times 10^{-6}$ (for carcinogens). The Region 9 PRG values for noncarcinogens were multiplied by 0.1 to account for potential cumulative effects of several chemicals affecting the same target area or producing the same adverse non-carcinogenic health effect.

Toxicity values for several chemicals have changed since the USEPA Region 9 PRG table was last updated in December 2004. For those chemicals with outdated toxicity criteria, PRGs were updated using current toxicity values. Chemicals with updated PRGs are indicated in Tables 6-1 and 6-2.

The screening levels used in the risk assessment conducted according to FDEP methodology were developed using the guidance provided in Appendices D and E of the Technical Report for Chapter 62-777 (FDEP, 2005a) and are presented in Section 6.6.

Exposure to COPCs in subsurface soil is typically evaluated only for potential exposure during construction or excavation activities. Therefore, a construction/excavation worker is considered to be the receptor most likely exposed to COPCs in subsurface soil. However, subsurface soil could potentially be brought to the surface during future excavation projects resulting in exposure of other receptors such as future residents or workers. For this reason, potential exposure of residents and typical industrial workers to subsurface soils are also evaluated in the risk assessment.

Screening Levels for Lead

Limited criteria are available to evaluate the potential risks associated with lead. There are no strictly risk-based concentrations for this chemical because the USEPA has not derived toxicity values [i.e., cancer slope factors (CSFs), reference doses (RfDs)] for lead. However, recommended screening levels are available for lead in soil and are frequently used to indicate the need for response activities.

Guidance from both the Office of Prevention, Pesticides, and Toxic Substances (OPPTS) and the Office of Solid Waste and Emergency Response (OSWER) recommend 400 mg/kg as the lowest screening level for lead-contaminated soil in a residential setting where children are frequently present (USEPA, 1994b). OPPTS identifies 2,000 to 5,000 mg/kg as an appropriate range for areas where contact with soil

**TABLE 6-1**
**OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SUBSURFACE SOIL**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

**Scenario Timeframe: Current/Future**
**Medium: Subsurface Soil**
**Exposure Medium: Subsurface Soil**

| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondects[2] | Concentration Used for Screening[3] | Background Value[4] | USEPA Region 9 PRG (Residential)[5] | USEPA SSL Soil to Air (Residential)[6] | COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site 4 | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 78-93-3 | 2-Butanone | 1.5 J | 6.3 J | ug/kg | OLFS4-MW35S-29 | 3/33 | 1.3 - 70 | 6.3 | NA | 2200000 N | 24000000 sat | No | BSL |
| | 67-64-1 | Acetone | 2.4 J | 4.3 J | ug/kg | OLFS4-DPW11-S45 | 2/33 | 1.8 - 100 | 4.3 | NA | 1400000 N | NA | No | BSL |
| | 75-09-2 | Methylene Chloride | 270 J | 270 J | ug/kg | OLFS4-DPW16-S4 | 1/38 | 0.56 - 30 | 270 | NA | 9100 C | 13000 C | No | BSL, FOD |
| | 1330-20-7 | Total Xylenes | 2.4 J | 2.4 J | ug/kg | OLFS4-MW25-S-40 | 1/63 | 0.64 - 35 | 2.4 | NA | 27000 N | 70000 N | No | BSL, FOD |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 92-52-4 | 1,1-Biphenyl | 340 J | 340 J | ug/kg | OLFS4-MW33S-5 | 1/33 | 55 - 120 | 340 | NA | 300000 N | NA | No | BSL, FOD |
| | 91-57-6 | 2-Methylnaphthalene | 1400 | 1500 | ug/kg | OLFS4-MW33S-5 | 2/63 | 20 - 49 | 1500 | NA | 5600 N[8] | NA | No | BSL, FOD |
| | 132-64-9 | Dibenzofuran | 190 J | 190 J | ug/kg | OLFS4-MW33S-5 | 1/33 | 55 - 120 | 190 | NA | 7300 N[9] | NA | No | BSL, FOD |
| | 86-73-7 | Fluorene | 78 J | 170 J | ug/kg | OLFS4-MW33S-5 | 2/63 | 20 - 49 | 170 | NA | 270000 N | NA | No | BSL, FOD |
| | 91-20-3 | Naphthalene | 220 J | 350 J | ug/kg | OLFS4-DPW15-S4 | 2/63 | 20 - 49 | 350 | NA | 5600 N | 17000 N | No | BSL, FOD |
| | 85-01-8 | Phenanthrene | 75 J | 75 J | ug/kg | OLFS4-MW33S-5 | 1/63 | 20 - 49 | 75 | NA | 230000 N[10] | NA | No | BSL, FOD |
| | **Pesticides/PCBs** | | | | | | | | | | | | | |
| | 11096-82-5 | Aroclor-1260 | 6.6 J | 6.6 J | ug/kg | OLFS4-DPW15-S4 | 1/36 | 4.2 - 5.1 | 6.6 | NA | 220 C | NA | No | BSL, FOD |
| | **Metals** | | | | | | | | | | | | | |
| | 7429-90-5 | Aluminum | 776 | 21500 | mg/kg | OLFS4-DPW18-S12 | 45/45 | - - - | 21500 | 9446 | 7500 N | 709000 N | Yes | ASL |
| | 7440-38-2 | Arsenic | 0.2 | 4.2 | mg/kg | OLFS4-MW33S-5 | 55/55 | - - - | 4.2 | 1.36 | 0.39 C | 769 C | Yes | ASL |
| | 7440-39-3 | Barium | 0.42 | 30.1 | mg/kg | OLFS4-MW33S-5 | 45/45 | - - - | 30.1 | 12.5 | 1500 N[9] | 70900 N | No | BSL |
| | 7440-70-2 | Calcium | 58.7 | 762 | mg/kg | OLFS4-DPW15-S4 | 26/45 | 49.2 - 61.1 | 762 | 112 | NA | NA | No | NUT |
| | 7440-47-3 | Chromium | 1.5 J | 25.3 | mg/kg | OLFS4-DP12-S20 | 55/55 | - - - | 25.3 | 7.9 | 22 N[11,12] | 276 C | Yes | ASL |
| | 7440-48-4 | Cobalt | 0.27 | 1.2 | mg/kg | OLFS4-MW33S-5 | 16/45 | 0.25 - 0.31 | 1.2 | 0.597 | 140 N[12] | 1180 C | No | BSL |
| | 7440-50-8 | Copper | 0.35 J | 6.9 | mg/kg | OLFS4-DPW18-S12 | 45/45 | - - - | 6.9 | 3.6 | 310 N | NA | No | BSL |
| | 7439-89-6 | Iron | 382 | 14100 | mg/kg | OLFS4-SB3-S-10 | 45/45 | - - - | 14100 | 5316 | 5500 N | NA | Yes | ASL |
| | 7439-92-1 | Lead | 0.6 | 5.2 | mg/kg | OLFS4-DP27-S4 | 55/55 | - - - | 5.2 | 3.68 | 400 | NA | No | BSL |
| | 7439-95-4 | Magnesium | 51.8 J | 203 | mg/kg | OLFS4-DPW21-S12 | 21/45 | 49.2 - 61.1 | 203 | 232 | NA | NA | No | NUT |
| | 7439-96-5 | Manganese | 0.85 | 588 | mg/kg | OLFS4-MW33S-5 | 45/45 | - - - | 588 | 36.8 | 180 N | 7090 N | Yes | ASL |
| | 7439-97-6 | Mercury | 0.019 | 0.019 | mg/kg | OLFS4-DPW15-S4, OLFS4-MW33S-5 | 2/45 | 0.012 - 0.016 | 0.019 | 0.123 | 2.3 N | NA | No | BSL, FOD, BKG |
| | 7440-02-0 | Nickel | 0.37 | 3.1 | mg/kg | OLFS4-DPW21-S12 | 35/45 | 0.25 - 0.31 | 3.1 | 2.93 | 160 N | NA | No | BSL |
| | 7440-09-7 | Potassium | 56.4 J | 215 | mg/kg | OLFS4-DPW01-S45 | 19/45 | 49.2 - 61.1 | 215 | 170 | NA | NA | | NUT |
| | 7782-49-2 | Selenium | 0.28 | 0.35 | mg/kg | OLFS4-SB4-S-45 | 2/45 | 0.25 - 0.31 | 0.35 | ND | 39 N | NA | No | BSL, FOD |
| | 7440-23-5 | Sodium | 1090 | 1090 | mg/kg | OLFS4-DPW12-S45 | 1/45 | 49.2 - 61.1 | 1090 | ND | NA | NA | No | NUT, FOD |
| | 7440-62-2 | Vanadium | 1.2 J | 35.8 J | mg/kg | OLFS4-SB3-S-10 | 45/45 | - - - | 35.8 | 12.6 | 7.8 N | NA | Yes | ASL |
| | 7440-66-6 | Zinc | 0.54 | 8.9 | mg/kg | OLFS4-DPW21-S12 | 39/45 | 0.54 - 0.61 | 8.9 | 8.7 | 2300 N | NA | No | BSL |
| | **Miscellaneous Parameters** | | | | | | | | | | | | | |
| | 57-12-5 | Cyanide | 0.17 | 0.17 | mg/kg | OLFS4-DPW07-S45 | 1/45 | 0.13 - 0.15 | 0.17 | NA | 120 N | NA | No | BSL, FOD |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | | TPH (C08-C40) | 11 J | 730 | mg/kg | OLFS4-MW33S-5 | 8/63 | 7 - 12 | 730 | NA | NA | NA | Yes | ASL - SCTL |

**TABLE 6-1**
**OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SUBSURFACE SOIL**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

**Scenario Timeframe: Current/Future**
**Medium: Subsurface Soil**
**Exposure Medium: Subsurface Soil**

**Footnotes**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - To determine whether metal concentrations were within background levels, soil concentrations were compared to facility background levels described in Section 6.1.1.1. If the maximum concentration of a chemical is less than the background value, that chemical was not selected as a COPC.
5 - USEPA Region 9 Preliminary Remediation Goal Table. The non-carcinogenic values (denoted with a "N" flag) are the RBC divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (USEPA, 2004b, Update December 29, 2004).
6 - USEPA Soil Screening Levels. USEPA Internet Site at http://rais.ornl.gov/calc_start.shtml. (Soil-to-air SSLs for noncarcinogens are divided by 10).
7 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level and for inorganics is present above background levels.
8 - The PRG for naphthalene is used as a surrogate for 2-methylnaphthalene.
9 - The value presented in the USEPA Region 9 PRG Table (USEPA, 2004b) was updated using current toxicity data.
10 - The PRG for pyrene is used as a surrogate for phenanthrene.
11 - The PRG for hexavalent chromium is presented.
12 - One tenth of the non-carcinogenic PRG is less than the carcinogenic PRG; therefore, the noncarcinogenic PRG is presented.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Definitions:**
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration
SSL = Soil Screening Level

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level and site background.
SCTL = Soil Cleanup Target Level
For elimination as a COPC:
BKG = Less than Background Concentration
BSL = Below COPC Screening Level
FOD = Frequency of Detection
NUT = Essential nutrient
NTX = No toxicity criteria

**Associated Samples**

| | | |
|---|---|---|
| OLFS4-DP01-S20 | OLFS4-DP27-S4 | OLFS4-DPW21-S12 |
| OLFS4-DP02-S20 | OLFS4-DP27-S4-D | OLFS4-DPW22-S26 |
| OLFS4-DP03-S20 | OLFS4-DP28-S8 | OLFS4-DPW23-S26 |
| OLFS4-DP04-S20 | OLFS4-DP29-S4 | OLFS4-DPW24-S26 |
| OLFS4-DP05-S20 | OLFS4-DP29-S4-D | OLFS4-MW24S-20 |
| OLFS4-DP06-S20 | OLFS4-DP30-S8 | OLFS4-MW25-S-10 |
| OLFS4-DP07-S20 | OLFS4-DPW01-S45 | OLFS4-MW25-S-40 |
| OLFS4-DP08-S20 | OLFS4-DPW02-S10 | OLFS4-MW26-S-25 |
| OLFS4-DP09-S20 | OLFS4-DPW03-S10 | OLFS4-MW27S-10 |
| OLFS4-DP10-S20 | OLFS4-DPW04-S10 | OLFS4-MW27S-45 |
| OLFS4-DP11-S20 | OLFS4-DPW05-S10 | OLFS4-MW33S-26 |
| OLFS4-DP12-S20 | OLFS4-DPW06-S10 | OLFS4-MW33S-5 |
| OLFS4-DP13-S20 | OLFS4-DPW07-S45 | OLFS4-MW35S-29 |
| OLFS4-DP14-S20 | OLFS4-DPW08-S10 | OLFS4-MW36S-25 |
| OLFS4-DP15-S20 | OLFS4-DPW09-S10 | OLFS4-SB2-S-10 |
| OLFS4-DP16-S6 | OLFS4-DPW10-S45 | OLFS4-SB2-S-26 |
| OLFS4-DP17-S10 | OLFS4-DPW11-S45 | OLFS4-SB3-S-10 |
| OLFS4-DP18-S6 | OLFS4-DPW12-S45 | OLFS4-SB3-S-26 |
| OLFS4-DP19-S12 | OLFS4-DPW13-S4 | OLFS4-SB4-S-10 |
| OLFS4-DP20-S10 | OLFS4-DPW14-S6 | OLFS4-SB4-S-45 |
| OLFS4-DP21-S10 | OLFS4-DPW15-S4 | OLFS4-SB5-S-10 |
| OLFS4-DP22-S18 | OLFS4-DPW16-S4 | OLFS4-SB5-S-45 |
| OLFS4-DP23-S8 | OLFS4-DPW17-S12 | OLFS4-SB6-S-16 |
| OLFS4-DP24-S8 | OLFS4-DPW18-S12 | OLFS4-SB7-S-12 |
| OLFS4-DP25-S10 | OLFS4-DPW19-S12 | OLFS4-SB8-S-12 |
| OLFS4-DP26-S6 | OLFS4-DPW20-S12 | |

**TABLE 6-2**
**OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - GROUNDWATER**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENSACOLA, FLORIDA**

**Scenario Timeframe: Current/Future**
**Medium: Groundwater**
**Exposure Medium: Groundwater**

| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondects[2] | Concentration Used for Screening[3] | Background Value[4] | USEPA Region 9 Tap Water PRG[5] | USEPA MCL[6] | COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site 4 | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 75-34-3 | 1,1-Dichloroethane | 5.2 | 27 | ug/L | OLFS4-DPW01-G53-55 | 2/53 | 0.15 - 0.75 | 27 | NA | 91 N[8] | NA | No | BSL |
| | 78-93-3 | 2-Butanone | 3.8 J | 4 J | ug/L | OLFS4-MW38-0607 | 2/53 | 1.2 - 6.2 | 4 | NA | 700 N | NA | No | BSL |
| | 591-78-6 | 2-Hexanone | 2 J | 2 J | ug/L | OLFS4-DPW13-34-36 | 1/53 | 0.83 - 4.2 | 2 | NA | NA | NA | No | BSL, FOD |
| | 67-64-1 | Acetone | 3 J | 52 J | ug/L | OLFS4-DPW13-34-36 | 17/53 | 1.1 - 16 | 52 | NA | 550 N | NA | No | BSL |
| | 71-43-2 | Benzene | 0.11 J | 26 | ug/L | OLFS4-DPW01-G53-55 | 11/53 | 0.11 - 0.4 | 26 | NA | 0.35 C | 5 | Yes | ASL |
| | 75-27-4 | Bromodichloromethane | 0.29 J | 0.6 J | ug/L | OLFS4-MW39-0607 | 3/53 | 0.24 - 1.2 | 0.6 | NA | 0.18 C | 80 | No | BSL |
| | 75-25-2 | Bromoform | 0.4 J | 0.4 J | ug/L | OLFS4-MW39-0607 | 1/53 | 0.24 - 1.2 | 0.4 | NA | 8.5 C | 80 | No | BSL, FOD |
| | 75-15-0 | Carbon Disulfide | 0.52 J | 4.3 | ug/L | OLFS4-MW09S-001 | 3/53 | 0.13 - 0.65 | 4.3 | NA | 100 N | NA | No | BSL |
| | 124-48-1 | Chlorodibromomethane | 0.26 J | 0.5 J | ug/L | OLFS4-MW39-0607 | 4/53 | 0.08 - 1 | 0.5 | NA | 0.13 C | 80 | Yes | ASL |
| | 67-66-3 | Chloroform | 0.16 J | 3 | ug/L | OLFS4-MW39-0607 | 14/53 | 0.15 - 0.75 | 3 | NA | 0.17 C | 80 | Yes | ASL |
| | 74-87-3 | Chloromethane | 0.18 J | 0.55 J | ug/L | OLFS4-MW15S-001 | 7/53 | 0.18 - 2 | 0.55 | NA | 16 N | NA | No | BSL |
| | 156-59-2 | cis-1,2-Dichloroethene | 0.61 J | 350 | ug/L | OLFS4-DPW01-G53-55 | 4/53 | 0.3 - 2.2 | 350 | NA | 6.1 N | 70 | Yes | ASL |
| | 110-82-7 | Cyclohexane | 0.27 J | 4.2 J | ug/L | OLFS4-MW32S-001 | 7/53 | 0.18 - 0.6 | 4.2 | NA | 1000 N | NA | No | BSL |
| | 100-41-4 | Ethylbenzene | 0.29 J | 110 | ug/L | OLFS4-MW32S-001 | 5/53 | 0.14 - 0.4 | 110 | NA | 130 N | 700 | No | BSL |
| | 98-82-8 | Isopropylbenzene | 0.36 J | 80 | ug/L | OLFS4-MW32S-001 | 8/53 | 0.25 - 0.5 | 80 | NA | 66 N | NA | Yes | ASL |
| | 108-87-2 | Methyl Cyclohexane | 0.53 J | 16 | ug/L | OLFS4-MW32S-001 | 5/53 | 0.2 - 1 | 16 | NA | 520 N | NA | No | BSL |
| | 127-18-4 | Tetrachloroethene | 0.2 J | 0.54 J | ug/L | OLFS4-DPW03-G53-55 | 4/53 | 0.14 - 0.7 | 0.54 | NA | 0.1 C | 5 | Yes | ASL |
| | 108-88-3 | Toluene | 0.23 J | 4.8 J | ug/L | OLFS4-MW32S-001 | 12/53 | 0.18 - 0.3 | 4.8 | NA | 230 N[9] | 1000 | No | BSL |
| | 1330-20-7 | Total Xylenes | 0.34 J | 840 | ug/L | OLFS4-MW32S-001 | 8/53 | 0.21 - 1 | 840 | NA | 21 N | 10000 | Yes | ASL |
| | 156-60-5 | trans-1,2-Dichloroethene | 0.45 J | 48 | ug/L | OLFS4-MW15S-001 | 5/53 | 0.4 - 2 | 48 | NA | 11 N | 100 | Yes | ASL |
| | 75-69-4 | Trichlorofluoromethane | 0.16 J | 0.16 J | ug/L | OLFS4-MW36S-001 | 1/53 | 0.15 - 0.75 | 0.16 | NA | 130 N | NA | No | BSL, FOD |
| | 75-01-4 | Vinyl Chloride | 0.27 J | 0.36 J | ug/L | OLFS4-MW15S-001 | 2/53 | 0.19 - 0.95 | 0.36 | NA | 0.02 C | 2 | Yes | ASL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 92-52-4 | 1,1-Biphenyl | 1.1 J | 1.1 J | ug/L | OLFS4-MW31S-001 | 1/37 | 1 - 3 | 1.1 | NA | 30 N | NA | No | BSL, FOD |
| | 91-57-6 | 2-Methylnaphthalene | 3.2 | 7.9 J | ug/L | OLFS4-MW05S-001 | 4/42 | 1 - 4 | 7.9 | NA | 0.62 N | NA | Yes | ASL |
| | 117-81-7 | Bis(2-ethylhexyl)phthalate | 1.4 J | 1.8 J | ug/L | OLFS4-MW17S-001 | 2/42 | 1 - 8 | 1.8 | NA | 4.8 C | 6 | No | BSL, FOD |
| | 85-68-7 | Butyl Benzyl Phthalate | 1.6 J | 1.6 J | ug/L | OLFS4-MW05S-001, OLFS4-MW16S-001 | 2/42 | 1 - 6 | 1.6 | NA | 730 N | NA | No | BSL, FOD |
| | 105-60-2 | Caprolactam | 1.2 J | 4.4 J | ug/L | OLFS4-MW19S-001 | 6/42 | 1 - 9 | 4.4 | NA | 1800 N | NA | No | BSL |
| | 84-74-2 | di-n-Butyl Phthalate | 1.4 J | 1.4 J | ug/L | OLFS4-MW16S-001 | 1/42 | 1 - 7 | 1.4 | NA | 360 N | NA | No | BSL, FOD |
| | 91-20-3 | Naphthalene | 13 | 68 | ug/L | OLFS4-MW32S-001 | 3/42 | 1 - 3 | 68 | NA | 0.62 N | NA | Yes | ASL |
| | **Polynuclear Aromatic Hydrocarbons** | | | | | | | | | | | | | |
| | 90-12-0 | 1-Methylnaphthalene | 0.01 J | 8.6 | ug/L | OLFS4-MW05S-001 | 11/32 | 0.01 - 0.012 | 8.6 | NA | 0.62 N | NA | Yes | ASL |
| | 91-57-6 | 2-Methylnaphthalene | 0.025 J | 12 | ug/L | OLFS4-MW05S-001 | 10/32 | 0.016 - 0.019 | 12 | NA | 0.62 N | NA | Yes | ASL |
| | 83-32-9 | Acenaphthene | 0.014 J | 0.014 J | ug/L | OLFS4-MW32S-001 | 1/32 | 0.01 - 0.012 | 0.014 | NA | 37 N | NA | No | BSL |
| | 208-96-8 | Acenaphthylene | 0.86 | 0.86 | ug/L | OLFS4-MW31S-001 | 1/32 | 0.0085 - 0.01 | 0.86 | NA | 37 N[10] | NA | No | BSL, FOD |
| | 56-55-3 | Benzo(a)anthracene | 0.018 J | 0.03 J | ug/L | OLFS4-MW12S-001 | 2/32 | 0.01 - 0.012 | 0.03 | NA | 0.029 C | NA | Yes | ASL |
| | 50-32-8 | Benzo(a)pyrene | 0.03 J | 0.03 J | ug/L | OLFS4-MW12S-001 | 1/32 | 0.0095 - 0.011 | 0.03 | NA | 0.0029 C | 0.2 | Yes | ASL |
| | 205-99-2 | Benzo(b)fluoranthene | 0.04 J | 0.04 J | ug/L | OLFS4-MW12S-001 | 1/32 | 0.016 - 0.019 | 0.04 | NA | 0.029 C | NA | Yes | ASL |
| | 207-08-9 | Benzo(k)fluoranthene | 0.037 J | 0.037 J | ug/L | OLFS4-MW12S-001 | 1/32 | 0.013 - 0.015 | 0.037 | NA | 0.29 C[11] | NA | No | BSL, FOD |
| | 218-01-9 | Chrysene | 0.027 J | 0.046 J | ug/L | OLFS4-MW12S-001 | 2/32 | 0.009 - 0.01 | 0.046 | NA | 2.9 C[8] | NA | No | BSL |
| | 206-44-0 | Fluoranthene | 0.016 J | 0.093 | ug/L | OLFS4-MW12S-001 | 6/32 | 0.012 - 0.014 | 0.093 | NA | 150 N | NA | No | BSL |
| | 86-73-7 | Fluorene | 0.015 J | 0.1 | ug/L | OLFS4-MW05S-001 | 4/32 | 0.012 - 0.015 | 0.1 | NA | 24 N | NA | No | BSL |
| | 91-20-3 | Naphthalene | 0.044 J | 79 J | ug/L | OLFS4-MW32S-001 | 11/32 | 0.019 - 0.022 | 79 | NA | 0.62 N | NA | Yes | ASL |
| | 85-01-8 | Phenanthrene | 0.027 J | 0.07 | ug/L | OLFS4-MW12S-001 | 8/32 | 0.014 - 0.016 | 0.07 | NA | 18 N[11] | NA | No | BSL |
| | 129-00-0 | Pyrene | 0.012 J | 0.06 | ug/L | OLFS4-MW12S-001 | 4/32 | 0.01 - 0.012 | 0.06 | NA | 18 N | NA | No | BSL |
| | | Benzo(a)pyrene Equivalents | 0.011 | 0.030 | ug/L | OLFS4-MW12S-001 | 2/32 | 0.0095 - 0.011 | 0.03 | NA | 0.0029 C | 0.2 | Yes | ASL |

**TABLE 6-2**
**OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - GROUNDWATER**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENSACOLA, FLORIDA**

**Scenario Timeframe: Current/Future**
**Medium: Groundwater**
**Exposure Medium: Groundwater**

| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondects[2] | Concentration Used for Screening[3] | Background Value[4] | USEPA Region 9 Tap Water PRG[5] | USEPA MCL[6] | COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Metals** | | | | | | | | | | | | | |
| | 7429-90-5 | Aluminum | 31.3 J | 3110 | ug/L | OLFS4-MW17S-001 | 34/42 | 75 - 75 | 3110 | 1054 | 3600 N | 50 | Yes | ASL |
| | 7440-38-2 | Arsenic | 3.6 | 5.8 | ug/L | OLFS4-MW17S-001 | 4/42 | 0.83 - 4 | 5.8 | 5.4 | 0.045 C | 10 | Yes | ASL |
| | 7440-39-3 | Barium | 9.1 | 119 | ug/L | OLFS4-MW45-0607 | 42/42 | --- | 119 | 339 | 730 N[9] | 2000 | No | BSL |
| | 7440-70-2 | Calcium | 1320 | 93400 | ug/L | OLFS4-MW45-0607 | 41/42 | 1000 - 1000 | 93400 | 181500 | NA | NA | No | NUT |
| | 7440-47-3 | Chromium | 2.8 | 855 | ug/L | OLFS4-MW19S-001 | 41/42 | 1.5 - 1.5 | 855 | 25.9 | 11 N | 100 | Yes | ASL |
| | 7440-48-4 | Cobalt | 1.7 | 31.5 | ug/L | OLFS4-MW15S-001 | 17/42 | 5 - 5 | 31.5 | ND | 73 N | NA | No | BSL |
| | 7440-50-8 | Copper | 5.1 | 22.3 | ug/L | OLFS4-MW25S-001 | 13/42 | 0.93 - 15.9 | 22.3 | ND | 150 N | 1300 | No | BSL |
| | 7439-89-6 | Iron | 58.6 | 12500 | ug/L | OLFS4-MW26D-001 | 42/42 | --- | 12500 | 34879 | 2600 N | 300 | No | BKG |
| | 7439-92-1 | Lead | 0.39 | 12.2 | ug/L | OLFS4-MW10D-001 | 23/42 | 0.38 - 1.5 | 12.2 | 9.85 | 15 | 15 | No | BSL |
| | 7439-95-4 | Magnesium | 789 | 9610 | ug/L | OLFS4-MW26D-001 | 37/42 | 1000 - 1000 | 9610 | 17600 | NA | NA | No | NUT |
| | 7439-96-5 | Manganese | 12.5 | 1860 | ug/L | OLFS4-MW31S-001 | 42/42 | --- | 1860 | 2803 | 88 N | 50 | No | BKG |
| | 7439-97-6 | Mercury | 1.1 | 1.1 | ug/L | OLFS4-MW43-0607 | 1/42 | 0.01 - 0.08 | 1.1 | ND | 1.1 N | 2 | No | BSL, FOD |
| | 7440-02-0 | Nickel | 2.8 | 438 | ug/L | OLFS4-MW19S-001 | 40/42 | 1.6 - 2.5 | 438 | 20.7 | 73 N | NA | Yes | ASL |
| | 7440-09-7 | Potassium | 545 | 26800 | ug/L | OLFS4-MW46-0607 | 34/42 | 1000 - 1000 | 26800 | 36100 | NA | NA | No | NUT |
| | 7782-49-2 | Selenium | 1.3 | 1.4 | ug/L | OLFS4-MW29D-001 | 1/42 | 1.2 - 5 | 1.4 | ND | 18 N | 50 | No | BSL, FOD |
| | 7440-22-4 | Silver | 4.8 | 4.8 | ug/L | OLFS4-MW15S-001 | 1/42 | 0.46 - 1 | 4.8 | ND | 18 N | 100 [12] | No | BSL, FOD |
| | 7440-23-5 | Sodium | 2200 | 58700 | ug/L | OLFS4-MW46-0607 | 42/42 | --- | 58700 | 35280 | NA | NA | No | NUT |
| | 7440-28-0 | Thallium | 0.82 | 0.99 | ug/L | OLFS4-MW31S-001 | 1/42 | 0.71 - 1.5 | 0.99 | ND | 0.24 N | 2 | Yes | ASL |
| | 7440-62-2 | Vanadium | 2.7 | 12.1 | ug/L | OLFS4-MW17S-001 | 6/42 | 0.57 - 5 | 12.1 | ND | 3.6 N | NA | Yes | ASL |
| | 7440-66-6 | Zinc | 11 | 255 | ug/L | OLFS4-MW15S-001 | 25/42 | 4.6 - 10 | 255 | 21.4 | 1100 N | 5000 [12] | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | | TPH (C08-C40) | 0.3 J | 8.9 | mg/L | OLFS4-MW31S-001 | 8/42 | 0.17 - 0.3 | 8.9 | NA | NA | NA | No | NTX |

**TABLE 6-2**
**OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - GROUNDWATER**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENSACOLA, FLORIDA**

**Scenario Timeframe: Current/Future**
**Medium: Groundwater**
**Exposure Medium: Groundwater**

| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondects[2] | Concentration Used for Screening[3] | Background Value[4] | USEPA Region 9 Tap Water PRG[5] | USEPA MCL[6] | COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Notes:**
1 - Sample and duplicate are counted as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining frequency of detection.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - Monitoring wells MW-22-D and MW-23-S.
5 - The risk-based COPC screening level for tap water is presented. The value is based upon a target HQ of 0.1 for noncarcinogens (denoted with a "N" flag), or an incremental cancer risk of $1 \times 10^{-6}$ for carcinogens (denoted with a "C" flag) (EPA Region 9, October 2004, Updated December 28, 2004).
6 - U.S. EPA Primary Drinking Water Standard (U.S. EPA, Summer 2006).
7 - The chemical is selected as a COPC if the maximum detected concentration exceeds the COPC screening level and is greater than the concentration detected in the upgradient well.
8 - The value presented in the USEPA Region 9 PRG Table (October 2004) was updated using current toxicity data.
9 - The PRG for naphthalene is used as a surrogate for 1- and 2-methylnaphthalene.
10 - The PRG for acenaphthene is used as a surrogate for acenaphthylene.
11 - The PRG for pyrene is used as a surrogate for phenanthrene.
12 - No primary MCL available, secondary MCL is presented.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Definitions:**
NA = Not Applicable
SQL = Sample Quantitation Limit
COPC = Chemical of Potential Concern
J = Estimated Value
C = Carcinogenic
MCL = Maximum Contaminant Level.
NA = Not applicable/not available.
N = Noncarcinogen.
SDWA = Safe Drinking Water Act.
SMCL = Secondary MCL.

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below Screening Level
NUT = Essential nutrient
BKG = Less than Background Concentration

**Associated Samples**

| | |
|---|---|
| OLFS4-DPW01-G53-55 | OLFS4-MW17S-001 |
| OLFS4-DPW03-G53-55 | OLFS4-MW18S-001 |
| OLFS4-DPW05-G53-55 | OLFS4-MW19S-001 |
| OLFS4-DPW07-G53-55 | OLFS4-MW20S-001 |
| OLFS4-DPW09-G53-55 | OLFS4-MW21S-001 |
| OLFS4-DPW09-G53-55-D | OLFS4-MW24S-001 |
| OLFS4-DPW11-G53-55 | OLFS4-MW25S-001 |
| OLFS4-DPW13-34-36 | OLFS4-MW26D-001 |
| OLFS4-DPW15-36-38 | OLFS4-MW27S-001 |
| OLFS4-DPW17-34-36 | OLFS4-MW28S-001 |
| OLFS4-DPW22-32-34 | OLFS4-MW29D-001 |
| OLFS4-DPW23-30-32 | OLFS4-MW30S-001 |
| OLFS4-DPW24-30-31 | OLFS4-MW31S-001 |
| OLFS4-MW01D2-001 | OLFS4-MW32S-001 |
| OLFS4-MW02D-001 | OLFS4-MW33S-001 |
| OLFS4-MW03S-001 | OLFS4-MW34S-001 |
| OLFS4-MW04D-001 | OLFS4-MW35S-001 |
| OLFS4-MW05S-001 | OLFS4-MW35S-001-D |
| OLFS4-MW06S-001 | OLFS4-MW36S-001 |
| OLFS4-MW07S-001 | OLFS4-MW37-0607 |
| OLFS4-MW08S-001 | OLFS4-MW37-0607-D |
| OLFS4-MW08S-001-D | OLFS4-MW38-0607 |
| OLFS4-MW09S-001 | OLFS4-MW39-0607 |
| OLFS4-MW10D-001 | OLFS4-MW40-0607 |
| OLFS4-MW11S-001 | OLFS4-MW41-0607 |
| OLFS4-MW12S-001 | OLFS4-MW42-0607 |
| OLFS4-MW13S-001 | OLFS4-MW43-0607 |
| OLFS4-MW14D-001 | OLFS4-MW44-0607 |
| OLFS4-MW15S-001 | OLFS4-MW45-0607 |
| OLFS4-MW16S-001 | OLFS4-MW46-0607 |

children in a residential setting is less frequent. A value of 400 mg/kg is used as the screening level for COPC selection for subsurface soil.

Guidance for the USEPA Technical Review Workgroup (TRW) for Lead indicates that "a reasonable screening level for soil lead at commercial/industrial (i.e., non-residential) sites is 800 mg/kg" for a typical non-contact intensive worker (USEPA online, 2007b). This value is not used for COPC selection, but may be used in the qualitative evaluation of lead. The current State of Florida commercial/industrial SCTL for lead in soil is 1,400 mg/kg (FDEP, 2005b).

The Florida CTL and Safe Drinking Water Act Action Level of 15 µg/L were used as the screening level for lead in groundwater.

Essential Nutrients and Chemicals without Toxicity Criteria

The essential nutrients calcium, magnesium, potassium, and sodium, are not included in the COPC screening process. These inorganic chemicals are naturally abundant in environmental matrices and are only toxic at high doses and, because of the lack of toxicity criteria, risk-based COPC screening levels are not available for these chemicals in the Region 9 PRG table or FDEP CTL tables.

USEPA risk-based screening levels are currently not available for several constituents detected at Site 4 (e.g., acenaphthylene, 1-methylnaphthalene, 2-methylnaphthalene, and phenanthrene). Therefore, screening levels available for surrogate chemicals are used as screening levels for these constituents, as recommended by USEPA Region 1 (USEPA, 1999b). For example, in the COPC selection for soil at Site 4, the screening level for acenaphthene is used as a surrogate for acenaphthylene, naphthalene is used as a surrogate for 1-methylnaphthalene and 2-methylnaphthalene, and pyrene is used as a surrogate for phenanthrene.

#### 6.1.1.2.2 Background Screen

Background concentrations are those that would exist in the absence of influence from site operations. As discussed in Section 2.6 the background concentrations for soil were obtained from 10 reference locations and background concentrations for groundwater were obtained from two monitoring wells. The background comparisons were conducted according to USEPA Region 4 risk assessment guidance which states, "For naturally occurring inorganics and radionuclides, compare the on-site maximum detected concentration to 2 times the average site-specific background concentration. Eliminate the chemical as a COPC if it is less than 2 times the background level." (USEPA, 2000). Therefore, if the detected site concentrations of an analyte are less than two times the mean of the background levels, the analyte is not selected as a COPC. The background values used for COPC selection are presented in Tables 6-1 and

6-2. In calculating the background value sample and duplicate results were averaged before the mean was calculated. A value of one half the detection limit was subsituted for non-detected ("U" qualified) results. The background values presented in Tables 6-1 and 6-2 are twice the arithmetic mean values.

The elimination of chemicals as site-related COPCs on the basis of background comparisons follows Navy Policy on the Use of Background Chemical Levels (DON, 2004). This document also presents the Navy's interpretation of the USEPA guidance provided in the document titled Role of Background in the CERCLA Cleanup Program (USEPA, 2002) and details the methodology to be used in evaluating background under the Navy's Environmental Restoration and Base Realignment and Closure (BRAC) programs. Navy policy applies to both the screening-level and baseline risk assessments and requires the following:

1. A clear and concise understanding of chemicals released from a site, thus ensuring the Navy is focusing on remediating the release.

2. The use of background data in the screening-level risk assessment.

    a. The comparison of site chemical levels to risk-based screening criteria.
    b. The comparison of site chemical levels to background concentrations.
    c. The identification of site-related COPCs based on screening criteria comparisons and background comparisons. Site-related COPCs are those chemicals with concentrations exceeding risk-based screening criteria and background concentrations. To the extent possible, site-related COPCs are further evaluated quantitatively in the baseline risk assessment. (Non-site-related COPCs are further discussed in the risk characterization sections of the baseline risk assessments.)

3. The consideration of background in the baseline risk assessment.

    a. The calculation of risk estimates for site-related COPCs only.
    b. The further evaluation of non-site-related COPCs in the risk characterization section only (e.g., the evaluation of chemicals detected at concentrations exceeding screening criteria but less than background concentrations). The Navy considers this comparison to be consistent with USEPA's Role of Background in the CERCLA Cleanup Program (USEPA, 2002).

4. The selection of site cleanup remedial goals at levels not less than background levels. Additionally, cleanup levels should not be developed for chemicals not identified as chemicals of concern (COCs). As defined in the Navy guidance, COCs are site-related COPCs found to be the risk drivers in the baseline risk assessment and that may pose unacceptable human or ecological risks.

#### 6.1.1.2.3 Frequency Screen

If an analyte is detected in less than 5 percent of the samples, it may not be selected as a COPC (FDEP, 2005). A frequency screen is conducted only when there are 20 or more samples of the medium of concern. The decision to eliminate a chemical because of low detection frequency is also based on site history (i.e., is there a reason to believe a chemical may or may not be related to historical site activities) and the magnitude of the concentration (i.e., does the concentration of a chemical indicate a potential hotspot area). Note that no chemicals were eliminated as COPCs on the basis of frequency alone.

#### 6.1.1.2.4 Decision Rules for Establishing COPCs

The applicable decision rules for the selection of COPCs are as follows:

- A chemical is selected as a COPC for soil or groundwater if the maximum detected concentration exceeds the screening level and if the background screen indicates that site concentrations are greater than the corresponding background concentrations.

- Individual chemicals may be eliminated as COPCs if they are detected at a frequency of less than 5 percent in any given medium, but only if there are no other indications the chemical would pose an unacceptable risk to receptors (e.g., there is no evidence of a contaminant "hot spot"). Chemicals exhibiting unusually high concentrations or are clearly site-related may be retained as COPCs at the discretion of the human health risk assessor.

- If a chemical is not detected in any of the samples in a particular medium, and the detection limits exceeds the risk-based screening levels, the chemical is not selected as a COPC, but is qualitatively discussed in the uncertainty analysis section.

- The essential nutrients (calcium, magnesium, potassium, and sodium) are not identified as COPCs.

- Chemicals with concentrations exceeding toxicity screening concentrations but determined to be less than background concentrations based on the background screen are not selected as COPCs.

## 6.2 SELECTION OF COPCS FOR HHRA – USEPA METHODOLOGY

The direct contact, USEPA Region 9 risk-based screening levels, and USEPA MCLs (for groundwater) defined in Section 6.1.1.2 were used to select COPCs for quantitative evaluation at Site 4. A discussion of the chemicals selected as COPCs (i.e., those chemicals detected at concentrations in excess of USEPA direct contact screening criteria and the rationale for COPC selection are provided in the following

paragraphs. COPC selection tables for subsurface soil and groundwater are presented in Tables 6-1 and 6-2, respectively.

### 6.2.1 Subsurface Soil

Four VOCs, six SVOCs, Aroclor-1260, 18 inorganics, cyanide, and petroleum hydrocarbons were detected in subsurface soil samples collected at Site 4. A comparison of the maximum detected subsurface soil concentrations to screening levels based on USEPA Region 9 PRGs for residential exposures is presented in Table 6-1. Also presented in Table 6-1 is a comparison of the maximum detected concentration to background for inorganics. Inorganics (aluminum, arsenic, chromium, iron, manganese, and vanadium) were detected in subsurface soils at maximum concentrations exceeding the direct contact, risk based COPC screening levels and background, and were retained as COPCs for subsurface soil.

The maximum detected concentrations of aluminum, chromium, iron, manganese, and vanadium exceeded the COPC screening levels [set at a hazard index (HI) of 0.1]; however, they did not exceed the USEPA Region 9 PRG for soil.

### 6.2.2 Groundwater

In groundwater samples collected at Site 4, 22 VOCs, 7 SVOCs, 14 PAHs, 20 inorganics, and TRPH were detected. A comparison of the maximum detected groundwater concentrations to screening levels based on USEPA Region 9 PRGs and USEPA MCLs for residential exposures is presented in Table 6-2. Also presented in Table 6-2 is a comparison of the maximum detected concentration to background for inorganics. The following chemicals were detected in groundwater at maximum concentrations exceeding the direct contact, risk-based COPC screening levels, and background levels, and were retained as COPCs for groundwater:

- VOCs (benzene, chlorodibromomethane, chloroform, cis-1,2-dichloroethene, isopropylbenzene, tetrachloroethene, total xylenes, trans-1,2-dichloroethene, and vinyl chloride)
- SVOCs (2-methylnaphthalene and naphthalene)
- PAHs (1-methylnaphthalene, 2-methylnaphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and naphthalene)
- Inorganics (aluminum, arsenic, chromium, nickel, thallium, and vanadium)

The maximum detected concentration of isopropylbenzene, trans-1,2-dichloroethene, nickel, thallium, and vanadium exceeded the COPC screening levels [set at a hazard index (HI) of 0.1]; however, they did not exceed the USEPA Region 9 PRG for groundwater. Concentrations of aluminum were below the USEPA Region 9 screening levels for groundwater; however, they exceeded the secondary MCL. Concentrations of iron and manganese exceeded the screening criteria but were within background levels, therefore iron and manganese were not retained as COPCs.

## 6.3 EXPOSURE ASSESSMENT/ESTIMATION OF RISK

The exposure assessment defines and evaluates, quantitatively or qualitatively, the type and magnitude of human exposure to the chemicals present at or migrating from the site. The exposure assessment is designed to depict the physical setting of the site, to identify potentially exposed populations and applicable exposure pathways, to determine concentrations of COPCs to which receptors might be exposed, and to estimate chemical intakes under the identified exposure scenarios. Actual or potential exposures at a site are determined based on the most likely pathways of contaminant release and transport, as well as human activity patterns. A complete exposure pathway has three components: (1) a source of chemicals that can be released to the environment, (2) a route of contaminant transport through an environmental medium, and (3) an exposure or contact point for a human receptor. These components can be integrated and described by means of a conceptual site model (CSM), which is an essential element of the exposure assessment.

Current or potential human exposures identified by the CSM are evaluated using the "risk-ratio" approach defined in Section 6.3.3. As noted above, this approach is supported by USEPA Region 4. The approach uses exposure point concentrations (EPCs) for the COPCs in soil and groundwater and relevant risk-based concentrations to generate cancer and non-cancer risk estimates for receptors of concern. The risk-based concentrations for soil used to estimate risk are the FDEP SCTLs developed for the residential and industrial land use scenarios and risk-based concentrations developed for other receptors using USEPA and FDEP guidance documents. The risk-based concentrations for groundwater used to estimate risks are the USEPA Region 9 Tap Water PRGs (USEPA, 2004b). The Region 9 PRGs were used for groundwater (instead of the FDEP CTLs), because most of the FDEP groundwater CTLs are not risk-based values. The risk-based concentrations define and incorporate all the exposure factors (e.g., soil and water ingestion rates) used to determine chemical intake/exposure by receptors of concern.

### 6.3.1 Conceptual Site Model

The foundation of an exposure assessment is the CSM, which identifies site characteristics including potential contaminant sources, contaminant release mechanisms, transport routes, receptors under current and future land use scenarios, and other appropriate information. The CSM integrates information

regarding the physical characteristics of the site, exposed populations, sources of contamination, and contaminant mobility (fate and transport) to identify potential exposure routes and receptors to be evaluated in the risk assessment. A well-defined CSM allows for a better understanding of the risks at a site and aids risk managers in the identification of the potential need for remediation. A general overview of CSM information relevant to Site 4 is provided below. Table 6-3 provides a general summary of the potential receptors and exposure routes evaluated in the risk assessment for Site 4.

**TABLE 6-3**
**EXPOSURE ROUTES FOR QUANTITATIVE EVALUATION**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| Receptors | Exposure Routes |
|---|---|
| Maintenance Workers | • No complete exposure pathways |
| Prisoners | • No complete exposure pathways |
| Construction Workers | • Soil dermal contact (surface and subsurface)<br>• Soil ingestion (surface and subsurface)<br>• Inhalation of air/dust/emissions (surface and subsurface) |
| Occupational Workers | • Soil dermal contact[1]<br>• Soil ingestion[1]<br>• Inhalation of air/dust/emissions[1] |
| Adult and Adolescent Trespassers / Recreational Users | • No complete exposure pathways |
| Residents (Adult/Children) | • Soil dermal contact[1]<br>• Soil ingestion[1]<br>• Inhalation of air/dust/emissions[1]<br>• Groundwater ingestion<br>• Groundwater inhalation |

Note:
1 - Assumes that subsurface soil could be brought to the surface in future excavation projects.

As noted above, the CSM depicts the relationships among the following elements:

- Site sources of contamination
- Contaminant release mechanisms
- Transport/migration pathways
- Exposure routes
- Potential receptors

A general discussion of these elements is provided in following paragraphs.

#### 6.3.1.1 Site Background and History

Saufley Field is located in Escambia County, northwest Florida. The facility is situated between Interstate 10 and Perdido Bay approximately five miles northwest of Pensacola, Florida. OLF Saufley consists of four

airstrips. Currently, all airstrips are inactive. The base also has a number of support buildings and a Federal Prison located south of the airfield. OLF Saufley encompasses 866 acres with the majority of the area consisting of airstrips, grass covered fields, buildings, and woods.

Site 4 consists of Hangars 807, 808, 809, and 810 and the concrete and grass covered areas immediately surrounding them. The hangars are roughly located symmetrically about the control tower, Building 803. Based on a review of historic aerial photographs, these hangars were initially constructed with concrete pavement surrounding the structures on all sides with the exception of small grass covered areas surrounded by curbs located adjacent to administrative doorways. For this reason, investigation for spilled fuels, oils, and solvents near the hangars was restricted to the locations of gasoline and used oil/solvent tanks and the wash racks.

OLF Saufley opened in 1940 as NAAS Saufley. NAAS Saufley was used to train pilots during World War II and the Korean Conflict. In 1957, the mission at Saufley Field was changed to basic training for naval aviators. NAAS Saufley was re-designated as a NAS in 1968 and retained this status until 1976 when NAS Saufley operations were discontinued and the facility was placed in caretaker status. Between 1976 and 1979, Saufley Field was used as an OLF for NAS Whiting Field. Currently, the landing strips are maintained, but unutilized.

In 1979, the facility was reactivated as NETPMSA. Saufley Field was renamed the Naval Education and Training Professional Development and Technical Center (NETPDTC) in 1996, and is now used primarily to train and educate naval personnel. At this time, approximately 10 percent of the base, including approximately 25 percent of Site 4 (primarily Hangar 810 and the associated eastern aircraft wash rack area), was designated as a minimum security Federal Prison Camp housing male offenders. Working within the camp area requires modification of typical work practices (i.e., no phones, knives, cameras, or speaking with inmates, and a check-in/check-out procedure).

#### 6.3.1.2 Sources of Environmental Contamination

Used oil/solvents were placed in two 2000-gallon capacity USTs designated tanks 807-B and 819-B located at Hangars 807 and 810, respectively. When the tanks were full, used oil/solvents were transported off base or burned by the base fire department at the fire fighting training pit north of the runways. Additional tanks associated with Hangars 807 and 810 were 1000-gallon kerosene tanks (Tanks 807-C and 819-C) and 1000-gallon gasoline tanks (Tanks 807-D and 819-D).

#### 6.3.1.3 Potential Contaminant Migration Routes

Assuming subsurface soil and groundwater contamination has occurred as a result of chemical usage/waste disposal and chemicals may migrate to deeper subsurface soils and groundwater, the primary plausible contaminant release and migration mechanisms at Site 4 are as follows:

- Migration of soil contaminants downward through the soil column with infiltrating precipitation. Chemicals may continue to migrate in groundwater via dispersion and advection in the downgradient direction. Depth to groundwater at Site 4 varies between 25 to 50 feet bls. However, Site 4 is covered with concrete and hangars with only small areas of exposed grass; therefore, the potential migration of contaminants with infiltrating precipitation is not significant.

- Migration of fugitive dusts from surface soils (and subsurface soils if construction/excavation activities occur) into ambient air. Currently, Site 4 is covered with concrete and hangars with only small areas of exposed grass; therefore, the potential for migration of airborne fugitive dusts from surface soil is not significant. Also, as indicated in COPC selection Table 6-1, the site soil concentrations of all detected chemicals were less than USEPA inhalation soil screening levels (SSLs) and, therefore, the soil-to-air inhalation pathway is not considered significant and is not further evaluated in the risk assessment.

#### 6.3.1.4 Potential Current and Future Receptors of Concern and Exposure Pathways

NETPDTC Saufley is an active facility and will remain active for the foreseeable future. However, for purposes of completeness, the baseline risk assessment prepared for Site 4 considers receptor exposure under residential, industrial, and recreational land use scenarios. As previously discussed, Site 4 consists of hangars and paved areas with very little exposed areas of grass. No surface soil samples were collected at Site 4; therefore, potential exposure pathways were only identified for subsurface soil and groundwater. The lack of surface soil data is discussed in the uncertainty analysis in Section 6.8. The majority of Site 4 is covered with concrete and hangars; therefore, potential exposures to surface soil could only occur under a future scenario where the concrete is removed. Based on current and potential future land use, the following potential receptors are assumed to be exposed to subsurface soil and groundwater at Site 4:

- **Site Maintenance Worker** – An on-site receptor under current/future land use. This includes adult military or civilian personnel assigned to work (primarily groundskeeping/outdoor maintenance activities) at a site. This receptor could be exposed to surface soil by incidental ingestion, dermal contact, and inhalation (i.e., airborne particulates/vapors) during groundskeeping or maintenance activities. This receptor would not be expected to be routinely exposed to subsurface soils. At present,

Site 4 is covered with concrete and hangars; consequently, there are no complete exposures pathways for this receptor under current conditions. In the future, site maintenance workers could be exposed to surface soil if the concrete and buildings were removed. As discussed above, no surface soil samples were collected at Site 4; therefore, potential exposures to surface soil by future site maintenance workers were not evaluated in this HHRA.

- **Construction/Excavation Worker** – A plausible on-site receptor under future land use if major construction activities were to occur. This receptor could be exposed to surface and subsurface soils by incidental ingestion, dermal contact, and inhalation (i.e., airborne particulates/vapors). The construction worker is assumed to be exposed to soil for 250 days per year (USEPA, 2002b) assuming a Reasonable Maximum Exposure (RME) scenario.

- **Typical Occupational Worker** – An on-site receptor under future land use. Future occupational workers may work at the site if the facility were to close and be developed for commercial/industrial uses. To provide information for risk management decisions, potential risks to future occupational workers are quantified in the risk assessments
- **Adult and Adolescent Recreational User/Trespasser** – A plausible receptor under current and future land use. Although access to the base is controlled, once inside the base, access to Site 4 is not limited by any physical constraints. This receptor may be exposed to potentially contaminated surface soil by incidental ingestion, dermal contact, and inhalation (i.e., airborne particulates/vapors). At present Site 4 is covered with concrete and buildings consequently there are no complete exposures pathways for this receptor under current conditions. In the future, recreational users could be exposed to surface soil if the concrete and hangars were removed. As discussed above no surface soil samples were collected at Site 4; therefore, potential exposures to surface soil by recreational users were not evaluated in this HHRA.

- **On-Site Child and Adult Resident** – A hypothetical on-site receptor under future land use. The future residential scenario was quantitatively evaluated in the risk assessment for decision-making purposes, although this scenario is unlikely for NETPDTC Saufley. It is assumed a resident may be exposed to surface soils by incidental ingestion, dermal contract, and inhalation (i.e., airborne particulates/vapors). Future residents could also be exposed to groundwater only if drinking water wells were installed on the site in the future. This is very unlikely since the main source of water for the base is the Navy-owned well field located at NTTC Corry Station north of NETPDTC Saufley. However, the future residential drinking water scenario was evaluated for decision-making purposes. According to USEPA Region 4 and Region 9 guidance, a resident is assumed to be exposed to groundwater by ingestion and inhalation (i.e., airborne vapors). FDEP in Chapter 62-777, FAC assumes that a receptor is exposed to groundwater by ingestion only. Residential receptors are assumed to be exposed to groundwater 350

days per year (USEPA, 1993) for a total of 30 years. As discussed above, no surface soil samples were collected at Site 4; therefore, potential exposures to surface soil by hypothetical residents were not evaluated in this HHRA. It is assumed that hypothetical residents are exposed to subsurface soil that was brought to the surface during excavation activities.

- **Prisoners** – As discussed above a portion of the site is used as a minimum security Federal Prison Camp. Therefore, the prisoner classification represents an on-site receptor under current/future land use. This receptor could be exposed to surface soil by incidental ingestion, dermal contact, and inhalation (i.e., airborne particulates/vapors). This receptor would not be expected to be routinely exposed to subsurface soils. Although prison inmates are at the site 24 hours a day they have only limited contact with surface and subsurface soil. Their exposures would be less than those experienced by occupational workers. At present, Site 4 is covered with concrete and hangars; consequently, there are no complete exposures pathways for this receptor under current conditions. In the future, prisoners could be exposed to surface soil if the concrete and buildings were removed. As discussed above, no surface soil samples were collected at Site 4; therefore, potential exposures to surface soil by future prisoners were not evaluated in this HHRA. It is assumed that the prisoner/ occupational worker is exposed to subsurface soil that was brought to the surface during excavation activities.

### 6.3.2 Calculation of EPCs

The EPC, calculated for COPCs only, is a reasonable estimate of the chemical concentration likely to be contacted over time by a receptor, and is used to calculate estimated exposure intakes. Calculation of EPCs considered guidance described in Florida's Chapter 62-780, FAC (FDEP, 2005b).
The 95-percent upper confidence limit (UCL), which is based on the distribution of a dataset, is considered to be the best estimate of the exposure concentration for datasets with 10 or more samples (USEPA, 1992d). For datasets with less than 10 samples, the UCL is considered to be a poor estimate of the mean, and the EPC is defined as the maximum concentration. As specified in Chapter 62-780, FAC, the Florida UCL Calculator tool (Version 1.0) was used to calculate the UCLs. Printouts from the Florida UCL Calculator tool are included in Appendix H.

The following decision rules were used to calculate EPCs:

- If a soil dataset contains fewer than 10 samples, the EPC is defined as the maximum detected concentration.

- If a soil dataset contains 10 or more samples, the 95-percent UCL on the arithmetic mean (calculated using the Florida UCL Calculator Tool), which is based on the distribution of the dataset, was selected as the EPC.

- If the calculated 95-percent UCL exceeded the maximum detected concentration, the maximum concentration was used as the EPC.

- Sample and duplicate analytical results were averaged before the EPC was calculated.

- One half the detection limit was subsituted for non-detected ("U" qualified) results.

The EPCs for groundwater used in the USEPA risk evaluation are the maximum detected concentrations.

### 6.3.3 Chemical Intake and Risk Estimation

To evaluate risks by USEPA methodology, cancer and non-cancer risk estimates for COPCs detected in soil and groundwater are determined using the following simple "risk ratio" technique, which involves the selection (or development) of risk-based concentrations established at the $1 \times 10^{-6}$ cancer risk level or HQ of 1 and the calculation of cancer and non-cancer risks based on the EPC and the risk based concentration:

$$\frac{\text{Risk Based Concentration}}{\text{EPC for COPC}} = \frac{\text{HQ of 1 or Cancer Risk Estimate of } 1 \times 10^{-6}}{\text{HQ or Cancer Risk Estimate for COPC}}$$

This is a valid technique for estimating risk because all of the intake and risk characterization equations used to develop risk-based concentrations are linear. The risk-based concentrations used in the HHRAs for the evaluation of exposure to soil are the State of Florida SCTLs or risk-based concentrations based on the methodology for the development of residential and industrial SCTLs presented in the draft Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777 (FDEP, 2005b). Since most Florida groundwater CTLs are not risk-based values, the risk-based Region 9 PRGs are used in the risk ratio calculations.

Cancer and non-cancer risk estimates for all other receptors evaluated in the HHRA (i.e., the construction worker, the maintenance worker, and the recreational user/trespasser) are based on risk- based concentrations developed using the exposure dose assumptions and the simple intake equations presented in the following sections and the toxicity criteria (slope factors and reference doses) discussed in Section 6.4. The simple intake equations are combined to produce one risk-based concentration per chemical that accounts for ingestion, dermal, and inhalation exposures. (The risk-based concentration calculations are presented in Appendix H.) The risk-based concentrations are established by setting the

cancer and non-cancer risk levels at 1 x $10^{-6}$ or HI of 1, respectively, and solving for the associated contaminant concentration in soil as demonstrated in the USEPA Risk Assessment Guidance for Superfund, Part B (USEPA, 1991). The exposure assumptions selected for the construction worker, the maintenance worker, the recreational user/trespasser were based on current USEPA risk assessment guidance (USEPA, 1989 and 2004a) and State of Florida guidance (FDEP, 2005b). Risk assessment spreadsheets for the calculation of the risk estimates are presented in Appendix H.

#### 6.3.3.1 Incidental Ingestion of Soil

Incidental ingestion of soil by potential receptors coincides with dermal exposure. Exposures associated with incidental ingestion were estimated in the following manner (USEPA, 1989):

$$Intake_{si} = \frac{(C_{si})(IR_s)(CF)(FI)(EF)(ED)}{(BW)(AT)}$$

where:
- $Intake_{si}$ = intake of contaminant "i" from soil (mg/kg/day)
- $C_{si}$ = concentration of contaminant "i" in soil (mg/kg)
- $IR_s$ = ingestion rate (mg/day)
- FI = fraction ingested from contaminated source (dimensionless)
- EF = exposure frequency (days/year)
- ED = exposure duration (year)
- CF = conversion factor (1x$10^{-6}$ kg/mg)
- BW = body weight (kg)
- AT = averaging time (days);
  for noncarcinogens, AT = ED x 365 days/year;
  for carcinogens, AT = 70 years x 365 days/year

As noted above, the State of Florida SCTLs are used to calculate cancer and non-cancer risk estimates for the hypothetical future resident and a typical industrial worker exposed to soil. Exposure assumptions for the construction workers are described below and were used to develop risk-based concentrations (Appendix H).

A default value of 1.0 (USEPA, 1989) is recommended for the fraction of soil ingested from the contaminated source. The ingestion rate was 330 mg per day for the construction worker (USEPA, 2002b).

#### 6.3.3.2 Dermal Contact with Soil

Direct physical contact with soil may result in the dermal absorption of chemicals. Exposures associated with the dermal route were estimated in the following manner (USEPA, 1989 and 2004a):

$$Intake_{si} = \frac{(C_{si})(SA)(AF)(ABS)(CF)(EF)(ED)}{(BW)(AT)}$$

where:
- $Intake_{si}$ = amount of chemical "i" absorbed during contact with soil (mg/kg/day)
- $C_{si}$ = concentration of chemical "i" in soil (mg/kg)
- SA = skin surface area available for contact ($cm^2$/day)
- AF = skin adherence factor ($mg/cm^2$)
- ABS = absorption factor (dimensionless)
- CF = conversion factor ($1 \times 10^{-6}$ kg/mg)
- EF = exposure frequency (days/year)
- ED = exposure duration (year)
- BW = body weight (kg)
- AT = averaging time (days);
  for noncarcinogens, AT = ED x 365 days/year;
  for carcinogens, AT = 70 years x 365 days/year

As noted above, the State of Florida SCTLs were used to calculate cancer and non-cancer risk estimates for the hypothetical future resident and a typical industrial worker. Exposure assumptions for construction workers are described below and were used to develop risk-based concentrations.

The exposed surface areas of the body available for dermal contact are determined on a receptor-specific basis and are based on assumed human activities and clothing worn during exposure events. Current guidance (USEPA, 1997c and 2004a) was used to develop the assumptions concerning the amount of skin surface area available for contact for a receptor. For the construction worker, the head, hands, and forearms were assumed to be exposed to soils (assuming the receptors wear a short-sleeved shirt, long pants, and shoes). As recommended in the Risk Assessment Guidance for Superfund (RAGS) Part E (USEPA, 2004a), the skin surface area for a worker was assumed to be 3,300 $cm^2$. This value represents the average of the 50$^{th}$-percentile areas of males and females more than 18 years old.

A soil adherence factor of 0.3 $mg/cm^2$ was used for the construction worker. This value is the 95$^{th}$-percentile value for construction workers, (Exhibit 3.3; USEPA, 2004a).

For the constituents identified as COPCs in soil, the following dermal absorption factors were used (USEPA, Exhibit 3-4, 2004a):

- VOCs – 0.0
- SVOCs – 0.1
- PAHs – 0.13
- PCBs – 0.14
- Arsenic - 0.03
- Other inorganics – 0.001

The dermal absorption factors for VOCs, SVOCs, PAHs, PCBs, and arsenic are based on USEPA guidance (USEPA, Exhibit 3-4, 2004a) and the dermal absorption factors for the other inorganics are USEPA Region 4 values.

The same exposure frequencies and durations used in the estimation of ingestion intakes were used to estimate exposure via dermal contact.

#### 6.3.3.3 Inhalation of Air and Fugitive Dust/Volatile Emissions

The amount of a chemical a receptor takes in as a result of breathing is determined using the concentration of the contaminant in air. Intakes of both particulates and vapors/gases are calculated using the same equation, as follows (USEPA, 1991 and 1996):

$$\text{Intake}_{ai} = \frac{(C_{ai})(IR_a)(ET)(EF)(ED)}{(BW)(AT)}$$

where: $\text{Intake}_{ai}$ = intake of chemical "i" from air via inhalation (mg/kg/day)
$C_{ai}$ = concentration of chemical "i" in air ($mg/m^3$)
$IR_a$ = inhalation rate ($m^3$/hour)
ET = exposure time (hours/day)
EF = exposure frequency (days/year)
ED = exposure duration (year)
PEF = Particulate Emission Factor ($m^3$/kg)
VF = Volatization Factor (chemical-specific) ($m^3$/kg)
BW = body weight (kg)
AT = averaging time (days);
= for noncarcinogens, AT = ED x 365 days/year;
= for carcinogens, AT = 70 year x 365 days/year

As noted above, the State of Florida SCTLs are used to calculate cancer and non-cancer risk estimates for the hypothetical future resident and a typical industrial worker. Exposure assumptions for the construction workers are described below and were used to develop risk-based concentrations.

The same exposure frequencies and durations used in the estimation of ingestion and dermal intakes of soil were used to estimate exposure via inhalation of air and fugitive dust/volatile emissions. Additionally, for construction/excavation workers an inhalation rate of 2.5 $m^3$ per hour (USEPA, December 2002b) and an exposure time of 8 hours/day (i.e., 20 $m^3$ per day) were used to evaluate risks from inhalation of fugitive dusts and volatile emissions.

The concentrations of chemicals in air resulting from emissions from soil were developed following procedures presented in USEPA Soil Screening Guidance (USEPA, 1996 and 2002b), as follows:

$$C_a = C_s \times \left[ \frac{1}{PEF} + \frac{1}{VF} \right]$$

where: $C_a$ = chemical concentration in air, $mg/m^3$
$C_s$ = chemical concentration in soil, mg/kg
PEF = Particulate Emission Factor, $1.241 \times 10^9$ $m^3/kg$ (FDEP, February 2005)
VF = chemical-specific Volatization Factor, $m^3/kg$

For chemicals in soil that are not classified as volatile, the above equation reduces to:

$$C_a = C_s \times \left[ \frac{1}{PEF} \right]$$

The Particulate Emissions Factor (PEF) relates the concentration of the chemical in soil with the concentration of dust particles in air. The Volatization Factor (VF) relates the concentration of the chemical in soil with the concentration in ambient air. The VFs used to calculate the alternate SCTLs were obtained from Table 4 of the Chapter 62-777 Technical Report (FDEP, 2005a). With the exception of the construction worker, the PEF value used to estimate risks from inhalation of fugitive dusts was $1.241 \times 10^9$ $m^3/kg$, which was developed by the State of Florida in FAC 62-777 (FDEP, 2005a). The PEF calculated for the construction worker was $2.43 \times 10^6$ $m^3/kg$ (USEPA, 2002a).

#### 6.3.3.4 Ingestion of Groundwater

Residents may be exposed to groundwater via direct ingestion. The Region 9 PRGS used in the risk calculations were derived using the following ingestion intake equation and exposure parameters (USEPA, 1989 and USEPA, 2004b):

$$Intake_{wi} = \frac{(C_{wi})(IR_w)(EF)(ED)}{(BW)(AT)}$$

where: $Intake_{wi}$ = intake of chemical "i" from water (mg/kg/day)

$C_{wi}$ = concentration of chemical "i" in water (mg/L)

$IR_w$ = ingestion rate for groundwater (L/day)

EF = exposure frequency (days/year)

ED = exposure duration (year)

BW = body weight (kg)

AT = averaging time (days);
for noncarcinogens, AT = ED x 365 days/year;
for carcinogens, AT = 70 years x 365 days/year

This scenario assumes that a receptor is exposed 350 days per year for 30 years using an adjusted intake factor (adult + child ingestion rates) of 1.1 L-year/kg-day for carcinogenic effects and an ingestion rate of 2 liters per day for noncarcinogens (USEPA, 2004b).

#### 6.3.3.5 Inhalation of Volatiles from Groundwater

Several VOCs were identified as a COPC for groundwater. Future residents may be exposed to VOC vapors from groundwater while bathing or showering The Region 9 PRG used in the risk calculation for chloroform was derived using the following inhalation intake equation and exposure parameters (USEPA, 2004b):

$$Intake_{winh} = \frac{(C_{wi})(VF_w)(InhF)(EF)(ED)}{(BW)(AT)}$$

where: $Intake_{winh}$= intake of chemical "i" from water by inhalation (mg/kg/day)

$C_{wi}$ = concentration of chemical "i" in water (mg/L)

InhF = inhalation rate ($m^3$/day)

$VF_w$ = volatization factor for water (0.5 L/$m^3$)

EF = exposure frequency (days/year)

ED = exposure duration (year)

BW = body weight (kg)

AT = averaging time (days);
for noncarcinogens, AT = ED x 365 days/year;
for carcinogens, AT = 70 years x 365 days/year

The inhalation scenario assumes that a receptor is exposed 350 days per year for 30 years using an adjusted intake factor (adult + child ingestion rates) of 11 $m^3$-year/kg-day for carcinogenic effects and an inhalation rate of 20 $m^3$ per day for noncarcinogens (USEPA, 2004b).

The ingestion and inhalation intake equations are combined to produce one risk-based concentration per chemical that accounts for ingestion and inhalation exposures (USEPA, 2004b).

## 6.4 TOXICITY ASSESSMENT PROTOCOL

The objective of a toxicity assessment is to identify the potential for human health hazards and adverse effects in exposed populations. A significant portion of the toxicity assessment of the HHRAs has been completed because CSFs and RfDs were selected by the State of Florida during the development of the residential and industrial soil SCTLs and GCTLs. A CSF is an indicator of the potency of a chemical carcinogen (i.e., the greater the CSF, the more potent the carcinogen). An RfD is the dose at or below which adverse non-carcinogenic effects are not anticipated. These factors represent quantitative estimates of the relationship between the magnitude and types of exposures and the severity or probability of human health effects and were used to develop risk-based concentrations as described above.

### 6.4.1 Sources of Toxicity Criteria

Oral and inhalation RfDs and CSFs used in the HHRAs were obtained from the following primary recommended USEPA sources:

- Integrated Risk Information System (IRIS) (online).

- USEPA Provisional Peer Reviewed Toxicity Values (PPRTVs) – The Office of Research and Development/National Center for Environmental Assessment (NCEA) Superfund Health Risk Technical Support Center develops PPRTVs on a chemical-specific basis when requested by USEPA's Superfund program.

- Tables 5a and 5b of the FDEP 62-777 Technical Report (FDEP, 2005a).

- Other Toxicity Values – These sources include, but are not limited, to California Environmental Protection Agency (Cal EPA) toxicity values, the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels (MRLs), and the Annual Health Effects Assessment Summary Tables (HEAST) (USEPA, 1997b).

Although RfDs and CSFs can be found in several toxicological sources, USEPA's IRIS online database, which is continuously updated, is the preferred source of toxicity values. The USEPA Region 9 PRG Tables (USEPA, 2004b) and Region 3 Risk-Based Concentration (RBC) tables (USEPA, 2007a) are also used as sources of toxicity criteria when criteria are not available from the aforementioned references.

### 6.4.2 Toxicity Criteria for Dermal Exposure

RfDs and CSFs found in literature are frequently expressed as administered doses; therefore, these values are considered to be inappropriate for estimating the risks associated with dermal routes of exposure. Oral dose-response parameters based on administered doses must be adjusted to absorbed doses before comparisons to estimate dermal exposure intakes are made.

The adjustment from administered to absorbed dose was made using the following chemical-specific absorption efficiencies published in RAGS Part E:

$$RfD_{dermal} = (RfD_{oral})(ABS_{GI})$$

$$CSF_{dermal} = (CSF_{oral})/(ABS_{GI})$$

where: $ABS_{GI}$ = absorption efficiency in the gastrointestinal tract

### 6.4.3 Toxicity Criteria for Carcinogenic Effects of PAHs

Limited toxicity values are available to evaluate the carcinogenic effects from exposure to PAHs. The most extensively studied PAH is benzo(a)pyrene, which is classified by the USEPA as a probable human carcinogen. Although CSFs are available for benzo(a)pyrene, insufficient data are available to calculate CSFs for other carcinogenic PAHs. Toxic effects for these chemicals were evaluated using the concept of estimated orders of potential potency, as presented in USEPA Region 4 guidance (USEPA, 2000) and in the Chapter 62-777 Technical Report. Toxicity Equivalence Factors (TEFs), which indicate the potency of each PAH compound relative to that of benzo(a)pyrene, are available for select carcinogenic PAHs. The equivalent oral and inhalation CSFs for PAHs other than benzo(a)pyrene are derived by multiplying the CSF for benzo(a)pyrene by the TEF for the PAH compounds (USEPA, 2000 and FDEP, 2005a).

These TEFs were used to convert the individual carcinogenic PAH concentrations to an equivalent concentration of benzo(a)pyrene. Both the COPC screening and quantitative risk estimates were based on an evaluation of the equivalent concentrations of benzo(a)pyrene. The carcinogenic PAHs actually detected at least once in a soil dataset were used in the calculation. Non-detect results were assigned a value of ½ the sample quantitation limit prior to the calculation. However, those carcinogenic PAHs not detected in any sample within the dataset were not considered in the calculation. If carcinogenic PAHs were not detected in a sample, ½ the sample quantitation limit presented for benzo(a)pyrene was used to calculate the equivalent concentration of benzo(a)pyrene in that sample.

## 6.5 RISK CHARACTERIZATION (USEPA METHODOLOGY)

This section provides a characterization of the human health risks associated with the potential exposures to chemicals in subsurface soil and groundwater at Site 4. The results of the risk characterization are discussed below. Potential risks (non-carcinogenic and carcinogenic) for individual chemicals detected in soil and groundwater at Site 4 were estimated using the simple risk ratio technique presented in Section 6.3.3. As discussed in Section 6.3.1, potential risks were estimated for three receptors (the hypothetical future resident, the typical industrial worker, and the construction worker) using USEPA and FDEP risk assessment guidance. The total risk from exposure to all COPCs was calculated in accordance with the risk assessment methods outlined in USEPA guidance (USEPA, 1989). Risks to human receptors are also characterized per FDEP guidelines/criteria established in Rule 62-780, FAC in Section 6.6.3 Supporting documentation for the site-specific HHRAs is presented in Appendix H.

### 6.5.1 Evaluation of Chemicals Other Than Lead

Quantitative estimates of risk for chemicals other than lead were calculated according to risk assessment methods outlined in Section 6.3.3. The methodology is based on standard USEPA guidance (USEPA, 1989). Lifetime cancer risks are expressed in the form of dimensionless probabilities referred to as ILCRs, which are based on CSFs. An ILCR of $1 \times 10^{-6}$ indicates the exposed receptor has an one-in-one-million chance of developing cancer under the defined exposure scenario. Alternatively, such a risk may be interpreted as representing one additional case of cancer in an exposed population of one million persons. Cancer risk estimates developed for individual chemicals are summed and presented as the total cancer risk estimate for each receptor. Non-carcinogenic risk estimates for individual chemicals are presented as HQs, which are based on RfDs. An HQ is the ratio of the intake to the RfD and is an indicator of the potential for adverse non-carcinogenic health effects. An HI is generated by summing the individual HQs for all COPCs. The HI is not a mathematical prediction of the severity of toxic effects and therefore is not a true "risk"; it is simply a numerical indicator of the possibility of the occurrence of non-carcinogenic (threshold) effects. As discussed below, HIs were calculated on a target organ/target effect basis.

### 6.5.2 Interpretation of Quantitative Risk Assessment Results

To interpret the quantitative risks and to aid risk managers in determining the need for remediation at a site, quantitative risk estimates are compared to typical risk benchmarks. Calculated ILCRs are interpreted using the USEPA's target range ($1 \times 10^{-6}$ to $1 \times 10^{-4}$) (i.e., a one-in-ten-thousand to one-in-one-million chance of developing cancer) and the State of Florida goal for a total cancer risk of $1 \times 10^{-6}$. HIs are evaluated using a value of 1.0.

The USEPA has defined the range of 1 x $10^{-6}$ to1 x $10^{-4}$ as the ILCR target range for hazardous waste facilities addressed under the CERCLA and the Resource Conservation and Recovery Act (RCRA). Individual or cumulative ILCRs greater than 1 x $10^{-4}$ are generally not considered as protective of human health. The State of Florida has established a cumulative cancer goal of 1 x $10^{-6}$ for receptors exposed to contaminated environmental media at a site. These benchmarks are used in the interpretation of the risk characterization results.

An HI exceeding unity (1.0) indicates there may be potential non-carcinogenic health risks associated with exposure. However, when an HI exceeds unity, target organs effects associated with exposure to COPCs are considered. Only the HQs for those chemicals affecting the same target organ(s) or exhibit similar critical effect(s) are regarded as truly additive. Consequently, it may be possible for a cumulative HI to exceed 1.0, but no adverse health effects are anticipated if the COPCs do not affect the same target organ or exhibit the same critical effect (i.e., the HIs developed on a target-organ-specific basis do not exceed 1). Individual target organ HIs for all receptors are presented in the risk calculation tables in Appendix H.

### 6.5.3 Risk Characterization Using USEPA Guidelines

This section contains a summary of the results of the risk characterization for Site 4 conducted according to USEPA guidance. Quantitative risk estimates for potential human receptors were developed for those chemicals identified as COPCs in Section 6.2. Potential cancer risks and HIs were calculated using the methodology presented in Section 6.3 and are summarized in Table 6-4. The results are discussed below. Chemical-specific risks are presented in Appendix H.

#### 6.5.3.1 Non-Carcinogenic Risk

Cumulative HIs estimated for exposures to subsurface soil by hypothetical residents and industrial workers were less than 1. The cumulative HI for construction workers exposed to subsurface soil exceeded 1 although the HQs for the individual target organs were less than 1, indicating that adverse non-carcinogenic effects are not anticipated for these receptors under the conditions established in the exposure assessment. However, the hazard index for exposure to groundwater by the hypothetical future resident (HI = 36) is greater than one. Total xylenes (HQ = 4), cis-1,2-dichloroethene (HQ = 6), 1-methylnaphthalene (HQ = 1), 2-methylnaphthalene (HQ = 2), naphthalene (HQ = 13), and chromium (HQ = 8) were the major contributors to the HI.

**TABLE 6-4**
**SUMMARY OF CANCER RISKS AND HAZARD INDICES**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENNSACOLA, FLORIDA**

| Receptor | Media | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an HI > 1 |
|---|---|---|---|---|---|---|---|
| Industrial Workers | Subsurface Soil | 2E-07 | -- | -- | -- | 0.03 | -- |
| Construction Workers | Subsurface Soil | 9E-07 | -- | -- | -- | 2 | -- |
| Hypothetical Future Residents | Subsurface Soil | 1E-06 | -- | -- | -- | 0.7 | -- |
| | Groundwater | 3E-04 | -- | Benzene, Chloroform, Vinyl Chloride, Arsenic, BaP Equivalents | Chlorodibromomethane, Tetrachloroethene | 36 | cis-1,2-Dichloroethene, Total Xylenes, 1-methylnaphthalene, 2-methylnaphthalene, Naphthalene, Chromium |

Notes:
HI - Hazard Index.

#### 6.5.3.2 Carcinogenic Risk

Cumulative ILCRs for exposure to subsurface soil were within USEPA's target risk range of $10^{-4}$ to $10^{-6}$ and less than or equal to FDEP's acceptable risk level of $1 \times 10^{-6}$ for cumulative exposures by all receptors.

The ILCR 0f $3 \times 10^{-4}$ for exposure to groundwater by the hypothetical future resident exceeded USEPA's target risk range of $10^{-4}$ to $10^{-6}$ and FDEP's acceptable risk level of $1 \times 10^{-6}$ for cumulative exposures. Arsenic (ILCR = $1 \times 10^{-4}$), benzene (ILCR = $7 \times 10^{-5}$), vinyl chloride (ILCR = $2 \times 10^{-5}$), chloroform (ILCR = $2 \times 10^{-5}$), carcinogenic PAHs (ILCR = $2 \times 10^{-5}$), tetrachloroethene (ILCR = $5 \times 10^{-6}$), and chlorodibromomethane (ILCR = $4 \times 10^{-6}$) were the major contributors to the ILCRs.

## 6.6 RISK CHARACTERIZATION USING FDEP CHAPTERS 62-777 AND 62-780, FAC

This section describes the State of Florida methodology used to evaluate risks for soil and groundwater at Site 4. The risk assessment methodology is based on guidance provided in Chapter 62-780, FAC, which makes use of a phased risk-based corrective action process that is iterative and tailors site rehabilitation to site-specific conditions and risks. Rule 62-780 is used in conjunction with Chapter 62-777, FAC which provides the methodology used to establish the FDEP CTLs for the residential, commercial/industrial, or alternate land use scenarios. The methodologies described in the following paragraphs are presented in Appendix D and Appendix E of the Technical Report for Chapter 62-777 FAC (FDEP, 2005a)

The FDEP risk characterization is performed, in part, through a series of tables in which concentrations of chemicals detected at a site are compared to various FDEP soil and groundwater criteria or to criteria developed according to guidelines presented in Chapter 62-777, FAC. The soil criteria include SCTLs for direct contact (i.e., ingestion, dermal contact, and inhalation), SCTLs for leachability to groundwater, soil saturation concentrations ($C_{sat}$) for an evaluation of free product, and background levels for metals. The groundwater criteria include CTLs for direct contact with groundwater (based on ingestion), water solubility values for evaluating the potential for the presence of free product (for organic chemicals), and background levels for metals.

### 6.6.1 Florida Methodology for Evaluating Soil

Using the guidance provided in Chapters 62-780 and 62-777, FAC, soil at Site 4 was evaluated for the following land use scenarios:

- Residential land use [Risk Management Option (RMO)Level I]
- Commercial/industrial land use (RMO Level II)

The evaluation of the hypothetical future residential and commercial/industrial land use of a site is described under RMO Levels I and II, respectively, of Rule 62.780.680. RMO Level III of the rule allows for the development and use of alternative SCTLs based on, for example, a site-specific risk assessment. Alternative SCTLs were not developed in this HHRA since concentrations of chemicals in subsurface soil were less than the Level II SCTLs.

A site is first evaluated for residential land use (Level I) for surface and subsurface soil. If the concentrations of chemicals detected at the site are less than their respective criteria, the site is not evaluated further. However, if any of the Level I criteria are exceeded, the site is evaluated for commercial/industrial land use (Level II). The process is then repeated for potential recreational land use (Level III), if necessary. The comparisons conducted for each level are presented in Tables 6-5 and 6-6 with the chemicals exceeding the relevant screening levels (i.e., the potential COCs) highlighted. Supporting documentation is presented in Appendix H, as necessary. Using the guidance provided in Chapters 62-777 and 62-780 the following evaluations were performed for Site 4:

***Comparison with Direct Contact SCTLs***. According to the FDEP guidance documents, under RMOs Level I and Level II, the maximum detected concentration of each contaminant may be compared with the respective default SCTL listed in Chapter 62-777, FAC or, the 95 percent UCL of the mean of the site concentrations can be compared with apportioned chronic toxicity-based SCTLs. Under RMO Level III, UCLs may be compared with apportioned chronic toxicity-based SCTLs only.

In this risk assessment, for RMO Levels I and II, maximum detected subsurface soil concentrations are compared to the default (non-apportioned) SCTLs because an initial review of the analytical data, the maximum detected concentrations, and the EPCs (calculated as described in Section 6.3.3) indicated the list of potential COCs would not increase if the maximum detected concentration versus the EPC were evaluated using the default SCTLs.) Therefore, if the maximum detected concentration for a chemical exceeds the direct contact SCTL for RMO Levels I and II (and background levels for metals), the constituent is identified as a potential COC and may be further evaluated using various apportionment approaches described in the following sections.

#### 6.6.1.1 Methods of Apportioning the SCTLs

**Simple Apportionment.** For situations in which apportionment is applicable, several methods of apportionment are available, as described in Appendix D of the Technical Report. The most straight forward method is simple apportionment. For simple apportionment, the default SCTL for each chemical is divided by the number of chemicals that produce the same type of toxicity. For carcinogens, the value of the simple apportioned SCTL is calculated by dividing the non-apportioned SCTL (residential,

**TABLE 6-5**
**FLORIDA LEVEL 1 (RESIDENTIAL) DIRECT CONTACT EVALUATION - SUBSURFACE SOIL**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENSACOLA, FLORIDA**

| CAS Number | Chemical | Frequency of Detection | Maximum Concentration | Sample of Maximum Concentration | Site Above Background?(1) | Non-Apportioned Florida Residential SCTL-Direct Contact(2) | Ratio of Maximum Concentration/ Non-apportioned Residential SCTL | Is Chemical a Potential Level 1 COC?(3) | Rationale/Comments |
|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds (ug/kg)** | | | | | | | | | |
| 78-93-3 | 2-Butanone | 3/33 | 6.3 J | OLFS4-MW35S-29 | NA | 16000000 N | 0.0000004 | No | maximum < SCTL |
| 67-64-1 | Acetone | 2/33 | 4.3 J | OLFS4-DPW11-S45 | NA | 11000000 N | 0.0000004 | No | maximum < SCTL |
| 75-09-2 | Methylene Chloride | 1/38 | 270 J | OLFS4-DPW16-S4 | NA | 17000 C | 0.02 | No | maximum < SCTL |
| 1330-20-7 | Total Xylenes | 1/63 | 2.4 J | OLFS4-MW25-S-40 | NA | 130000 N | 0.00002 | No | maximum < SCTL |
| **Semivolatile Organic Compounds (ug/kg)** | | | | | | | | | |
| 92-52-4 | 1,1-Biphenyl | 1/33 | 340 J | OLFS4-MW33S-5 | NA | 3000000 N | 0.0001 | No | maximum < SCTL |
| 91-57-6 | 2-Methylnaphthalene | 2/63 | 1500 | OLFS4-MW33S-5 | NA | 210000 N | 0.007 | No | maximum < SCTL |
| 132-64-9 | Dibenzofuran | 1/33 | 190 J | OLFS4-MW33S-5 | NA | 320000 N | 0.0006 | No | maximum < SCTL |
| 86-73-7 | Fluorene | 2/63 | 170 J | OLFS4-MW33S-5 | NA | 2600000 N | 0.00007 | No | maximum < SCTL |
| 91-20-3 | Naphthalene | 2/63 | 350 J | OLFS4-DPW15-S4 | NA | 55000 N | 0.006 | No | maximum < SCTL |
| 85-01-8 | Phenanthrene | 1/63 | 75 J | OLFS4-MW33S-5 | NA | 2200000 N | 0.00003 | No | maximum < SCTL |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | |
| 11096-82-5 | Aroclor-1260 | 1/36 | 6.6 J | OLFS4-DPW15-S4 | NA | 500 C | 0.01 | No | maximum < SCTL |
| **Metals (mg/kg)** | | | | | | | | | |
| 7429-90-5 | Aluminum | 45/45 | 21500 | OLFS4-DPW18-S12 | Yes | 80000 N | 0.3 | No | maximum < SCTL |
| 7440-38-2 | Arsenic | 55/55 | 4.2 | OLFS4-MW33S-5 | Yes | 2.1 C | 2 | Yes | maximum > SCTL |
| 7440-39-3 | Barium | 45/45 | 30.1 | OLFS4-MW33S-5 | Yes | 120 N | 0.3 | No | maximum < SCTL |
| 7440-70-2 | Calcium | 26/45 | 762 | OLFS4-DPW15-S4 | Yes | --- | --- | No | Essential Nutrient |
| 7440-47-3 | Chromium | 55/55 | 25.3 | OLFS4-DP12-S20 | Yes | 210 C | 0.1 | No | maximum < SCTL |
| 7440-48-4 | Cobalt | 16/45 | 1.2 | OLFS4-MW33S-5 | Yes | 1700 N | 0.0007 | No | maximum < SCTL |
| 7440-50-8 | Copper | 45/45 | 6.9 | OLFS4-DPW18-S12 | Yes | 150 N | 0.05 | No | maximum < SCTL |
| 7439-89-6 | Iron | 45/45 | 14100 | OLFS4-SB3-S-10 | Yes | 53000 N | 0.3 | No | maximum < SCTL |
| 7439-92-1 | Lead | 55/55 | 5.2 | OLFS4-DP27-S4 | Yes | 400 | 0.01 | No | maximum < SCTL |
| 7439-95-4 | Magnesium | 21/45 | 203 | OLFS4-DPW21-S12 | No | --- | --- | No | Essential Nutrient |
| 7439-96-5 | Manganese | 45/45 | 588 | OLFS4-MW33S-5 | Yes | 3500 N | 0.2 | No | maximum < SCTL |
| 7439-97-6 | Mercury | 2/45 | 0.019 | OLFS4-DPW15-S4, OLFS4-MW33S-5 | Yes | 3 | 0.006 | No | maximum < SCTL |
| 7440-02-0 | Nickel | 35/45 | 3.1 | OLFS4-DPW21-S12 | Yes | 340 N | 0.009 | No | maximum < SCTL |
| 7440-09-7 | Potassium | 19/45 | 215 | OLFS4-DPW01-S45 | Yes | --- | --- | No | Essential Nutrient |
| 7782-49-2 | Selenium | 2/45 | 0.35 | OLFS4-SB4-S-45 | Yes | 440 N | 0.0008 | No | maximum < SCTL |
| 7440-23-5 | Sodium | 1/45 | 1090 | OLFS4-DPW12-S45 | Yes | --- | --- | No | Essential Nutrient |
| 7440-62-2 | Vanadium | 45/45 | 35.8 J | OLFS4-SB3-S-10 | Yes | 67 N | 0.5 | No | maximum < SCTL |
| 7440-66-6 | Zinc | 39/45 | 8.9 | OLFS4-DPW21-S12 | Yes | 26000 N | 0.0003 | No | maximum < SCTL |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | |
| 57-12-5 | Cyanide | 1/45 | 0.17 | OLFS4-DPW07-S45 | NA | 34 N | 0.005 | No | maximum < SCTL |
| **Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | |
| | TPH (C08-C40) | 8/63 | 730 | OLFS4-MW33S-5 | NA | 460 N | 2 | Yes | maximum > SCTL |

**Footnotes**

1 - To determine whether metal concentrations were within background levels, soil concentrations were compared to facility background levels described in Section 6.1.1.1. If the maximum concentration of a chemical is less than the background value, that chemical was not selected as a COPC.

2 - Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Florida Department of Environmental Protection (FDEP), April 2005.

3 - A chemical is selected as a potential COC if the maximum concentration exceeds the non-apportioned SCTL and, for metals, if the site concentrations exceed background levels. If the maximum concentration of a chemical is less than the background value, that chemical was not selected as a COPC.

4 - Value is for chlordane.

5 - Value is for endrin.

NA - Not Applicable. According to Rule 62-780 only naturally occurring (inorganic) constituents are considered in the background evaluation.

**TABLE 6-6**
**FLORIDA LEVEL 2 (INDUSTRIAL) DIRECT CONTACT EVALUATION - SUBSURFACE SOIL**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENSACOLA, FLORIDA**

| CAS Number | Chemical | Frequency of Detection | Maximum Concentration | Sample of Maximum Concentration | Site Above Background?(1) | Non-Apportioned Florida Residential SCTL-Direct Contact(2) | Ratio of Maximum Concentration/ Non-apportioned Residential SCTL | Is Chemical a Potential Level 2 COC?(3) | Rationale/Comments |
|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds (ug/kg)** | | | | | | | | | |
| 78-93-3 | 2-Butanone | 3/33 | 6.3 J | OLFS4-MW35S-29 | NA | 110000000 N | 0.0000001 | No | maximum < SCTL |
| 67-64-1 | Acetone | 2/33 | 4.3 J | OLFS4-DPW11-S45 | NA | 68000000 N | 0.0000001 | No | maximum < SCTL |
| 75-09-2 | Methylene Chloride | 1/38 | 270 J | OLFS4-DPW16-S4 | NA | 26000 C | 0.01 | No | maximum < SCTL |
| 1330-20-7 | Total Xylenes | 1/63 | 2.4 J | OLFS4-MW25-S-40 | NA | 700000 N | 0.000003 | No | maximum < SCTL |
| **Semivolatile Organic Compounds (ug/kg)** | | | | | | | | | |
| 92-52-4 | 1,1-Biphenyl | 1/33 | 340 J | OLFS4-MW33S-5 | NA | 34000000 N | 0.00001 | No | maximum < SCTL |
| 91-57-6 | 2-Methylnaphthalene | 2/63 | 1500 | OLFS4-MW33S-5 | NA | 2100000 N | 0.0007 | No | maximum < SCTL |
| 132-64-9 | Dibenzofuran | 1/33 | 190 J | OLFS4-MW33S-5 | NA | 6300000 N | 0.00003 | No | maximum < SCTL |
| 86-73-7 | Fluorene | 2/63 | 170 J | OLFS4-MW33S-5 | NA | 33000000 N | 0.000005 | No | maximum < SCTL |
| 91-20-3 | Naphthalene | 2/63 | 350 J | OLFS4-DPW15-S4 | NA | 300000 N | 0.001 | No | maximum < SCTL |
| 85-01-8 | Phenanthrene | 1/63 | 75 J | OLFS4-MW33S-5 | NA | 36000000 N | 0.000002 | No | maximum < SCTL |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | |
| 11096-82-5 | Aroclor-1260 | 1/36 | 6.6 J | OLFS4-DPW15-S4 | NA | 2600 C | 0.003 | No | maximum < SCTL |
| **Metals (mg/kg)** | | | | | | | | | |
| 7429-90-5 | Aluminum | 45/45 | 21500 | OLFS4-DPW18-S12 | Yes | (4) | --- | No | (4) |
| 7440-38-2 | Arsenic | 55/55 | 4.2 | OLFS4-MW33S-5 | Yes | 12 C | 0.4 | No | maximum < SCTL |
| 7440-39-3 | Barium | 45/45 | 30.1 | OLFS4-MW33S-5 | Yes | 130000 N | 0.0002 | No | maximum < SCTL |
| 7440-70-2 | Calcium | 26/45 | 762 | OLFS4-DPW15-S4 | Yes | --- | --- | No | Essential Nutrient |
| 7440-47-3 | Chromium | 55/55 | 25.3 | OLFS4-DP12-S20 | Yes | 470 C | 0.05 | No | maximum < SCTL |
| 7440-48-4 | Cobalt | 16/45 | 1.2 | OLFS4-MW33S-5 | Yes | 42000 N | 0.00003 | No | maximum < SCTL |
| 7440-50-8 | Copper | 45/45 | 6.9 | OLFS4-DPW18-S12 | Yes | 89000 N | 0.00008 | No | maximum < SCTL |
| 7439-89-6 | Iron | 45/45 | 14100 | OLFS4-SB3-S-10 | No | (4) | --- | No | (4) |
| 7439-92-1 | Lead | 55/55 | 5.2 | OLFS4-DP27-S4 | Yes | 1400 | 0.004 | No | maximum < SCTL |
| 7439-95-4 | Magnesium | 21/45 | 203 | OLFS4-DPW21-S12 | No | --- | --- | No | Essential Nutrient |
| 7439-96-5 | Manganese | 45/45 | 588 | OLFS4-MW33S-5 | Yes | 43000 N | 0.01 | No | maximum < SCTL |
| 7439-97-6 | Mercury | 2/45 | 0.019 | OLFS4-DPW15-S4, OLFS4-MW33S-5 | Yes | 17 | 0.001 | No | maximum < SCTL |
| 7440-02-0 | Nickel | 35/45 | 3.1 | OLFS4-DPW21-S12 | Yes | 35000 N | 0.00009 | No | maximum < SCTL |
| 7440-09-7 | Potassium | 19/45 | 215 | OLFS4-DPW01-S45 | Yes | --- | --- | No | Essential Nutrient |
| 7782-49-2 | Selenium | 2/45 | 0.35 | OLFS4-SB4-S-45 | Yes | 11000 N | 0.00003 | No | maximum < SCTL |
| 7440-23-5 | Sodium | 1/45 | 1090 | OLFS4-DPW12-S45 | Yes | --- | --- | No | Essential Nutrient |
| 7440-62-2 | Vanadium | 45/45 | 35.8 J | OLFS4-SB3-S-10 | Yes | 10000 N | 0.004 | No | maximum < SCTL |
| 7440-66-6 | Zinc | 39/45 | 8.9 | OLFS4-DPW21-S12 | Yes | 630000 N | 0.00001 | No | maximum < SCTL |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | |
| 57-12-5 | Cyanide | 1/45 | 0.17 | OLFS4-DPW07-S45 | NA | 11000 N | 0.00002 | No | maximum < SCTL |
| **Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | |
| | TPH (C08-C40) | 8/63 | 730 | OLFS4-MW33S-5 | NA | 2700 N | 0.3 | No | maximum < SCTL |

**Footnotes**

1 - To determine whether metal concentrations were within background levels, soil concentrations were compared to facility background levels described in Section 6.1.1.1. If the maximum concentration of a chemical is less than the background value, that chemical was not selected as a COPC.

2 - Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Florida Department of Environmental Protection (FDEP), April 2005.

3 - A chemical is selected as a potential COC if the maximum concentration exceeds the non-apportioned SCTL and, for metals, if the site concentrations exceed background levels. If the maximum concentration of a chemical is less than the background value, that chemical was not selected as a COPC.

4 - Chemical is not a health concern for this exposure scenario.

NA - Not Applicable. According to Rule 62-780 only naturally occurring (inorganic) constituents are considered in the background evaluation.

commercial/industrial, or recreational) by the number carcinogenic chemicals detected in a surface or subsurface soil dataset. For example, if five carcinogens were detected in a surface soil dataset for a site, the simple apportioned SCTLs for carcinogens are the non-apportioned SCTLs divided by 5 (FDEP, 2005a). For noncarcinogens, the simple apportioned SCTL is determined by dividing the non-apportioned SCTL by the number of chemicals impacting the same target organ. If the liver, for example, is identified as the target organ for seven noncarcinogens in a dataset, the simple apportioned SCTLs for those chemicals are the non-apportioned values divided by 7.

Not all SCTLs should be apportioned. The Technical Report (FDEP, 2005a) lists the following exceptions to apportioning:

1. Do not apportion an SCTL based on natural background concentration or practical quantitation limit. These are criteria that are not directly risk-based, and therefore are not subject to apportionment.

2. Do not apportion an SCTL based on acute toxicity. These SCTLs are always regarded as not-to-exceed values, and the default value should be compared with the maximum concentration on site. (Note that acute toxicity SCTLs are applicable only in situations where small children might be present, such as a residence, playground, or school.) Of the chemicals detected in soil at Site 4, the residential SCTLs for barium, copper, and vanadium are acute values.

3. Do not apportion lead (Pb) SCTLs. Both residential and commercial/industrial lead SCTLs are based on a unique type of toxicological analysis that is not amenable to the standard apportionment process.

4. Do not apportion the SCTLs for chemicals present in low concentrations. Eliminate from consideration at a site chemicals whose maximum concentration is less than or equal to 1/10 the default SCTL. Chemicals present in low concentrations are unlikely to contribute substantially to risk and unnecessarily complicate the apportionment process. As shown in Tables 6-5 and 6-6, the maximum concentrations of most detected chemicals (all except carcinogenic PAHs, arsenic, barium, copper, lead, and vanadium) were less than 1/10 of the default SCTLs for surface and subsurface soil. Therefore, the SCTLs for most chemicals detected in soil at Site 4 were not apportioned.

5. Do not apportion the SCTLs for chemicals detected infrequently. A chemical can be eliminated from consideration at a site if it is detected a) in only one out of 10 or more samples, or 5 percent or fewer out of 20 or more samples, and in only one environmental medium; and b) in low concentrations (no more than the default SCTL); and c) there is no reason to believe that the chemical may be present due to historical site activities. These criteria are intended to eliminate

chemical detections that are artifacts from sampling, analytical, or other problems. They are not intended to eliminate chemicals present due to site activities in localized areas of contamination.

**Weighted Apportionment.** In most situations, simple apportionment will be overly conservative in that the sum of the risks represented by the individual chemical SCTLs are likely to be below FDEP target risks of $1x10^{-6}$ and a HI (for each target organ/system or effect) of 1. This can be avoided by weighted apportioning. One method of weighted apportioning involves calculation of ratios of the 95 percent UCLs for chemicals to their SCTLs. The 95 percent UCL for each chemical subject to apportionment is divided by its default SCTL. If the sum of the ratios is less than 1, the chemicals have met the FDEP's risk goals. If the sum is greater than 1, dividing the concentration of each by the sum of the ratios will yield apportioned SCTLs that match exactly the risk goals. In this approach, steps to achieve the apportioned SCTLs are expected to produce proportional decreases in the concentrations of each chemical. This approach makes sense if the chemicals are co-located, such that removal of one chemical results in similar reduction in others.

**Non-Proportional Weighted Apportionment.** Another method of weighted apportionment is non-proportional reductions in default SCTLs among chemicals with additive effects. As with other methods, the objective of the reduction in default SCTLs is to achieve a situation in which the sum of the risks posed by apportioned SCTLs does not exceed FDEP's risk goals for any health effect. However, in this approach, the reduction may be taken unevenly among the chemicals. This approach is useful if the chemicals are not co-located, and removal of one or more chemicals can be achieved more easily or more economically than the others. Risks can be distributed optimally among the apportioned SCTLs based on site conditions, as long as the sums of the risks they represent meet the goals of $1 \times 10^{-6}$ excess cancer risk and a HI of 1.

Weighted apportionment is performed on a chemical by chemical basis when it is feasible and appropriate, as determined by the human health risk assessor. In practice, weighted apportionment is often an option when cumulative quantitative risk assessment results derived as described in preceding sections are less than FDEP risk benchmarks (i.e., a cancer risk estimate of $1 \times 10^{-6}$ for carcinogens and an HI of 1 for noncarcinogens).

When the 95 percent UCL approach is used to develop exposure concentrations, two criteria must be satisfied when comparing site concentrations to the SCTLs, either default or alternative:

1) The 95 percent UCL must meet or be below the apportioned SCTL; and

2) The maximum concentration remaining on site must meet or be below a concentration three-times the unapportioned SCTL in RMO Levels I and II, and below three-times the apportioned SCTL in RMO

Level III. Using the 95 percent UCL as the basis to determine whether the SCTL has been achieved for a site means that some areas can have concentrations above the SCTL, as long as other areas are below. In this context, it is important to insure that concentrations above the SCTL allowed to remain do not constitute an unacceptable health risk.

In the risk assessment for Site 4, SCTLs were apportioned (by simple apportionment) for Risk Management Option Level III. In the Level III evaluations, only the maximum concentrations of carcinogenic PAHs and lead were more than three times their respective non-apportioned SCTLs and these constituents were selected as potential COCs for soil.

#### 6.6.1.2 Comparison with Leachability-based SCTLs

The potential for leaching was addressed through comparisons with SCTLs for Leachability Based on Groundwater Criteria (FDEP, 2005a). Unlike direct contact SCTLs, which are based primarily on long-term exposure covering a specified area, leachability-based default SCTLs are intended to protect water resources at all locations. Consequently, maximum rather than average (or 95 percent UCL) concentrations are compared with leaching criteria. If the maximum concentration of a chemical exceeds its respective leachability SCTL, that chemical is identified as a potential COC.

***Evaluation of Free Product in Soil.***

The potential for the presence of free product (for organic chemicals) was evaluated by comparing maximum site concentrations to soil saturation ($C_{sat}$) limits. The $C_{sat}$ values are provided in Table 8 of Chapter 62-777, FAC (FDEP, 2005a). The $C_{sat}$ comparisons indicated the concentrations of all organic chemicals detected in soil at the sites evaluated in this report were significantly less than the $C_{sat}$ levels. Therefore, it is unlikely these chemicals are present as free product at any of the sites.

### 6.6.2 Florida Methodology for Evaluating Groundwater

This section describes the methodology used to evaluate groundwater at Site 4 using guidelines presented in Chapters 62-780 and 62-777, FAC A detailed discussion of the FDEP approach for evaluating groundwater is presented in Appendix E of the Chapter 62-777 Technical Report (FDEP, 2005a).

As with soil, the FDEP risk characterization for groundwater is performed by comparing concentrations of chemicals detected in groundwater with FDEP groundwater criteria (or to criteria developed according to guidelines presented in Chapter 62-777, if necessary). The groundwater CTLs are based on primary and secondary standards (e.g., MCLs) or on human health risk-based criteria, assuming that the groundwater is used as a potable water source (and are based on ingestion only). For contaminants that do not

produce cancer, the risk-based CTLs are calculated based on a HI of 1 and incorporate a default relative source contribution factor of 0.2. The relative source contribution factor means, in effect, that no more than 20 percent of the total allowable intake of the contaminant can come from contaminated water. For carcinogens, the default groundwater CTL is based on an excess cancer risk of $1 \times 10^{-6}$.

Using the guidance provided in Chapters 62-780 and 62-777, FAC, groundwater at Site 4 was evaluated for residential land use (RMO Level I). In RMO Level I, the applicable CTL is usually the default value for that contaminant in the groundwater as presented in Table 1 of the Technical Report. If groundwater has the potential to impact surface water, demonstrated by monitoring well data, groundwater flow rate and direction, or fate and transport modeling, the appropriate marine surface water or freshwater surface water CTL also applies to groundwater. However, based on information presented in the Site Assessment Report Addendum II for UST Site 2406, (TtNUS, 2005), groundwater at Site 4 has little potential to impact a surface water body. Therefore, the groundwater evaluation is based on comparison to groundwater CTLs only.

The following evaluations for Site 4 were performed according to Chapters 62-777 and 62-780, FAC:

- ***Comparison of maximum detected concentrations to groundwater CTLs.*** Comparing the groundwater CTLs to maximum detected groundwater concentrations is appropriate for Site 4 because, as stated previously, the CTLs for all but two detected chemicals are primary or secondary standards and the list of potential COCs would not change if CTLs were apportioned. If the maximum detected concentration for a chemical exceeds the CTL (and background levels for metals), the constituent is identified as a potential COC for the site.

- ***Evaluation of Free Product in Groundwater.*** The potential for the presence of free product (for organic chemicals) was evaluated by comparing maximum site concentrations to water solubility values presented in Table 4, Chapter 62-777 FAC (FDEP, April 2005). The water solubility comparisons indicated the concentrations of the few organic chemicals detected in groundwater at Site 4 in 2005 were significantly less than their respective water solubilities. Therefore, it is unlikely these chemicals are present as free product in groundwater at the site.

### 6.6.3 Risk Characterization Using State of Florida Guidelines

This section contains a summary of the results of the risk characterization for Site 4 conducted using guidelines presented in Florida Chapter 62-780, FAC and the Chapter 62-777 Technical Report. The results are summarized in Tables 6-4 through 6-6 and are discussed below.

### 6.6.3.1 Results of Subsurface Soil Evaluation – Florida Methodology

#### 6.6.3.1.1 Level 1 Evaluation (Residential)

Table 6-5 presents a comparison of the maximum detected concentrations for subsurface soil to the FDEP residential SCTLs. The following chemicals were identified as exceeding the Level 1 SCTLs and were retained as potential COCs for residential exposures to surface soil at Site 4:

- Arsenic
- TRPH

#### 6.6.3.1.2 Level 2 (Industrial)

The results of the Level 1 evaluation identified arsenic and TRPH as COCs; therefore, a Level 2 evaluation was conducted. A comparison of the maximum concentrations in subsurface soil to the FDEP industrial SCTLs is presented in Table 6-6. No constituents were identified as exceeding the Level 2 SCTLs.

#### 6.6.3.1.3 Level 3

The results of the Level 2 evaluation identified no potential COCs; therefore, a Level 3 evaluation was not conducted.

Comparison of Chemicals in Subsurface Soil with Leachability SCTLs

Table 6-7 presents comparisons of maximum detected concentrations in subsurface soil with Florida criteria based on leachability to groundwater. As shown in the table, maximum concentrations of methylene chloride, 1,1-biphenyl, and TRPH were greater than the leachability criteria indicating that there is potential for contaminants detected in subsurface soil to impact groundwater. Although methylene chloride and TRPH were not detected in groundwater at concentrations exceeding GCTLs. Table 6-7 also presents comparisons of maximum concentrations with soil saturation concentrations to evaluate the potential for presence of free product. As shown in the table, the concentrations of organic compounds in subsurface soil were less than the $C_{sat}$ concentrations, indicating that free product is not present in subsurface soil.

TABLE 6-7
COMPARISON WITH SCTLs FOR LEACHABILITY TO GROUNDWATER AND $C_{SAT}$ LIMITS - SUBSURFACE SOIL
SITE 4 REMEDIAL INVESTIGATION REPORT
OLF SAUFLEY
PENSACOLA, FLORIDA

| CAS Number | Chemical | Frequency of Detection | Maximum Concentration | Sample of Maximum Concentration | Site Above Background?(1) | Florida Leachability to Groundwater(2) | Soil Saturation Limit, Csat(3) |
|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds (ug/kg)** | | | | | | | |
| 78-93-3 | 2-Butanone | 3/33 | 6.3 J | OLFS4-MW35S-29 | NA | 17000 | 25000000 |
| 67-64-1 | Acetone | 2/33 | 4.3 J | OLFS4-DPW11-S45 | NA | 25000 | 100000000 |
| 75-09-2 | Methylene Chloride | 1/38 | 270 J | OLFS4-DPW16-S4 | NA | 20 | 2400000 |
| 1330-20-7 | Total Xylenes | 1/63 | 2.4 J | OLFS4-MW25-S-40 | NA | 200 | 140000 |
| **Semivolatile Organic Compounds (ug/kg)** | | | | | | | |
| 92-52-4 | 1,1-Biphenyl | 1/33 | 340 J | OLFS4-MW33S-5 | NA | 200 | --- |
| 91-57-6 | 2-Methylnaphthalene | 2/63 | 1500 | OLFS4-MW33S-5 | NA | 8500 | --- |
| 132-64-9 | Dibenzofuran | 1/33 | 190 J | OLFS4-MW33S-5 | NA | 15000 | --- |
| 86-73-7 | Fluorene | 2/63 | 170 J | OLFS4-MW33S-5 | NA | 160000 | --- |
| 91-20-3 | Naphthalene | 2/63 | 350 J | OLFS4-DPW15-S4 | NA | 1200 | --- |
| 85-01-8 | Phenanthrene | 1/63 | 75 J | OLFS4-MW33S-5 | NA | 250000 | --- |
| **Pesticides/PCBs (ug/kg)** | | | | | | | |
| 11096-82-5 | Aroclor-1260 | 1/36 | 6.6 J | OLFS4-DPW15-S4 | NA | 17000 | --- |
| **Metals (mg/kg)** | | | | | | | |
| 7429-90-5 | Aluminum | 45/45 | 21500 | OLFS4-DPW18-S12 | Yes | NA | --- |
| 7440-38-2 | Arsenic | 55/55 | 4.2 | OLFS4-MW33S-5 | Yes | NA | --- |
| 7440-39-3 | Barium | 45/45 | 30.1 | OLFS4-MW33S-5 | Yes | 1600 | --- |
| 7440-70-2 | Calcium | 26/45 | 762 | OLFS4-DPW15-S4 | No | NA | --- |
| 7440-47-3 | Chromium | 55/55 | 25.3 | OLFS4-DP12-S20 | Yes | NA | --- |
| 7440-48-4 | Cobalt | 16/45 | 1.2 | OLFS4-MW33S-5 | Yes | NA | --- |
| 7440-50-8 | Copper | 45/45 | 6.9 | OLFS4-DPW18-S12 | Yes | NA | --- |
| 7439-89-6 | Iron | 45/45 | 14100 | OLFS4-SB3-S-10 | Yes | NA | --- |
| 7439-92-1 | Lead | 55/55 | 5.2 | OLFS4-DP27-S4 | Yes | NA | --- |
| 7439-95-4 | Magnesium | 21/45 | 203 | OLFS4-DPW21-S12 | Yes | NA | --- |
| 7439-96-5 | Manganese | 45/45 | 588 | OLFS4-MW33S-5 | Yes | NA | --- |
| 7439-97-6 | Mercury | 2/45 | 0.019 | OLFS4-DPW15-S4, OLFS4-MW33S-5 | No | 2.1 | --- |
| 7440-02-0 | Nickel | 35/45 | 3.1 | OLFS4-DPW21-S12 | Yes | 130 | --- |
| 7440-09-7 | Potassium | 19/45 | 215 | OLFS4-DPW01-S45 | No | NA | --- |
| 7782-49-2 | Selenium | 2/45 | 0.35 | OLFS4-SB4-S-45 | No | 5.2 | --- |
| 7440-23-5 | Sodium | 1/45 | 1090 | OLFS4-DPW12-S45 | No | NA | --- |
| 7440-62-2 | Vanadium | 45/45 | 35.8 J | OLFS4-SB3-S-10 | Yes | 980 | --- |
| 7440-66-6 | Zinc | 39/45 | 8.9 | OLFS4-DPW21-S12 | Yes | NA | --- |

**TABLE 6-7**
**COMPARISON WITH SCTLs FOR LEACHABILITY TO GROUNDWATER AND $C_{SAT}$ LIMITS - SUBSURFACE SOIL**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FLORIDA**

| CAS Number | Chemical | Frequency of Detection | Maximum Concentration | Sample of Maximum Concentration | Site Above Background?(1) | Florida Leachability to Groundwater(2) | Soil Saturation Limit, Csat(3) |
|---|---|---|---|---|---|---|---|
| **Miscellaneous Parameters (mg/kg)** | | | | | | | |
| 57-12-5 | Cyanide | 1/45 | 0.17 | OLFS4-DPW07-S45 | NA | 0.8 | --- |
| **Petroleum Hydrocarbons (mg/kg)** | | | | | | | |
| | TPH (C08-C40) | 8/63 | 730 | OLFS4-MW33S-5 | NA | 340 | --- |

**Shaded cells indicate that the specified criterion or background level has been exceeded.**

**Footnotes:**

1 - To determine whether metal concentrations were within background levels, soil concentrations were compared to facility background levels described in Section 6.1.1.1. If the maximum concentration of a chemical is less than the background value, that chemical was not selected as a COPC.
2 - Soil Cleanup Target Levels (SCTLs) for Leachability Based on Groundwater Criteria, Table 2, Chapter 62-777 Technical Report (FDEP, 2005a).
3 - Soil Saturation Limits (CSAT), Table 8, Chapter 62-777 Technical Report (FDEP, 2005a).
NA - Not Applicable. According to proposed Florida Rule 62-780 only naturally occurring (inorganic) constituents are considered in the background evaluation.

### 6.6.3.2 Results of Groundwater Evaluation – Florida Methodology

6.6.3.2.1 Level 1 Evaluation (Residential)

Groundwater was evaluated for future residential use (Level 1). Table 6-8 presents a comparison of the maximum detected concentrations in groundwater to the FDEP GCTLs. The following chemicals were identified as exceeding the Level 1 CTLs and were retained as potential COCs for residential exposures to groundwater at Site 4:

- VOCs (benzene, chlorodibromomethane, cis-1,2-dichloroethene, ethylbenzene, isopropylbenzene, and total xylenes)
- SVOCs (1,1-biphenyl and naphthalene)
- PAHs (naphthalene)
- Inorganics (aluminum, chromium, and nickel)

The maximum detected concentrations of cis-1,2-dichloroethene, ethylbenzene, total xylenes, naphthalene, aluminum, chromium, and nickel also exceeded three times the Florida GCTLs. Concentrations of iron and manganese exceeded the Florida GCTLs but were within background levels, therefore iron and manganese were not retained as COCs.

## 6.7 HUMAN HEALTH RISK UNCERTAINTY ANALYSIS

This section presents a summary of uncertainties inherent in the risk assessment and includes a discussion of how they may affect the quantitative risk estimates and conclusions of the risk analysis. The baseline HHRA for Site 4 was performed in accordance with current USEPA and Florida guidance. However, there are varying degrees of uncertainty associated with the baseline HHRA. The following sections discuss general uncertainties in risk assessment and uncertainties specific to the risk assessment for Site 4.

Uncertainty in the selection of COPCs was related to the current status of the predictive databases, the grouping of samples, the numbers, types and distributions of samples, data quality, and the procedures used to include or exclude constituents as COPCs. Uncertainty associated with the exposure assessment included the values used as input variables for a given intake route or scenario, the assumptions made to determine EPCs, and the predictions regarding future land use and population characteristics. Uncertainty in the toxicity assessment included the quality of the existing toxicity data needed to support dose-response relationships and the weight-of-evidence used to determine the carcinogenicity of COPCs. Uncertainty in risk characterization was associated with exposure to multiple chemicals and the cumulative uncertainty from combining conservative assumptions made in earlier steps of the risk assessment process.

INSERT TABLE 6-8 HERE 2 PAGES PAGE 6-44 THRU 6-45

Whereas there were various sources of random uncertainty and bias, the magnitude of bias and uncertainty and the direction of bias were influenced by the assumptions made throughout the risk assessment, including selection of COPCs and selection of values for dose-response relationships. Throughout the entire risk assessment, assumptions that considered safety factors were made so that the final calculated risks were overestimated.

Generally, risk assessments carry two types of uncertainty: measurement and informational uncertainty. Measurement uncertainty refers to the usual variance that accompanies scientific measurements. For example, this type of uncertainty is associated with analytical data collected for each site. The risk assessment reflects the accumulated variances of the individual values used.

Informational uncertainty stems from inadequate availability of information needed to complete the toxicity and exposure assessments. Often, this gap is significant, such as the absence of information on the effects of human exposure to low doses of a chemical, the biological mechanism of action of a chemical, or the behavior of a chemical in soil.

Once the risk assessment is complete, the results must be reviewed and evaluated to identify the type and magnitude of uncertainty involved. Reliance on results from a risk assessment without consideration of uncertainties, limitations, and assumptions inherent in the process can be misleading. For example, to account for uncertainties in the development of exposure assumptions, conservative estimates were made to ensure that the particular assumptions were protective of sensitive subpopulations or the maximum exposed individuals. If a number of conservative assumptions are combined in an exposure model, the resulting calculations can propagate the uncertainties associated with those assumptions, thereby producing a much larger uncertainty for the final results. This uncertainty is biased toward overpredicting both carcinogenic and non-carcinogenic risks. Thus, both the results of the risk assessment and the uncertainties associated with those results must be considered when making risk management decisions.

This interpretation of uncertainty is especially relevant when the risks exceed the point of departure for defining "acceptable" risk. For example, when risks calculated using a high degree of uncertainty are less than an acceptable risk level (i.e., $10^{-6}$), the interpretation of no significant risk is typically straightforward. However, when risks calculated using a high degree of uncertainty exceed an acceptable risk level (i.e., $10^{-4}$); a conclusion can be difficult unless uncertainty is considered.

### 6.7.1 Uncertainty in Selection of COPCs

The most significant issues related to uncertainty in COPC selection were the usability of existing databases [i.e., the use of validated and unvalidated sample results (only validated data were used in this

risk assessment) and the completeness, precision, and accuracy of the data set], the screening levels used, and the absence of screening levels for a few chemicals detected in the site media. A brief discussion of each of these issues is provided in the remainder of this section.

#### 6.7.1.1 COPC Screening Levels

The use of risk-based screening values (for the USEPA analysis) based on conservative land use scenarios (i.e., residential land use for soil and groundwater) corresponding to an ILCR of $10^{-6}$ and HI of 0.1 ensured that all the significant contributors to risk from a site were evaluated. The elimination of chemicals present at concentrations that correspond to an ILCR less than $10^{-6}$ and an HI less than 0.1 should not affect the final conclusions of the risk assessment, because those chemicals are not expected to cause a potential health concern at the detected concentrations.

#### 6.7.1.2 Chemicals Without Established Screening Levels

Region 9 PRGs are currently not available for some constituents (e.g., acenaphthylene, 1-methylnaphthalene, 2-methylnaphthalene, and phenanthrene). Appropriate surrogates were selected for these chemicals based on similar chemical structures, if available. For example, the screening level for acenaphthene is used as a surrogate for acenaphthylene, naphthalene is used as a surrogate for 1-methylnaphthalene and 2-methylnaphthalene, and pyrene is used as a surrogate for phenanthrene. Applying toxicity values of one compound to another increases the uncertainty in the risk assessment both in regard to the selection of COPCs and the calculated risks. The direction of the uncertainty is not known. Note that the State of Florida does provide CTLs for these compounds and they were evaluated in the analysis using FDEP methodology. Therefore, the uncertainty associated with the use of surrogates is likely to be minimal.

### 6.7.2 Uncertainty in the Exposure Assessment

Uncertainty in the exposure assessment arose because of the methods used to calculate EPCs, the determination of land use conditions, lack of surface soil samples, the selection of receptors and scenarios, the estimation of EPCs, and the selection of exposure parameters. Each of these is discussed below.

#### 6.7.2.1 Land Use

The current land use patterns at NETPDTC Saufley are well established, thereby limiting the uncertainty associated with land use assumptions. Land use at Site 4 is currently limited and is expected to be limited in the future, as long as NETPDTC Saufley remains open. To be conservative, risks to potential and future construction workers, maintenance workers, occupational workers, recreational users, and on-site

residents were estimated for the site. Maintenance workers and recreational users are considered to be the most likely receptors under current land use.

#### 6.7.2.2 Lack of Surface Soil Samples

No surface soil samples were collected at Site 4. At present the site is covered with concrete and hangars, consequently current receptors at Site 4 are not exposed to surface soil. Therefore the lack of surface soil samples does not effect the conclusions of this HHRA under current conditions. In the future receptors could be exposed to surface soil if the concrete and hangars were removed. Therefore the lack of surface soil samples is a potential data gap for future scenarios.

#### 6.7.2.3 Exposure Point Concentrations

EPCs for soil were calculated using the Florida UCL Calculator (Version 1.0). Uncertainty is associated with the use of the 95 percent UCL on the mean concentration as the EPC. As a result of using the 95 percent UCL, the estimations of potential risk for the RME scenario were most likely overstated because this is a representation of the upper limit that potential receptors would be exposed to over the entire exposure period.

As discussed previously, the calculated risks for groundwater in the USEPA risk evaluation were based on the assumption that EPCs for groundwater were the maximum detected concentrations. Using the maximum detected concentrations may result in an overestimation of risks. Note that maximum groundwater concentrations were used in the risk assessment performed according the FDEP methodology.

There was also uncertainty in assuming that current groundwater concentrations will not change in the future and this introduces additional uncertainty in the EPCs and risks for groundwater COPCs. Concentrations in groundwater may diminish over time due to natural attenuation processes involving source depletion and dilution.

#### 6.7.2.4 Exposure Routes and Receptor Identification

The determination of various receptor groups and exposure routes of potential concern was based on current land use observed at the site and the anticipated future land use. Therefore, the uncertainty associated with the selection of exposure routes and potential receptors was minimal because they were considered to be well defined. Although residential use of groundwater was evaluated as an exposure scenario, groundwater is not currently used at the site nor is it expected to be used in the future. The

evaluation of direct exposure to groundwater in the HHRA was included primarily to aid in risk management decision making.

#### 6.7.2.5 Exposure Parameters

The risk-based concentrations used to estimate risks by the USEPA methodology were calculated by the equations and exposure factors presented in Section 6.3.3. Each exposure factor selected for use in the risk assessment has some associated uncertainty. Generally, exposure factors were based on surveys of physiological and lifestyle profiles across the United States. The attributes and activities studied in these surveys generally have a broad distribution. The exposure factors used in this report, in most cases, were obtained from USEPA or Florida guidance documents for the RME, which generally specify the use of the 95th percentile value for most parameters. Therefore, the selected values for the RME receptor represented an upper bound of the observed or expected habits of the majority of the population.

Generally, the uncertainty can be assessed quantitatively for many assumptions made in determining factors for calculating exposures and intakes. Many of these parameters were determined from statistical analyses on human population characteristics. Often, the database used to summarize a particular exposure parameter (i.e., body weight) is quite large. Consequently, the values chosen for such variables in the RME scenario have low uncertainty.

### 6.7.3 Uncertainty in the Toxicological Evaluation

The risk-based concentrations used to assess risk were also developed using the toxicity criteria discussed in Section 6.4. Uncertainties associated with the toxicity assessment (determination of RfDs and CSFs and use of available criteria) are presented in this section.

#### 6.7.3.1 Derivation of Toxicity Criteria

Uncertainty associated with the toxicity assessment was associated with hazard assessment and dose-response evaluations for the COPCs. The hazard assessment dealt with characterizing the nature and strength of the evidence of causation or the likelihood that a chemical that induces adverse effects in animals will also induce adverse effects in humans. Hazard assessment of carcinogenicity was evaluated as a weight-of-evidence determination using USEPA methods. Positive animal cancer test data suggest that humans contain tissue(s) that may manifest a carcinogenic response; however, the animal data cannot necessarily be used to predict the target tissue in humans. In the hazard assessment of noncancer effects, however, positive animal data often suggest the nature of the effects (i.e., the target tissues and type of effects) anticipated in humans.

Uncertainty in hazard assessment arose from the nature and quality of the animal and human data. Uncertainty was reduced when similar effects were observed across species, strain, sex, and exposure route; when the magnitude of the response was clearly dose related; when pharmacokinetic data indicated a similar fate in humans and animals; when postulated mechanisms of toxicity were similar for humans and animals; and when the COC was structurally similar to other chemicals for which the toxicity is more completely characterized.

Uncertainty in the dose-response evaluation included the determination of a CSF for the carcinogenic assessment and derivation of an RfD for the non-carcinogenic assessment. Uncertainty was introduced from interspecies (animal to human) extrapolation, which, in the absence of quantitative pharmacokinetic or mechanistic data, is usually based on consideration of interspecies differences in basal metabolic rate. Uncertainty also resulted from intraspecies variation. Most toxicity experiments are performed with animals that are very similar in age and genotype, so intragroup biological variation is minimal, but the human population of concern may reflect a great deal of heterogeneity, including unusual sensitivity or tolerance to the COPC. Even toxicity data from human occupational exposure reflect a bias because only those individuals sufficiently healthy to attend work regularly (the "healthy worker effect") and those not unusually sensitive to the chemical are likely to be occupationally exposed. Finally, uncertainty arises from the quality of the key study from which the quantitative estimate was derived and the database used. For cancer effects, the uncertainty associated with dose-response factors was mitigated by assuming the 95 percent upper bound for the slope factor. Another source of uncertainty in carcinogenic assessment is the method by which data from high doses in animal studies are extrapolated to the dose range expected for environmentally exposed humans. The linearized multistage model, which is used in nearly all quantitative estimations of human risk from animal data, is based on a nonthreshold assumption of carcinogenesis. Evidence suggests, however, that epigenetic carcinogens, as well as many genotoxic carcinogens, have a threshold below which they are noncarcinogenic. Therefore, the use of the linearized multistage model was conservative for chemicals that exhibited a threshold for carcinogenicity.
For non-cancer effects, additional uncertainty factors may have been applied in the derivation of the RfD to mitigate poor quality of the key study or gaps in the database. Additional uncertainty for noncancer effects arose from the use of an effect level in the estimation of an RfD, because this estimation was predicated on the assumption of a threshold less than which adverse effects were not expected. Therefore, an uncertainty factor is usually applied to estimate a no-effect level. Additional uncertainty arose in estimation of an RfD for chronic exposure from subchronic data. Unless empirical data indicated that effects did not worsen with increasing duration of exposure, an additional uncertainty factor was applied to the no-effect level in the subchronic study. Uncertainty in the derivation of RfDs was mitigated by the use of uncertainty and modifying factors that normally ranged between 3 and 10. The resulting combination of uncertainty and modifying factors may have reached 1,000 or more.

The derivation of dermal RfDs and CSFs from oral values may have caused uncertainty. This was particularly the case when no gastrointestinal absorption rates were available in the literature or when only qualitative statements regarding absorption were available.

#### 6.7.3.2 Uncertainty Associated with Evaluation of the Dermal Exposure Pathway

According to RAGS Part E (USEPA, 2004a), risks for dermal absorption of chemicals in soil are quantitatively evaluated for arsenic, cadmium, chlordane, 2,4-dichlorophenoxyacetic acid, DDT, TCDD (and other dioxins), PAHs, PCBs, pentachlorophenol, and SVOCs only because of the limited information and guidance available to evaluate dermal exposure to other constituents. However, risks associated with dermal exposure to other metals in soil (except for arsenic and cadmium) were also evaluated in the risk assessment using the dermal absorption factors provided in FDEP guidance (FDEP, 2005b). Generally, potential risks associated with the metals may result in an overestimation of risk because metals do not readily desorb from soil and become available for absorption through the skin.

The Region 9 PRGs used to assess risks for groundwater are based on ingestion and inhalation (for volatiles), but dermal effects are not considered in the PRG calculations. For some chemicals (e.g., PCBs and PAHs) the omission of the aqueous dermal pathway can be significant. However, for most of the chemicals detected in groundwater at Site 4 (i.e., VOCs and metals), the aqueous dermal pathway is generally not important.

#### 6.7.3.3 Alternate RfD for Manganese

The oral RfD for manganese listed in the Region 9 PRG table (0.024 mg/kg/day) was used to calculate the PRG for evaluating risks for residential exposure to soil. This value includes a modification factor of 3 and an adjustment factor for the dietary contribution which is applied to the non-dietary reference dose (0.14 mg/kg/day) presented in IRIS. IRIS indicates that an adjustment for the dietary contribution should be subtracted from this allowable intake. Using the modified and adjusted RfD results in risk estimates 6 times higher than if the non-dietary reference dose were used.

### 6.7.4 Uncertainty in the Risk Characterization

Uncertainty in risk characterization resulted from assumptions made regarding additivity of effects from exposure to multiple COPCs from various exposure routes. High uncertainty existed when summing noncancer risks for several substances across different exposure pathways. This assumed that each substance has a similar effect and/or mode of action. Even when compounds affect the same target organs, they may have different mechanisms of action or differ in their fate in the body, so additivity may

not have been an appropriate assumption. However, the assumption of additivity was considered because in most cases it represented a conservative estimate of risk.

Risks to any individual may also have been overestimated by summing multiple assumed exposure pathway risks for any single receptor. Although every effort was made to develop reasonable scenarios, not all individual receptors may have been exposed via all pathways considered.

Finally, the risk characterization did not consider antagonistic or synergistic effects. Little or no information was available to determine the potential for antagonism or synergism for the COPCs. Because chemical-specific interactions could not be predicted, the likelihood for risks to be overpredicted or underpredicted could not be defined, but the methodology used was based on current USEPA guidance.

## 6.8 SUMMARY AND CONCLUSIONS

An HHRA was conducted for the chemical concentrations detected in subsurface soil and groundwater samples collected at Site 4. The evaluation was conducted using both USEPA and State of Florida regulations and guidelines for HHRA. The results of the USEPA and Florida risk assessments are summarized in the following sections.

### 6.8.1 Summary of USEPA Risk Assessment

The USEPA risk assessment considered three receptors, the hypothetical future resident, the typical industrial worker, and the construction worker, assuming exposure via the ingestion, dermal contact, and inhalation route of exposures. No surface soil samples were collected at Site 4; therefore, potential exposure pathways were only identified for subsurface soil and groundwater. The majority of Site 4 is covered with concrete and hangars; therefore, potential exposures to surface soil could only occur under a future scenario where the concrete is removed.

The list of COPCs for Site 4 included the following:

- Subsurface Soil – Aluminum, arsenic, chromium, iron, manganese, vanadium, and TRPH.
- Groundwater – Aluminum, arsenic, nickel, chromium, thallium, vanadium, benzene, chloroform, dibromochloromethane, isopropylbenzene, total xylenes, ethylbenze, tetrachloroethene, trans 1,2-dichloroethene, vinyl chloride, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, and cis 1,2-dichloroethene.

Quantitative estimates of non-carcinogenic and carcinogenic risks (HIs and ILCRs, respectively) were developed for potential human receptors. Results of these evaluations are summarized below.

Non-carcinogenic risks are below the target HI of 1.0 to satisfy USEPA and FDEP requirements for exposure to subsurface soil. The non-carcinogenic risks for exposure to groundwater exceeded the USEPA and FDEP acceptable risk level.

Carcinogenic risks for exposures to subsurface soil were within USEPA and FDEP acceptable levels. Carcinogenic risks exceed $1 \times 10^{-4}$ for exposure to groundwater by the hypothetical future resident.

### 6.8.2 Summary of Florida Risk Assessment

The risk assessment conducted per the State of Florida regulations and guidelines evaluated risks to a hypothetical future resident and a typical industrial worker using the published SCTLs for the residential and industrial land use scenario, respectively. Risks to a hypothetical future recreational user were evaluated using SCTLs specifically developed for this risk assessment as stipulated in the State of Florida regulations and guidelines.

The following chemicals were identified as potential COCs for subsurface soils based on a comparison of maximum concentrations or EPCs to these SCTLs:

**FLORIDA SUBSURFACE SOIL EVALUTION**

| RESIDENTIAL SCTLs | INDUSTRIAL SCTLs |
|---|---|
| ARSENIC, TRPH | |

The following chemicals were identified as potential COCs for groundwater based on a comparison of maximum concentrations to GCTLs:

**FLORIDA GROUNDWATER EVALUATION**

| RESIDENTIAL GCTLs | |
|---|---|
| BENZENE | CHLORODIBROMOMETHANE |
| CIS-1,2-DICHLOROETHENE | ETHYLBENZENE |
| ISOPROPYLBENZENE | TOTAL XYLENES |
| 1,1-BIPHENYL | NAPHTHALENE |
| ALUMINUM | CHROMIUM |
| NICKEL | |

Chemicals detected in subsurface soil were also evaluated for the potential to impact groundwater quality at the site by comparing maximum concentrations with FDEP SCTLs for migration from soil to groundwater. This evaluation indicated that the maximum concentrations of methylene chloride, 1,1-biphenyl, and TRPH were greater than the leachability criteria indicating that there is potential for contaminants detected in subsurface soil to impact groundwater. Although methylene chloride and TRPH were not detected in groundwater at concentrations exceeding GCTLs.

# 7.0 SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT

## 7.1 INTRODUCTION

This SLERA was conducted in accordance with USEPA Ecological Risk Assessment Guidance for Superfund (USEPA, 1997a), USEPA Amended Guidance on Ecological Risk Assessment at Military Bases (USEPA, 2000a), and the Navy Policy for Conducting Ecological Risk Assessments (DON, 1999). The risk assessment for IR Site 4 consists of Step 1 of USEPA's 8-step ecological risk assessment process. Step 1 consists of the following:

Step 1 Screening-Level Problem Formulation and Ecological Effects Evaluation

Section 7.2.1 provides the environmental setting and summarizes the site history for Site 4. The fate and transport characteristics of the chemicals detected in subsurface soil and groundwater are provided in Section 7.2.2. The ecotoxicity of site contaminants and potential ecological receptors are described in Section 7.2.3. Section 7.2.4 describes complete exposure pathways. Uncertainties inherent with the ecological risk assessment are discussed in Section 7.3 and the summary and conclusions of this ecological risk assessment are provided in Section 7.4.

## 7.2 SCREENING-LEVEL PROBLEM FORMULATION

The Problem Formulation presents the site history, describes physical and ecological characteristics of the site, identifies ecological receptors of concern, and provides the basis for selecting assessment and measurement endpoints. These items provide the information that will be used to develop the conceptual exposure model for the site.

### 7.2.1 Environmental Setting

Saufley Field is located in Escambia County, northwest Florida. The facility is situated between Interstate 10 and Perdido Bay approximately five miles northwest of Pensacola, Florida (see Figure 1-1). OLF Saufley consists of four inactive airstrips. The base also has a number of support buildings and a Federal Prison located south of the airfield. OLF Saufley encompasses 866 acres with the majority of the area consisting of airstrips, grass covered fields, buildings, and woods.

OLF Saufley opened in 1940 as NAAS Saufley. NAAS Saufley was used to train pilots during World War II and the Korean Conflict. In 1957, the mission at Saufley Field was changed to basic training for naval aviators. NAAS Saufley was re-designated as a Naval Air Station in 1968 and retained that status until

1976 when NAS Saufley operations were discontinued and the facility was placed in caretaker status. Between 1976 and 1979 Saufley Field was used as an OLF for NAS Whiting Field. In 1979, Saufley Field was reactivated as NETPMSA. Saufley Field was renamed the NETPDTC in 1996. Saufley Field is now used primarily to train and educate Naval personnel and to house federal prisoners.

Site 4 lies between Sprague Avenue and the southern runways (Figure 1-2). The area covers approximately 713,000 square feet (16 acres) and the site elevation is approximately 80 feet above mean sea level. The site lies on the eastern slope of a low area between these two roads and across the street from the entrance to the Officers' Quarters. There is approximately 2 feet of vertical relief across the site. Most of the site is paved or built on. Grass and shrubs cover landscape islands and building lawns.

Site 4 consists of Hangars 807, 808, 809, and 810 and the concrete and a limited amount of grass covered areas immediately surrounding them. The hangars are roughly located symmetrically about the control tower, Building 803. Based on a review of historic aerial photographs, these hangars were initially constructed with concrete pavement surrounding the structures on all sides with the exception of small grass covered areas surrounded by curbs located adjacent to administrative doorways. For this reason, investigation for spilled fuels, oils, and solvents near the hangars was restricted to the locations of gasoline and used oil/solvent tanks and the wash racks (Figure 1-2).

No environmental investigations involving sampling and analysis of environmental media had been performed at Site 4 prior to this investigation. In May 1992, NEESA based in Port Hueneme, California submitted the "Preliminary Assessment Report, NETPMSA, Saufley Field, Escambia County, Florida." In this document, NEESA made the following general statements or observations regarding Site 4:

- Used oil/solvents were placed in two 2000-gallon capacity USTs designated tanks 807-B and 819-B located at Hangars 807 and 810, respectively.
- Waste solvents may also have been stored in these tanks.
- When the tanks were full, used oil/solvents were transported off base or burned by the base fire department at the fire fighting training pit north of the runways.
- Additional tanks associated with Hangars 807 and 810 were 1000-gallon kerosene tanks (Tanks 807-C and 819-C) and 1000-gallon gasoline tanks (Tanks 807-D and 819-D).

Previous investigations in the vicinity of Site 4 consisted of the completion of an RI at adjacent Site 2406 (Building 2406). The Site 2406 Site Assessment Report included groundwater sampling in a portion of what is now included in Site 4. The Site Assessment Report at UST Site 2406 concluded that petroleum

contaminants are present in subsurface soil at 25 to 45 feet bls in the vicinity of a free product plume, and that groundwater contamination extends from approximately 45 feet bls to 130 feet bls.

Site 4 is located in a developed area of the base. Ground cover at the site is predominantly concrete areas (runway), hangars, and a limited amount of grass landscaping. No wooded or grassy areas are present. No large trees are present at the site. No wetlands are located in the vicinity of Site 4. Soils from the developed areas at Site 4 are classified as urban land, which are typical of industrial areas. The native soils usually have been altered by grading or fill and the ground surfaces have been paved or built upon. The remaining soils are classified as Bonifay loamy sand. The majority of the site is paved to a depth of 12 to 18 inches thick. Although organic carbon was not analyzed in soil samples from Site 4, the sandy soils of northwest Florida are typically low in organic carbon content.

Site 4 is located within the central portion of the facility on the eastern slope of a shallow closed depression bound by paved roads on all four sides. The topography forms a plateau at the site and precipitation rapidly runs off due to the paved surfaces covering the site. Sites for rainfall infiltration are limited to pavement cracks and seams and limited landscaping areas scattered throughout the site. Surface water features are not present at the site. A small pond located approximately 1100 feet to the south of site is the nearest surface water feature. The nearest stream is Eight Mile Creek, which is located less than 1 mile northwest of the site. A 5000-foot long drainage ditch lies approximately 1000 feet from the site. This ditch is downgradient of the site hydrogeologically and at a lower elevation from the site. Water in this drainage ditch flows southwesterly and empties directly into Perdido Bay. Regional overland runoff is to the west towards Perdido River and Perdido Bay.

On January 9, 2007, the relative groundwater elevations in the shallow monitoring wells ranged from 57.84 feet on the east side of Site 4 to 34.34 feet on the west side of the site. The deepest groundwater elevations for deep monitoring wells were 32.66 feet and 57.84 feet. Interpretation of data from Site 4 indicates that overall, groundwater flow at the water table is to the northwest.

A list of federally listed threatened and endangered species and species of special concern for Escambia County was obtained from the web site for the Ecological Services and Fisheries Resource Office of the U.S. Fish and Wildlife Service in Panama City, Florida and is included in Appendix F. Five fish, 11 amphibians/reptiles, 16 birds, 6 mammals, 5 invertebrates, and 29 plants are listed as threatened, endangered, or a species of special concern for the county. The habitats listed for many special status species (i.e., estuarine, marine, riverine, palustrine, upland forest) do not exist at Site 4 or adjacent areas. Therefore, the special status species recorded in Escambia County would not be expected inhabit the site.

On-site wildlife is limited to occasional birds, reptiles, rodents, and stray cats. Due to lack of suitable habitat, wildlife use of the site is assumed to be infrequent.

### 7.2.2 Contaminant Fate and Transport

The release of some of the contaminants at Site 4 appears to have resulted from fuel spills and or leaks. The origin of other contaminants, such as chromium, is unclear, as many industrial or chemical processes could be the source. The source and nature of materials, as well as the time of disposal, are unknown. The area currently occupied by OLF Saufley was farm and woodland, before the Navy purchased it in the 1930's.

No surface soil samples were collected at Site 4. Only a small percentage of the ground surface is exposed. The remaining areas are covered by concrete, asphalt, and building with concrete up to 18 inches thick in some places. The concrete/asphalt soil barrier, along with the nature and age of the contamination, precluded the need for surface soil sampling during the investigation.

Potential contaminant release mechanisms at Site 4 include the mobilization of contaminants from wastes discharged directly to surface soil with impact to local groundwater by infiltration of precipitation and dissolution of soluble contaminants. Soluble constituents can be transported to the water table by rainwater infiltration, and may continue to migrate downgradient to an ultimate discharge location.

Transport is affected by the chemical and physical properties of both the soil and the contaminants. Currently erosion and overland transport of particulate matter from site surface soil do not appear to be important transport mechanisms at Site 4 due to the developed nature of the site. Past erosion and overland transport of surface soil via storm water runoff as well as airborne dispersion by wind may have resulted in contaminant transport and deposition. Sources outside of Site 4 may also be responsible for contamination found in subsurface soil and groundwater.

The following discussions address classes of contaminants detected in subsurface soil and/or groundwater that were evaluated against several criteria to determine their classification as COPCs. These chemicals were further evaluated as part of the SLERA. The following sections present a summary of process used to determine if any of the selected chemicals are a significant ecologic risk.

#### 7.2.2.1 VOCs

VOCs are poorly adsorbed to soil and sediment particles. In addition, because they are very volatile, they typically are detected in surface water, surface soil, and sediment only at low concentrations. VOCs in soil will dissolve in rainwater to varying degrees and could be transported overland with runoff or into

groundwater. Photolysis and hydrolysis are not significant mechanisms for VOC degradation. Aerobic biodegradation in soil and groundwater is significant, however, and anaerobic degradation can occur in these media. VOCs do not bioaccumulate in ecological receptors, and therefore, biomagnification through the food chain is not significant. VOCs are typically toxic to ecological receptors only at relatively high concentrations.

#### 7.2.2.2 SVOCs

Most SVOCs detected in Site 4 media were PAHs and phthalates. PAHs are a diverse group of compounds consisting of two or more substituted and unsubstituted polynuclear aromatic rings formed by the incomplete combustion of carbonaceous materials. PAHs are ubiquitous in the modern environment and are common constituents of coal tar, soot, vehicle exhaust, cigarette smoke, certain petroleum products, road tar, mineral oils, creosote, and many cooked foods. PAHs can also be released to the environment through natural sources such as forest fires. The fate and transport characteristics of PAHs are dependent on their molecular weights. Low molecular weight PAHs are more soluble and volatile, and therefore, more mobile. They may volatilize and photolyze from soil and surface water, and they also may be biodegraded. High molecular weight PAHs tend to be immobile and insoluble, binding strongly to organic matter (reducing the potential for leaching to groundwater), and they are resistant to volatization, photolysis, and biodegradation (Eisler, 2000). Upper tropic level organisms are primarily exposed to PAHs through diet, but most wildlife can metabolize and excrete PAHs. Vertebrates can readily metabolize PAHs, but lower forms (insects and worms) cannot metabolize PAHs as quickly. USEPA Region IV considers the potential toxicity of PAHs via the terrestrial food web to be generally negligible unless PAHs are present at extremely high concentrations (i.e., percent levels: 10,000 mg/kg) in soil. Food chain uptake does not appear to be a major exposure source to PAHs, and food-chain biomagnification of PAHs is typically minimal (ATSDR, 1989). PAHs may be absorbed by plants but are expected to be translocated, metabolized, and potentially photodegraded. Accumulation within plants is likely to occur only in heavily polluted locations where uptake exceeds metabolism and degradation (Edwards, 1983).

Two phthalates (butyl benzyl phthalate and di-N-butyl phthalate) were detected in groundwater. Plastic wastes are the major source of phthalates, which are relatively persistent in the environment. Although numerous studies have demonstrated that phthalates undergo biodegradation, this is a slow process. Some microorganisms have been shown to excrete products that increase the solubility of phthalates and enhance their biodegradation (Gibbons and Alexander, 1989). Adsorption onto soils and sediments appears to be a significant sink for phthalates. If released to water, phthalates tend to adsorb strongly to suspended particulate matter within the water column and sediment. Butyl benzyl phthalate and di-N-butyl phthalate are not expected to significantly volatilize or appreciably leach from soil into groundwater (Spectrum, 2003). Biomagnification of phthalates does not occur.

#### 7.2.2.3 Pesticides

Chlorinated pesticides are highly persistent in the environment, and tend to tightly sorb to organic matter and be immobile in most soils. Although organic carbon was not analyzed in soil samples from Site 4, the sandy soils of northwest Florida are typically low in organic carbon content, which is presumably a major contributing factor in the migration of pesticides from soil into groundwater at the site. Degradation of chlorinated pesticides in soil would eventually occur through volatization, photolysis, and aerobic and anaerobic degradation. Due to the lipophilicity of organochlorine pesticides, they can bioaccumulate in animals. These compounds generally bioconcentrate in lower trophic level organisms and can be transferred and magnified in higher trophic level organisms. One chlorinated pesticide (heptachlor) was reported in subsurface soil, but none were reported in groundwater at Site 4.

#### 7.2.2.4 PCBs

PCBs include to a variety of mixtures of individual biphenyl isomers, each consisting of two joined benzene rings and up to 10 chlorine atoms. Mixtures of these isomers are known by their commercial designation of Aroclor. Only one PCB compound (Aroclor-1260) was detected in subsurface soil at Site 4.

PCBs adsorb strongly to soil particles with adsorption generally increasing with the degree of chlorination. PCBs generally do not significantly leach in aqueous soil systems. PCBs released into water adsorb to sediments and other organic matter. Typically, PCB concentrations are greater in sediment and suspended material than in the water column. Aquatic sediments can act as an environmental reservoir from which PCBs may be released slowly over a long period of time (ATSDR, 2000). For PCBs that exist in the dissolved state in water, volatization becomes the primary fate process. Degradation of PCBs in the environment is dependent upon the degree of chlorination. Generally, the more chlorinated the PCB molecule, the more persistent it will be in the environment. Factors that determine biodegradability include the amount of chlorination, concentration, microbial population type, available nutrients, and the temperature (ATSDR, 2000). Biodegradation of higher chlorinated PCBs (such as Aroclor-1260) occurs very slowly (HSDB, 2007). PCBs can significantly bioconcentrate in aquatic organisms.

#### 7.2.2.5 Metals

Metals released to soils will tend to remain in soils but may impact groundwater through infiltration and surface water through run off and erosion. Leaching of metals is more apt to occur under acid conditions in sandy soils with low organic matter content. Many metals occur naturally in soil, surface water, and sediment due primarily to chemical weathering of rocks. Factors such as pH, clay content, and organic matter content influence the bioavailability of metals to potential receptors. In water, most metals tend to adsorb to sediment or to suspended particles in the water column. However, because of dissolution, complexation, and sediment resuspension, metals are often detected in surface water. Arsenic, cadmium,

chromium, copper, lead, mercury, silver, and zinc have the potential to bioaccumulate in biota (USEPA, 2000b).

### 7.2.3 Ecotoxicity

VOCs, SVOCs, pesticides, PCBs, and metals were detected in either subsurface soil or groundwater samples collected at Site 4. The following abstracts from the literature provide general discussions of each group's ecotoxicity.

#### 7.2.3.1 VOCs

VOCs readily volatilize, are poorly adsorbed to soil and sediment particles, and are typically detected in surface water, surface soil, and sediment only at low concentrations. VOCs do not bioaccumulate in ecological receptors, and their toxicity to ecological receptors is relatively low.

#### 7.2.3.2 SVOCs

Few generalizations can be made about the ecotoxicity of PAHs because of the extreme variability in toxicity and physiochemical properties of PAHs. Adverse impacts to plants from PAHs, however, are rare (Eisler, 2000). In most animal species, PAHs are metabolized by a mixed-function oxidase enzyme system into intermediates that may be toxic, mutagenic, or carcinogenic to the host. Some invertebrate species cannot efficiently metabolize PAHs, and PAHs can be chronically toxic to invertebrates, but overall, very little is known about the toxicological mechanisms of PAHs in invertebrates (Erstfield and Snow-Ashbrook, 1999). PAHs can bind to cellular macromolecules and thereby disrupt their function in higher-level organisms such as mammals and birds. Biological macromolecules include polymers of carbohydrates (e.g., starch), amino acids (proteins), and nucleotides (e.g., DNA). The cellular functions of these polymers include structure, energy storage, energy transfer, material transport, and the storage and transmittal of genetic information. PAHs show little tendency to biomagnify in the food web (Eisler, 2000). USEPA Region 4 considers the potential toxicity of PAHs via the terrestrial food web to be generally negligible unless PAHs are present at extremely high concentrations (i.e., percent levels: 10,000 mg/kg) in soil. Microbial metabolism is the major process for degradation of PAHs in soil (ATSDR, 1997).

Chronic oral exposure to phthalates can result in liver toxicity in mammals. Ingested phthalates metabolize to monoesters in the gut and are subsequently absorbed. Following absorption, phthalates distribute primarily to the liver and kidneys and may, in some species, concentrate in the testes (Rhodes et al., 1986). Liver carcinogenesis has been observed (ATSDR, 1997). Many receptors are able to metabolize and excrete phthalate esters, so their ability to bioaccumulate varies among species.

#### 7.2.3.3 Pesticides

Organochlorine pesticides are reproductive and nervous system toxins. Although these compounds were used as insecticides, they are toxic to other animals as well. The target organ for acute exposures is the nervous system, while chronic exposures can affect the liver and endocrine systems of higher animals. Organochlorine pesticides are lipophilic and can be stored in the fat tissue of organisms such as birds and mammals. They can cause reproductive failure in birds of prey through eggshell thinning and disruption of egg-laying and nesting cycles (Amdur et al., 1991). These pesticides were developed to control insects on crops, and as a result, they are practically non-toxic to plants.

#### 7.2.3.4 PCBs

PCBs are highly lipophilic, and can bioaccumulate in animals. PCBs can accumulate in offspring through placental transfer in mammals and accumulation in bird eggs, and can accumulate in upper trophic level animals such as piscivorous birds and mammals that feed on contaminated prey items (Eisler, 2000). Toxicity to aquatic organisms can occur through chronic exposures to PCBs at the parts per billion level. In animals, the primary effect associated with PCB exposure is the induction of liver enzyme systems. These enzymes are associated with detoxification mechanisms and with the metabolism of hormones. Adverse reproductive effects observed with PCB exposure are associated with induction of the enzyme systems. The toxicity of PCBs to mammals and birds varies, depending on the particular PCB and the animal species. Mink, for example, are highly sensitive to PCBs. Impacts to mink include anorexia, weight loss, lethargy, reproductive effects, and death (Eisler, 2000). Among sensitive avian species, PCBs disrupt the normal pattern of growth, reproduction, metabolism, and behavior. PCBs are not water soluble and accumulate to a much greater degree in animals than in plants. Nevertheless, plant-related effects of PCB exposure can include slower growth, reduced chlorophyll content, and diminished photosynthesis (USEPA, 1999a).

#### 7.2.3.5 Metals

It is difficult to make generalizations about the toxic actions of metals because of diverse affinities for organic molecules in biological structures, a wide array of biological effects, and a multiplicity of target organs and systems (Amdur et al., 1991). At the molecular level, metals can manifest toxicity in many ways, including selectively accumulating in target organs (such as the kidneys), substituting for essential metals, and mimicking essential substrates (Clarkson, 1983). At the molecular level, metal toxicity typically affects enzyme systems, leading to disruption of cellular transport, cellular respiration, cell division, and other physiological processes. Metal toxicity to aquatic organisms is marked by a broad spectrum of effects that can range from reduced growth to death. Aquatic organisms are most sensitive to metal toxicity in the embryonic and larval stages of the life cycle.

### 7.2.4 Complete Exposure Pathways

Soil invertebrates and plants are typically exposed to soil contaminants through ingestion and direct contact with surface soil. The USEPA defines surface soils as those soils within the root zone at a specific site (USEPA, 2005). The USEPA further states that ecological risks from potential exposure to contaminated subsurface soils are generally not considered for ecological receptors except in some cases where there may be risks to animals that burrow beneath the root zone or where the root zone can extend several feet. The majority of Site 4 is covered by buildings and concrete runway and as previously discussed is paved to a depth of 12 to 18 inches thick. As the depth of concrete occupies the horizon that would typically be inhabited by soil invertebrates and plants, the exposure pathway to soil invertebrates and plants is considered incomplete.

No complete exposure pathways to higher trophic level animals are present at Site 4. Ground cover at the site is predominantly paved areas or buildings with little undisturbed native soils. The current land use discourages use of the site by birds and mammals except as occasional transients. The exposure of higher trophic level animals such as birds and mammals to site-related contamination through ingestion of contaminated food items is, therefore, considered unlikely due to the absence of habitat at Site 4. Consequently, this is not considered to be a complete exposure pathway. Similarly, the incidental ingestion of soil contaminants while preening feathers is not considered a significant source of potential exposure as birds are not anticipated to reside at the site or be present for extended periods of time. Exposure to contaminants in soil through dermal contact could occur, but is unlikely to represent a major exposure pathway because feathers and chitinous exoskeletons minimize transfer of contaminants across dermal tissue. Additionally, these pathways are not considered significant routes of exposure as only limited areas of exposed soil are present at the site. Airborne transport is a negligible pathway; consequently, the inhalation pathway is not significant. Due to the depth to groundwater and absence of discharge locations at the site, exposure to contaminants in groundwater is not anticipated to occur at Site 4.

Actual or potential exposures of ecological receptors are determined by identifying the most likely pathways of contaminant release and transport. A complete exposure pathway has three components: (1) a source of chemicals that can be released to the environment, (2) a route of contaminant transport through an environmental medium, and (3) an exposure or contact point for an ecological receptor. As explained in Step 1 of USEPA's Ecological Risk Assessment Guidance (USEPA, 1997a), if an exposure pathway is not complete, that exposure pathway does not need to be evaluated.

Exposure pathways to soil invertebrates and plants are incomplete as are exposure pathways to upper trophic level receptors that might feed on soil-dwelling organisms and plants or be exposed to

contaminated surface soil. The characteristics of the contaminants identified in subsurface soil and groundwater reduces the potential of their being available for exposure of ecological receptors at Site 4. In summary, no complete exposure pathways and routes of entry into biota are present at Site 4.

## 7.3 UNCERTAINTY

The primary uncertainty associated with assessing potential ecological risk at Site 4 is the absence of surface soil data. Soil samples available for evaluation in this risk assessment consisted of samples collected at depths of 2 feet or greater below the soil surface. The history and nature of contaminant releases indicated that surface soil contamination was unlikely; consequently no surface soil samples were collected. While the absence of surface soil data introduces uncertainty, this uncertainty is mitigated by the fact that concrete is present across the majority of the site from the surface to depths ranging from 12 to 18 inches, which is the soil horizon that would normally be occupied by soil invertebrates and plants.

## 7.4 SUMMARY AND CONCLUSIONS

An evaluation of the exposure setting at OLF Saufley Site 4 indicated an absence of complete exposure pathways to soil invertebrates, plants, and upper trophic level receptors. The habitat at Site 4 minimizes its use by ecological receptors, and the presence of concrete throughout most of the site from the surface to depths ranging from 12 inches to 18 inches reduces the availability of subsurface contamination to potential receptors. Since a complete exposure pathway does not exist at Site 4, the potential for ecological impacts from site-related contaminants does not exist, and no further assessment of ecological risks is applicable.

# 8.0 SUMMARY AND CONCLUSIONS

The primary objective of the RI is to provide data to evaluate the current environmental conditions and guide the selection of a remedy for any contamination present at Site 4 that is protective of human health and the environment. In order to achieve this primary objective, samples from subsurface soils and groundwater were collected and analyzed to characterize the site, to evaluate the extent of contamination at the site and to provide a better understanding of the conditions of the site.

## 8.1 SITE HYDROLOGY

The depth to groundwater at Site 4 ranges from approximately 32 to 57 feet and is controlled primarily by surface topography. Groundwater flow direction in the shallow groundwater interval as well as in the deep groundwater interval, is to the northwest (shown in Figures 3-1 through 3-4). The estimated average groundwater velocity for the shallow zone at the site was calculated at 0.45 feet/day. A downward vertical gradient was observed in adjacent pairs of shallow and deep monitoring wells.

## 8.2 SOIL ASSESSMENT

The majority of soil borings completed for this investigation were completed using DPT equipment. Seven of the soil borings were completed using a rotosonic drill rig during monitor well installation activities. While conducting the subsurface soil investigation, samples were collected at 2- to 4-foot intervals. Each sample, was screened with a FID. Based upon FID results (included in Appendix B), at least one sample was collected from each interval and sent to an off-site laboratory for analysis. The samples were analyzed for VOCs, SVOCs, TRPH, PCBs, pesticides, cyanide, and metals.

As mentioned in the Preliminary Assessment Report (NEESA, 1992), the release of contaminants at Site 4 may have resulted from routine aircraft maintenance activities, storage of materials used, and refueling activities. The source and nature of materials, as well as the time of disposal, are undocumented.

According to the samples taken during the RI sampling events, only two contaminants exceeded the most stringent screening levels for subsurface soils and three analytes exceeded the leaching to groundwater FDEP SCTL criteria.

Arsenic was detected in 53 subsurface soil samples in concentrations ranging from 0.6 to 3.3 mg/kg located throughout the site at concentrations above the USEPA residential PRG (0.36 mg/kg) and FDEP residential SCTL (2.1 mg/kg), but all the samples reported concentrations below the FDEP

commercial/industrial SCTL and most were below the site specific background, which is 1.36 mg/kg. Two surface soil sample exceeded the FDEP residential SCTL (460 mg/kg) for TRPH (730 mg/kg, 510 mg/kg) and the leaching to groundwater SCTL (340 mg/kg). Additionally two samples reported exceedances to the leaching to groundwater criteria of 1,1-biphenyl (0.34 mg/kg) and methyl chloride (0.27 mg/kg estimated), respectively. These samples were collected from soil borings in the washrack area adjacent to Building 810. However, 1,1-biphenyl and methyl chloride were not detected in nearby wells; therefore, this should not be a concern. No other contaminants were found above FDEP residential SCTLs or USEPA PRGs in the subsurface soil samples collected from Site 4.

## 8.3 GROUNDWATER ASSESSMENT

Groundwater samples collected at Site 4 were analyzed for VOCs, SVOCs, TRPH, PCBs, pesticides and metals. Groundwater sampling at Site 4 was divided into two events. The first event took place between December 2006 and January 2007. Analytical data from this event were evaluated against FDEP GCTLs and USEPA Tap Water PRGs. Based on the results of the first round of groundwater sampling, 10 additional wells were installed. In the second event, the additional wells were installed and sampled in June 2007.

Screen point sampling reported detections of VOCs in the western area of Building 807, this led to the installation of monitoring wells surrounding the screen point samples. Contaminant concentrations in the groundwater samples collected from 13 wells near Building 807, during the first round of sampling, were greater than current FDEP GCTLs. FDEP GCTL exceedances of metals, including aluminum, iron, and manganese, were recorded in 10 monitor wells. Two wells in the area had GCTL exceedances of nickel and chromium, as well as exceedances of VOCs and SVOCs. Concentrations of iron and manganese exceedances were below their respective background reference concentrations. The source and extent of exceedances of chromium, nickel, VOCs, and SVOCs has yet to be determined. Results from the first round of groundwater sampling led to the installation of monitor well OLFS4-MW-37S to aid in the delineation of the potential contaminant. No effort was made to delineate the contaminants detected around OLFS4-MW-14D, because it is most likely associated the established plume from up-gradient UST Site 2406, which has been investigated and is under remediation.

Monitoring well OLFS4-MW-37S was the only Building 807 area well sampled during the second groundwater sampling event. Results from this event indicate that VOCs and SVOCs found in groundwater from OLFS4-MW-05S are limited in areal extent. No further delineation is recommended in this area.

Once again, screen point sampling reported detections of VOCs in the western area of Building 810, this led to the installation of monitoring wells surrounding the screen point samples. Concentrations of metals

including aluminum, chromium, iron, and manganese exceeding current GCTLs were detected in the groundwater samples collected from in the vicinity of Building 808. Elevated concentrations of aluminum, iron, and manganese appear to be widespread throughout the property. The source of nickel and chromium found in the groundwater was unknown. Therefore, four additional wells were installed during the second phase in order to evaluate any potential plume.

Results from the second round of sampling around Building 808 indicated that the elevated concentrations of chromium and nickel detected during the first sampling event are limited to the area surrounding and below Building 808. In addition, exceedances of VOCs were detected from OLFS4-MW-38S and OLFS4-MW-39S above the GCTL level. These exceedances are most likely associated with the existing contaminant plume at Site 2406. Consequently, no further delineation is recommended in this area.

Results from the first groundwater sampling event revealed exceedances of current GCTLs for aluminum, iron, and manganese in the area surrounding Building 809. The concentration of these metals in groundwater was comparable to the background reference concentrations and is most likely naturally occuring. Therefore, no additional wells were installed in the area. Accordingly, no further delineation is recommended in this area.

Five wells sampled during the first round of groundwater sampling had GCTL exceedences of metals including iron, aluminum, and manganese in the area surrounding Building 810. Three wells had exceedances of VOCs, SVOCs, TRPH, and metals. Metal concentrations detected during the first sampling event were comparable to their reference background concentrations and are most likely naturally occuring. To further evaluate any potential organics or metals plume, five additional wells were installed and sampled in June 2007.

Based on sampling results and groundwater flow direction, the contaminants associated with Building 810 groundwater monitoring wells is roughly limited to the area between Building 2440 and Building 810. All five wells sampled during the second event produced samples with exceedances of metals. The concentrations of iron and manganese were comparable to their respective background reference concentrations and can be attributed to non-anthropogenic sources. However, the source of the chromium and nickel is uncertain.

Additionally, inorganic analytes, such as iron, manganese, and aluminum, had exceedances to FDEP GCTLs and USEPA Tap Water PRGs in the deep monitoring wells, including the deep background well. Only one deep monitoring well had a benzene detection above the regulatory criteria and one deep monitoring well had chloroform exceedance. This could indicate that the inorganic analytes are spread throughout the property and may have components that are naturally occuring. Most of the VOCs and SVOCs found throughout the site were detected in the shallow groundwater monitoring wells.

Most of the contaminants found in the groundwater are not present in significant concentrations in the soil. Therefore, the probability of leaching to groundwater is unlikely.

## 8.4 HUMAN HEALTH RISK ASSESSMENT

A HHRA was conducted using data from laboratory analysis of samples collected during the RI sampling event at Site 4. The risk assessments were conducted using USEPA, FDEP, and Navy regulations and guidelines. The risk assessment considered contaminants, modes of exposure, site conditions, and potential receptors. For the HHRA, we considered three receptors, the hypothetical future resident, the typical industrial worker, and the construction worker, assuming exposure via the ingestion, dermal contact, and inhalation route of exposures.

No surface soil samples were collected at Site 4. Therefore potential exposure pathways were only identified for subsurface soil and groundwater. The majority of Site 4 is covered with concrete and hangars, therefore potential exposure to surface soils could only occur under a future scenario were the concrete is removed.

The list of COPCs for Site 4 included the following:

- Subsurface Soil – Aluminum, arsenic, chromium, iron, manganese, vanadium, and TRPH.
- Groundwater – Aluminum, arsenic, nickel, chromium, thallium, vanadium, benzene, chloroform, dibromochloromethane, isopropylbenzene, total xylenes, ethylbenzene, tetrachloroethene, trans 1,2-dichloroethene, vinyl chloride, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, and cis 1,2-dichloroethene.

In summary, the HHRA stated that risks to humans associated with exposure to subsurface soil are within federal and state limits. However, the results of the HHRA reveal unacceptable carcinogenic and non-carcinogenic risks associated with contact with groundwater. But it should be added that chances of exposure to groundwater at Site 4 are minimal because of the depth to groundwater in the area, the off-base source of drinking water, and the access restriction due to being a federal facility.

## 8.5 ECOLOGICAL RISK ASSESSMENT

This SLERA was conducted in accordance with USEPA Ecological Risk Assessment Guidance for Superfund (USEPA, 1997a), USEPA Amended Guidance on Ecological Risk Assessment at Military Bases (USEPA, 2000a), and the Navy Policy for Conducting Ecological Risk Assessments (DON, 1999).

The risk assessment for IR Site 4 consists of Step 1 of USEPA's 8-step ecological risk assessment process.

As mentioned, surface soil samples were not collected at Site 4 because of the lack of exposed soil,\; therefore, assessing potential ecological risk at Site 4 consisted of samples collected at depths of 2 feet or greater below the soil surface. Additionally, the information available regarding the history and nature of contaminant releases at Site 4 indicate that surface soil contamination would be unlikely. While the absence of surface soil data introduces uncertainty, this uncertainty is mitigated by the fact that concrete is present across the majority of the site from the surface to depths ranging from 12 to 18 inches, which is the soil horizon that would normally be occupied by soil invertebrates and plants.

An evaluation of the exposure setting at OLF Saufley Site 4 indicated an absence of complete exposure pathways to soil invertebrates, plants, and upper trophic level receptors. The habitat at Site 4 minimizes its use by ecological receptors, and the presence of concrete throughout most of the site from the surface to depths ranging from 12 inches to 18 inches reduces the availability of subsurface contamination to potential receptors. Since a complete exposure pathway does not exist at Site 4, the potential for ecological impacts from site-related contaminants does not exist, and no further assessment of ecological risks is applicable.

## 8.6 CONCLUSIONS

The contaminants detected in the groundwater of Site 4 will require measures to eliminate or minimize exposure by active cleanup, engineering controls, and/or institutional controls in order to achieve no further action for future residential scenarios. Therefore, exposure to groundwater at the site will require control or remediation. A detailed evaluation of alternatives to achieve this goal should be conducted. Therefore, a Feasibility Study for Site 4 Outlying Landing Field Saufley is recommended.

# REFERENCES

Amdur, M.O., J. Doull C.D. Klassen eds., 1991. Casarett and Doull's Toxicology: The Basic Science of Poisons 3rd edition Macmillan Press New York, New York.

ATSDR (Agency for Toxic Substances and Disease Registry), 1989. Toxicological Profile for Polycyclic Aromatic Hydrocarbons. U.S. Public Health Service. Atlanta, Georgia. October.

ATSDR, 1997. ATSDR Toxicological Profiles on CD-ROM. U.S. Public Health Service, Atlanta, GA.

ATSDR, 2000. Toxicological Profile for Selected PCBs. U.S. Department of Public Health. Atlanta, Georgia. November 2000.

"Chemical Facts." Online. http://www.epa.gov/chemicals/s_cycloh.txt. April 4, 2007.

Clarkson, T.W., 1983. Molecular Targets of Metal Toxicity in Chemical Toxicology and Clinical Chemistry of Metals Academic Press, Inc., Orlando, Florida.

DON (Department of the Navy), 1999. Navy Policy for Conducting Ecological Risk Assessments. Office of the Chief of Naval Operations, Washington, D.C., April 6.

DON, 2001. Conducting Human Health Risk Assessments under the Environmental Restoration Program. Ser N453E/1U595168. Washington, D.C. February

DON, 2004. Navy Policy on the Use of Chemical Background Levels, Ser N45C/N4U732212. Washington, D.C. January.

Edwards, N.T., 1983. Polycyclic Aromatic Hydrocarbons (PAHs) in the Terrestrial Environment – a Review. Journal of Environmental Quality 12:427-441.

Eisler, R., 2000. Handbook of Chemical Risk Assessment: Health Hazards to Humans, Plants, and Animals; Volume 2, Organics. Lewis Publishers, Boca Raton, FL.

Erstfield, K.M. and J. Snow-Ashbrook, 1999. Effects of chronic low level PAH contamination on soil invertebrate communities. Chemosphere 39 (12): 2117-2139.

## REFERENCES (CONTINUED)

FDEP (Florida Department of Environmental Protection), 2004. Standard Operating Procedures for Field Activities DEP-SOP-001/01, February 1, 2004.

FDEP, 2005a. Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, FAC, Division of Waste Management, Tallahassee, Florida. February

FDEP, 2005b. Contaminated Site Cleanup Criteria, Chapter 62-780 FAC, Division of Waste Management, Tallahassee, Florida. April

Ford, K.L. and P. Gurba, 1984. Health Risk Assessments for Contaminated Soils. In: Proceedings of the Fifth National Conference on Management of Uncontrolled Hazardous Waste Sites. Washington D.C.

Geraghty and Miller, Inc. 1986. Characterization Study, Assessment of Potential Ground-water Pollution at Naval Air Station, Pensacola, Florida

Gibbons, J.A., and M. Alexander, 1989. Microbial degradation of sparingly soluble organic chemicals: phthalate esters. Environmental Toxicology and Chemistry. 8(4): 283-291.

HSDB (Hazardous Substance Data Bank), 2007. Toxnet National Library of Medicine Washington, D.C. "Hazardous Substances Data Bank."Online. http://toxnet.nlm.nih.gov/cgi-:@term+@rn+@rel+105-60-2. April 4, 2007

McCall, P.J., D.A. Swann, and R.L. Laskowski, 1983, Partition Models for Equilibrium Distribution of chemicals in environmental compartments. In: Fate of Chemicals in the Environment. R.A. Swann and A. Eschenroeder, eds. ACS Symposium Series 225, American Chemical Society, Washington D.C.

Musgrove, R.H., Barraclough, J.T., and Grantham, R.G., 1965. Water Resources of Escambia and Santa Rosa Counties, Florida. Florida Geological Survey, Report Inv. 40, 102p.

NEESA (Naval Energy and Environmental Support Activity), 1983, Initial Assessment Study of Naval Air Station Pensacola. June.

## REFERENCES (CONTINUED)

NEESA, 1992. Preliminary Assessment Report, NETPMSA, Saufley Field, Escambia County, Florida. Port Hueneme, California . May.

Rhodes, C., T. Orton, I. Pratt, P. Batten, H. Bratt, S. Jackson, C. Elcombe, 1986. Comparative Pharmacokinetics and Subacute Toxicity of Di(2-ethylhexyl)phthalate in Rats and Marmosets: Extrapolation of Effects in Rodent to Man. Environmental Health Perspective 65:299-308.

Spectrum Laboratories. 2003. Chemical Fact Sheets. CAS #85687, CAS #117817, and CAS# 131113. http://www.speclab.com/compound/chemabc.htm

Swartzbaugh, et al., 1992. Remediating Sites Contaminated with Heavy Metals. Hazardous Materials Control, November/December.

Trapp, Henry Jr., 1973. Hydrology of the Sand-and-Gravel Aquifer in Central and Southern Escambia County, Florida: United States Geological Survey, open-file report FL-74027, 40p.

TtNUS (Tetra Tech NUS, Inc.), 2003. Site Assessment Report Addendum, Site 2406 (NETPDTC), Outlying Landing Field Saufley, Pensacola, Florida, Southern Division, Naval Facilities Engineering Command, Contract Number N62467-94-D-0888, Contract Task Order 0274, August.

TtNUS, 2004. Corporate Standard Operating Procedures, April.

TtNUS, 2005. Site Assessment Report Addendum No. 2 for Underground Storage Tank Site 2406 Outlying Landing Field Saufley, Naval Education and Training Professional Development and Technical Center, Naval Air Station Pensacola, Pensacola Florida, December.

TtNUS, 2005. Sampling and Analysis Plan for Site Characterization Study Installation Restoration Sites 4 and 5, November.

TtNUS, 2006. Revised Health and Safety Plan for Site Characterization Study, Installation Restoration Site 4. June.

TtNUS, 2007 Site 4 Field Investigations Logbook and field notes.

## REFERENCES (CONTINUED)

USDA (United States Department of Agriculture), 2004. Soil Survey if Escambia County, Florida. Natural Resources Conservation Service, Washington, D.C.

USEPA (United States Environmental Protection Agency), 1982. Aquatic Fate Process Data for Organic Priority Pollutants. December.

USEPA, 1989. Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part A). USEPA 540/1 89/002. Office of Emergency and Remedial Response, Washington, D.C. December.

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. Office of Solid Waste and Emergency Response (OSWER) Directive 9285.6 03. Washington, D.C. March.

USEPA, 1991. Risk Assessment Guidance for Superfund: Volume 1 - Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals). December.

USEPA, 1992a. Handbook of RCRA Groundwater Monitoring Constituents: Chemical and Physical Properties. September.

USEPA, 1992b. Guidance and Risk Characterization for Risk Managers and Risk Assessors. Memorandum from F. Henry Habicht, Deputy Administrator, Washington, D.C. February.

USEPA, 1992c. Guidance for Data Usability in Risk Assessment (Part A), PB92-963356, Office of Emergency and Remedial Response, Washington, D.C. April.

USEPA, 1992d. Supplemental Guidance to RAGS: Calculating the Concentration Term. OSWER Publication No. 9285.7 081. Washington, D.C. May.

USEPA, 1993. Preliminary Review Draft: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure. OSWER. Washington, D.C. May.

USEPA, 1994a. Guidance Manuel for the Integrated Exposure Uptake Kinetic Model for Lead in Children. EPA/540/R-93-081. Office of Emergency and Remedial Response, Washington, D.C. February.

## REFERENCES (CONTINUED)

USEPA, 1994b. Revised Interim Guidance on Establishing Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July.

USEPA, 1994c. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. October.

USEPA, 1996. Soil Screening Guidance: Technical Background Document. EPA/540/R-95/128. OSWER. Washington, D.C. July.

USEPA, 1997a. Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conduction Ecological Risk Assessments, Office of Solid Waste and Emergency Response, EPA 540-R-97-006. June.

USEPA, 1997b. Health Effects Assessment Summary Tables FY 1997. Office of Solid Waste and Emergency Response, Washington, D.C., July.

USEPA, 1997c. Exposure Factors Handbook. EPA/600/P 95/002Fa. Office of Health and Environmental Assessment, Washington, D.C. August.

USEPA, 1999a. Protocol for Screening Level Ecological Risk Assessment - Toxicological Profiles. U.S. Environmental Protection Agency Multimedia Planning and Permitting Division Center for Combustion Science and Engineering, Office of Solid Waste Washington, D.C.

USEPA, 1999b. Risk Updates, Number 5, Waste Management Division, Region I, Boston, Massachusetts. August.

USEPA, 1999c. Contract Laboratory Program National Functional Guidelines for Organic Data Review. October.

USEPA Region 4, 2000. Supplemental Guidance to RAGS: Region IV Bulletins, Human Health Risk Assessment. May.

USEPA, 2000a. Amended Guidance on Ecological Risk Assessment at Military Bases: Process Considerations, Timing of Activities, and Inclusion of Stakeholders. Memorandum from Ted. W. Simon, Region 4 EPA Office of Technical Services, Atlanta, Georgia, June 23.

## REFERENCES (CONTINUED)

USEPA, 2000b. Bioaccumulation Testing and Interpretation for the Purpose of Sediment Quality Assessment, Status and Needs. EPA-823-R-00-001, February. Office of Water, Washington, D.C.

USEPA, 2001. USEPA Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM).

USEPA, 2002. Role of Background in the CERCLA Cleanup Program, Office of Solid Waste and Emergency Response, OSWER 9285.6-07P. April.

USEPA, 2002a. Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10. Washington, D.C. December.

USEPA, 2002b. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. Washington, D.C. December.

USEPA, 2004a. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance, Dermal Risk Assessment) Interim Guidance, EPA/540/R/99/005, OSWER 9285.7-02EP, Washington, D.C. July.

USEPA Region 9, 2004b. (Updated, December 2004). Preliminary Remediation Goals. October.

USEPA, 2005. Guidance for Developing Ecological Soil Screening Levels (Revised). Office of Emergency and Remedial Response. OSWER Directive 9285.7-55. February.

USEPA, 2006. 2006 Edition of the Drinking Water Standards and Health Advisories, EPA 822-R-06-013, Office of Water, Washington, D.C. August.

USEPA, 2007a. USEPA Region 3 Risk-Based Concentration Table, online at (http://www.epa.gov/reg3hwmd/risk/human/index.htm). April.

USEPA, 2007b. EPA Technical Review Workgroup for Lead. Guidance Document. Frequently Asked Question (FAQs) on the Adult Lead Model. http://www.epa.gov/superfund/lead/almfaq.htm, August 2.

## REFERENCES (CONTINUED)

USEPA, 2007c. Integrated Risk Information System (IRIS) - On-Line Database at (http://www.epa.gov/iris/). October.

# APPENDIX A

# FIELD DATA SHEETS

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2811 | PAGE ___ OF ___

| PROJECT NO: | FACILITY: | PROJECT MANAGER | PHONE NUMBER | LABORATORY NAME AND CONTACT: |
|---|---|---|---|---|
| 112603789 | Saltillo Field | Gary Waller | 650 385-9899 | E-Lab/Maria Mr Gindy |
| SAMPLERS (SIGNATURE) | | FIELD OPERATIONS LEADER: Gary Davis | PHONE NUMBER: 4016 | ADDRESS: 227 Fleet Landing Drive Ste 55 |
| | | CARRIER/WAYBILL NUMBER: 8425 9627 9692 | | CITY, STATE: Nashville, TN |

STANDARD TAT ☐
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | PRESERVATIVE USED | TYPE OF ANALYSIS: TCL Hers, Appendix IX PCBs, TAL metals | TCL VOCs & Appendix | BTEX + MTBE | SPLP TCL Hers, Appendix PCBs, TAL metals | SPLP TCL VOCs & Appendix | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | P | G | G | G | | | |
| 9-12 | 1328 | OLFS4-DPB1-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1358 | OLFS4-DPB2-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1425 | OLFS4-DPB3-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1425 | OLFS4-DPB3-S10 MS | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1425 | OLFS4-DPB3-S10 MSD | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1500 | OLFS4-DPB4-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1500 | OLFS4-DPB4-S10-D | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1540 | OLFS4-DPB5-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1600 | OLFS4-DPB6-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1618 | OLFS4-DPB7-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1635 | OLFS4-DPB8-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1650 | OLFS4-DPB9-S10 | | 5' | 10' | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |
| 9-12 | 1700 | OLFS4-DPB10-S10 | | 5 | 10 | soil | G | 7 | 1 | 1 | 3 | 1 | 1 | | | |

| | DATE | TIME | | DATE | TIME |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY | 9-12-06 | 1430 | 1. RECEIVED BY | | |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS: Hold SPLP pending Analysis

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

Tetra Tech NUS, Inc.

# QA SAMPLE LOG SHEET



Project Site Name: Sampling Site 4
Project Number: 112G00389
Sample Location: NA
QA Sample Type:

Sample ID Number: OLFS4-TB2
Sampled By: /
C.O.C. Number: 2805

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank _____

| SAMPLING DATA: | WATER SOURCE: |
|---|---|
| Date: _____<br>Time: _____<br>Method: _____ | [X] Laboratory Prepared [] Tap<br>[] Purchased [] Fire Hydrant<br>[] Other _____ |
| **PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):** | **RINSATE INFORMATION (If Applicable):** |
| Product Name: _____<br>Supplier: _____<br>Manufacturer: _____<br>Order Number: _____<br>Lot Number: _____<br>Expiration Date: _____ | Media Type: _____<br>Equipment Used: _____<br>Equipment Type:<br>[] Dedicated<br>[] Reusable |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Volatiles | Cool 4°C & HCl | 2 ~~3~~ voas | YES / NO |
| Semivolatiles | Cool 4°C | ~~1/2~~ | YES / NO |
| Pesticide / PCB | Cool 4°C | | YES / NO |
| Metals | Cool 4°C & $HNO_3$ | | YES / NO |
| Cyanide | Cool 4°C & NaOH | | YES / NO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# QA SAMPLE LOG SHEET



Project Site Name: Sampling Site 4
Project Number: 112G00380
Sample Location: NA
QA Sample Type:

Sample ID Number: OLFS4-TB3
Sampled By: /
C.O.C. Number: 2806

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank

**SAMPLING DATA:**

Date:
Time:
Method:

**WATER SOURCE:**

[X] Laboratory Prepared
[] Purchased
[] Other
[] Tap
[] Fire Hydrant

**PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):**

Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:

**RINSATE INFORMATION (If Applicable):**

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Volatiles | Cool 4°C & HCl | 2 vials | (YES) / NO |
| Semivolatiles | Cool 4°C | | YES / NO |
| Pesticide / PCB | Cool 4°C | | YES / NO |
| Metals | Cool 4°C & $HNO_3$ | | YES / NO |
| Cyanide | Cool 4°C & NaOH | | YES / NO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**Signature(s):** Barry J. Davis

Tetra Tech NUS, Inc.

# QA SAMPLE LOG SHEET



Project Site Name: Sanfley Site 4
Project Number: 112G00389
Sample Location: NA
QA Sample Type:

Sample ID Number: OLFSA-TB5
Sampled By:
C.O.C. Number: 2808

[X] Trip Blank
[] Source Water Blank
[] Rinsate Blank
[] Other Blank

| SAMPLING DATA: | WATER SOURCE: |
|---|---|
| Date:<br>Time:<br>Method: | [X] Laboratory Prepared [] Tap<br>[] Purchased [] Fire Hydrant<br>[] Other |
| **PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):** | **RINSATE INFORMATION (If Applicable):** |
| Product Name:<br>Supplier:<br>Manufacturer:<br>Order Number:<br>Lot Number:<br>Expiration Date: | Media Type:<br>Equipment Used:<br>Equipment Type:<br>[] Dedicated<br>[] Reusable |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Volatiles | Cool 4°C & HCl | 2 - 40ml voas | (YES) / NO |
| Semivolatiles | Cool 4°C | | YES / NO |
| Pesticide / PCB | Cool 4°C | | YES / NO |
| Metals | Cool 4°C & $HNO_3$ | | YES / NO |
| Cyanide | Cool 4°C & NaOH | | YES / NO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

Signature(s): Amy J Davis

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[X] Other Well Type: DPT Screen Point
[] QA Sample Type:

Sample ID No.: OLFS4-DPW11-G53-55
Sample Location: DPW 11
Sampled By: Gary J. Davis
C.O.C. No.: 7808
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 9-11-06 / Time: 1015 / Method: Grab | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. ($^0$C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TCL VOCs & App IX | HCL | 3-40ml Voas | ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

Circle if Applicable:
MS/MSD | Duplicate ID No.:

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Horiba U-22

MANUFACTURER: Horiba

SERIAL NUMBER: 606013

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 1-4-07 | | | | | | 4.00 | | pH |
| ↓ | | | | | | 4.50 | | cond |
| ↓ | | | | | | 10.36 | | DO |
| 1-5-07 | | | | | | 4.01 | 4.00 | pH |
| ↓ | | | | | | 99.9 | | cond sensor bad |
| ↓ | | | | | | 9.08 | 9.40 | DO |
| 1-6-07 | | | | | | 3.96 | 4.00 | |
| ↓ | | | | | | 99.9 | 99.9 | cond sensor bad |
| ↓ | | | | | | 9.90 | 9.77 | |
| 1-7-07 | | | | | | 4.02 | 4.01 | pH |
| ↓ | | | | | | 4.14 | 4.40 | cond |
| ↓ | | | | | | 9.21 | 9.35 | DO |
| 1-8-07 | | | | | | 3.93 | 3.99 | pH |
| ↓ | | | | | | 4.98 | 4.51 | cond |
| ↓ | | | | | | 10.46 | 10.12 | DO |
| | | | | | | 3.93 | | pH |
| | | | | | | 4.38 | | cond |
| | | | | | | 9.55 | | DO |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: La Motte 2020

MANUFACTURER: La Motte

SERIAL NUMBER: 06481

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 1-4-07 | | | | | 1.0 | | | 1.0 |
| ↓ | | | | | 9.9 | 10 | | 10.0 |
| 1-5-07 | | | | | 0.65 | 1.0 | | 1.0 |
| ↓ | | | | | 9.35 | 10 | | 10.0 |
| 1-6-07 | | | | | .40 | 1.00 | | 1.0 |
| ↓ | | | | | 12 | 10 | | 10.0 |
| 1-7-07 | | | | | 0.75 | 1.00 | | 1.0 |
| ↓ | | | | | 11 | 10 | | 10.0 |
| 1-8-07 | | | | | 0.98 | .99 | | 1.0 |
| ↓ | | | | | 10.69 | 10.00 | | 10.0 |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: PID

MANUFACTURER: Micro TIP Perkin/Elmer

SERIAL NUMBER: C2 MF 309

Back Ground Cal Gas

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 9/6/06 | C2 MF 309 | G.N | 0 | 0 | 100.00 | 100 | | |
| 9/7/06 | 11 | G.N | 0 | 0 | 99.7 | 100. | | |
| 9/8/06 | | | | | | | | PID Not Working Shared w/ other Team unit 9-11-06 |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME: Site 4 RI

SITE NAME: Site 4 Saufley Field

PROJECT No.: 112G03389

INSTRUMENT NAME/MODEL: Microfid I/SX Trio

MANUFACTURER: Photovac

SERIAL NUMBER: CZNK315

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 6-4-07 | | C. Odom | | | 0.1 | 99.9 | | LTA057-mm-Cz |
| 6-5-07 | | C. Odom | | | 0.0 | 100.1 | | " |
| 6-6-07 | | C. Odom | | | 0.1 | 100.1 | | " |
| 6-7-07 | | C. Odom | | | 0.0 | 100.0 | | " |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME: Southfield RI

SITE NAME: Site 4

PROJECT No.: 112603389

INSTRUMENT NAME/MODEL: YSI 556 MPS

MANUFACTURER: YSI

SERIAL NUMBER: 05C1158 / 03C0005

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 6-12-07 | 05C1158 | C. Dolan | | | 3.91 | 3.99 | | pH 4.0 |
| 6- ↓ | | | | | 10.06 | 9.99 | | pH 10.0 |
| | | | | | 1.559 | 1.410 | | Conductivity |
| 6-13-07 | | | | | 4.00 | 3.99 | | pH 4.0 |
| | | | | | 10.04 | 10.01 | | pH 10.0 |
| | | | | | 1.295 | 1.410 | | conductivity |
| | | | | | | | | |
| 6-14-07 | | | | | 1.579 | 1.409 | | conductivity |
| | | | | | 4.06 | 3.97 | | pH 4.0 |
| | | | | | 9.95 | 9.99 | | pH 10.0 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| 6-12-07 | 05C005 | | | | 3.98 | 4.00 | | pH 4.0 |
| | | | | | 10.05 | 10.00 | | pH 10.0 |
| ↓ | | | | | 1.466 | 1.409 | | Conductivity |
| 6-13-07 | | | | | 3.96 | 3.99 | | pH 4.0 |
| | | | | | 10.05 | 10.00 | | pH 10.0 |
| ↓ | | | | | 1.266 | 1.411 | | Conductivity |
| ~~6-14-07~~ | | | | | | | | |
| 6-14-07 | | | | | 1.553 | 1.409 | | conductivity |
| | | | | | 4.06 | 3.99 | | pH 4.0 |
| | | | | | 9.98 | 9.99 | | pH 10.0 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME: Site 4 RI

SITE NAME: Site 41 Seneca

PROJECT No.: 112G00385

INSTRUMENT NAME/MODEL: Lamotte 2020e

MANUFACTURER: Lamotte

SERIAL NUMBER: U009894 / U51963A

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 6-12 | U51963A | | | | 1.01 | 1.00 | | 1.0 |
| | | | | | 10.0 | 10.0 | | 10.0 |
| 6-12 | U009894A | | | | 1.03 | 1.00 | | 1.0 |
| | | | | | 10.07 | 10.00 | | 10.0 |
| 6-13 | U51963A | | | | 1.28 | 1.00 | | 1.0 |
| | | | | | 10.44 | 10.01 | | 10.0 |
| 6-13 | U009894A | | | | 0.99 | 1.0 | | 1.0 |
| | | | | | 9.1 | 10.0 | | 10.0 |
| 6-14 | U51963A | | | | 9.75 | 10.04 | | 10.0 |
| | | | | | 1.37 | 1.01 | | 1.0 |
| 6-14 | U009894A | | | | 1.2 | 1.0 | | 1.0 |
| | | | | | 10. | 10 | | |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Micro FID 1/5

MANUFACTURER: PhotoVac

SERIAL NUMBER: CZJG317

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings (Background Air) | | Instrument Readings (Cal Gas) | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 9-11-06 | 02424 | [signature] | 0.0 | 0.0 | 44.2 | 100.8 | LTE106JCM | Methane 100ppm |
| 9-12-06 | " | [signature] | 0.0 | 0.0 | 100.2 | 100.2 | " | Exp. May 2009 |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: MicroFid

MANUFACTURER: Photovac

SERIAL NUMBER: 01297

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 9-6-06 | | C.Odom | | 102 | | | | clean air & methane cal |
| 9-7-06 | | C.Odom | | 104.5 | | | | " |
| 9-8-06 | | C.Odom | | 103.9 | | | | " |
| 9-9-06 | | C.Odom | | 98.7 | | | | " |
| 9-10-06 | | C.Odom | | 100.8 | | | | " |
| 9-11-06 | | C.Odom | | 99.2 | | | | " |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Lamotte 2020

MANUFACTURER: Lamotte

SERIAL NUMBER: 03326

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 1-4-07 | | | | | 0.85 | 1.0 | | 1.0 |
| ↓ | | | | | 10 | | | 10.0 |
| 1-5-07 | | | | | 0.97 | 1.0 | | 1.0 |
| ↓ | | | | | 11.1 | 10.0 | | 10.0 |
| 1-6-07 | | | | | .93 | 1.0 | | 1.0 |
| ↓ | | | | | 11.8 | 10.01 | | 10.0 |
| 1-7-07 | | | | | 0.95 | 1.0 | | 1.0 |
| ↓ | | | | | 10.06 | 10.01 | | 10.0 |
| 1-8-07 | | | | | .05 | 1.0 | | 1.0 |
| ↓ | | | | | 13 | 10 | | 10.0 |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Horiba U-22

MANUFACTURER: Horiba

SERIAL NUMBER: 206023

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-19-06 | | C. Dolan | | | 2.84 | 4.00 | | pH |
| ↓ | | | | | 5.01 | 4.50 | | cond |
| | | | | | 10.99 | 9.44 | | DO |
| 12-20-06 | | | | | 3.99 | 3.99 | | pH |
| ↓ | | | | | 4.32 | 4.49 | | cond |
| | | | | | 11.18 | 9.47 | | DO |
| 12-21-06 | | | | | 4.02 | 4.00 | | pH |
| ↓ | | | | | 4.47 | 4.49 | | cond |
| | | | | | 10.05 | 9.30 | | DO |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Horiba U-22

MANUFACTURER: Horiba

SERIAL NUMBER: 111078

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-19-06 | | | | | 3.10 | 4.00 | | pH |
| | | | | | 4.68 | 4.49 | | cond |
| | | | | | 11.59 | 9.65 | | DO |
| 12/20/06 | | | | | 4.18 | 3.99 | | pH |
| | | | | | 4.33 | 4.49 | | cond |
| | | | | | 9.76 | 9.75 | | DO |
| | | | | | 3.99 | 4.00 | | pH |
| | | | | | 4.55 | 4.49 | | cond |
| | | | | | 9.72 | 9.15 | | DO |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Lamotte 2020e

MANUFACTURER: Lamotte

SERIAL NUMBER: 10457

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-19-00 | | COC | | | 0.0 | 0.0 | | 0.0 |
| ↓ | | | | | 0.85 | 0.93 | | 1.0 |
| ↓ | | | | | 11.2 | 9.98 | | 10.0 |
| 12-20-00 | | | | | 0.0 | 0.0 | | 0.0 |
| ↓ | | | | | 0.98 | 0.99 | | 1.0 |
| ↓ | | | | | 10.43 | 10.01 | | 10.0 |
| 12-21-00 | | | | | 0.0 | 0.0 | | 0.0 |
| | | | | | 1.07 | 1.01 | | 1.0 |
| | | | | | 9.97 | 9.99 | | 10.0 |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: LaMotte 2020e

MANUFACTURER: LaMotte

SERIAL NUMBER: 1027C

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-19-00 | | C. Odell | | | 0.0 | 0.0 | | 0.0 |
| " | | | | | 0.96 | 1.02 | | 1.0 |
| ↓ | | | | | 11.3 | 9.98 | | 10.0 |
| 12-20-00 | | | | | 0.0 | 0.0 | | 0.0 |
| ↓ | | | | | 0.94 | 1.0 | | 1.0 |
| ↓ | | | | | 10.63 | 9.99 | | 10.0 |
| 12-21-00 | | | | | 0.0 | 0.0 | | 0.0 |
| ↓ | | | | | 0.92 | 1.01 | | 1.0 |
| ↓ | | | | | 11.2 | 9.98 | | 10.0 |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Horiba U-22

MANUFACTURER: Horiba

SERIAL NUMBER: D. 523

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 1-4-07 | | | | | 3.86 | ~~+0.24~~ 4.00 | | pH |
| ↓ | | | | | 4.59 | 4.50 | | cond |
| | | | | | 9.80 | 10.24 | | DO |
| 1-5-07 | | | | | 4.02 | 4.00 | | pH |
| ↓ | | | | | 4.50 | 4.49 | | cond |
| | | | | | 9.54 | 9.53 | | DO |
| 1-6-07 | | | | | 3.99 | 4.00 | | pH |
| ↓ | | | | | 4.44 | 4.49 | | cond |
| | | | | | 8.74 | 9.70 | | DO |
| 1-7-07 | | | | | 4.05 | 4.00 | | pH |
| ↓ | | | | | 4.58 | 4.49 | | cond |
| | | | | | 9.59 | 9.42 | | DO |
| 1-8-07 | | | | | 3.93 | 4.00 | | pH |
| ↓ | | | | | 4.38 | 4.51 | | cond |
| | | | | | 9.55 | 10.53 | | DO |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Horiba U-22

MANUFACTURER: Horiba

SERIAL NUMBER: 928045

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-5 | | C. Dam | | | 4.06 | 3.99 | | pH |
| ↓ | | | | | 0.55 | 0.47 | | cond |
| ↓ | | | | | 0 | 0 | | turb |
| ↓ | | | | | 11.88 | 12.56 | | DO |
| 12-6 | | | | | 3.98 | 4.01 | | pH |
| ↓ | | | | | 0.49 | 0.44 | | cond |
| ↓ | | | | | 1 | 0 | | turb |
| ↓ | | | | | 11.93 | 12.52 | | DO |
| 12-7 | | | | | 4.03 | 4.00 | | pH |
| ↓ | | | | | 0.49 | 0.44 | | cond |
| ↓ | | | | | 0 | 0 | | turb |
| ↓ | | | | | 12.71 | 12.55 | | DO |
| 12-8 | | | | | 4.01 | 3.99 | | pH |
| ↓ | | | | | 0.42 | 0.48 | | cond |
| ↓ | | | | | 0 | 0 | | turb |
| ↓ | | | | | 12.61 | 12.46 | | DO |
| 12-9 | | | | | 3.98 | 4.00 | | pH |
| ↓ | | | | | 0.45 | 0.46 | | cond |
| ↓ | | | | | 1 | 0 | | turb |
| ↓ | | | | | 12.37 | 12.63 | | DO |
| 12-10 | | | | | 3.96 | 4.00 | | pH |
| ↓ | | | | | 0.47 | 0.46 | | cond |
| ↓ | | | | | 0 | 0 | | turb |
| ↓ | | | | | 11.95 | 11.57 | | DO |
| 12-11 | | | | | 4.10 | 3.99 | | pH |
| ↓ | | | | | 0.44 | 0.45 | | cond |
| ↓ | | | | | 2 | 0 | | turb |
| ↓ | | | | | 11.35 | 10.58 | | DO |
| 12-12 | | | | | 4.03 | 4.00 | | pH |
| ↓ | | | | | 0.45 | 0.45 | | cond |
| ↓ | | | | | 3 | 0 | | turb |
| ↓ | | | | | 9.22 | 9.06 | | DO |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: MicroFID I/S Eagle Instr.

MANUFACTURER: PE Photovac

SERIAL NUMBER: CZ EF216

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings (Kit) | | Instrument Readings (Methane) | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-5-06 | CZ EF216 | [signature] | 0.0 | 0.0 | 97.8 | 94.9 | LTH262 CR | 95ppm Methane |
| 12-6-06 | " | [signature] | 0.0 | 0.0 | 96.0 | 95.0 | " | " |
| 12-7-06 | " | " | 0.0 | 0.0 | 96.0 | 95.9 | " | " |
| 12-13-06 | " | " | 0.0 | 0.0 | 95.8 | 95.8 | " | " |
| 12-14-06 | " | " | 6.9 | 0.0 | 26.3 | 94.9 | " | " |
| 12-15-06 | " | " | 1.3 | 0.0 | 102.10 | 95.0 | " | " |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: MiniRAE 2000

MANUFACTURER: ~~Mini~~ Ray Systems

SERIAL NUMBER: PGM 7600 110-011534

Pine 06473

Air Isobutylene

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 11-29-06 | 06473 | Stacy J. Davis | 0.0 | 0.0 | 98.0 | 99.1 | 100ppm Lot LTH236-M-CM | |
| 11-30-06 | " | " | 0.0 | 0.0 | 83.1 | 100 | " | " |
| 12-1-06 | " | " | 0.3 | 0.2 | 124 | 100 | " | " |
| 12-2-06 | " | " | 0.4 | 0.3 | 141 | 98.5 | " | " |
| 12-3-06 | " | " | 0.2 | 0.0 | 111 | 100 | " | " |
| 12-4-06 | " | " | 0.2 | 0.0 | 89.5 ~~98.2~~ | 100 | " | " |

Tetra Tech NUS, Inc.

# EQUIPMENT CALIBRATION LOG

PROJECT NAME : Saufley Field

SITE NAME: Site 4

PROJECT No.: 112G00389

INSTRUMENT NAME/MODEL: Horiba Model U-2000

MANUFACTURER: Horiba

SERIAL NUMBER: T101001

| Date of Calibration | Instrument I.D. Number | Person Performing Calibration | Instrument Settings | | Instrument Readings | | Calibration Standard (Lot No.) | Remarks and Comments |
|---|---|---|---|---|---|---|---|---|
| | | | Pre-calibration | Post-calibration | Pre-calibration | Post-calibration | | |
| 12-2-06 | 03828 | Gary J. Davis | 3.92 | 4.01 | 0.000 | (illegible) | 5432 | DO 11.64 pH 8.3 NTU (0.0) Temp °C 8.99 ORP |
| 12-3-06 | " | Gary J. Davis | 4.25 | | 0.001 | | " | 11.58 27 9.05 |
| " | " | " | 4.42 | 4.38 | 0.005 | 0.004 | " | 9.94 59.2 (41.8) 16.00 245 23 |
| 12-16-06 | " | " | 4.51 | 4.49 | 0.002 | 0.002 | " | 9.74 56A 56 9.4 176 |
| 12-17-06 | " | " | 4.52 | | 0.001 | | ~~57.4~~ 5432 | 11.22 57.4 (0.4) 12.47 218 |
| | | | | | | | | ← Error 6 |

Is cloudy w/ mold? growth?

Auto CAL soln. 4.0 pH 0.0 NTU. 4.49 mS/cm Lot #5432 exp. 9-19-07

**TETRA TECH NUS, INC.** **CHAIN OF CUSTODY** | NUMBER 2813 | PAGE 1 OF ____

| | | | | | |
|---|---|---|---|---|---|
| PROJECT NO: 112G00389 | FACILITY: Southley Site A | PROJECT MANAGER: Gerry Walker | PHONE NUMBER: 850-385-9899 | LABORATORY NAME AND CONTACT: Empirical Laboratories / Marcia McGinnity | |
| SAMPLERS (SIGNATURE): Gary J. Davis | | FIELD OPERATIONS LEADER: Gary J. Davis | PHONE NUMBER: 404-642-9470 cell | ADDRESS: 227 French Landing Dr / Ste 550 | |
| | | CARRIER/WAYBILL NUMBER | | CITY, STATE: Nashville, TN 37228 | |

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G / G / G / G / G / G / P / P / G
PRESERVATIVE USED: 4°C / 4° / 4°C / 4°C / 4°C / 4°C / HNO3 / NaOH / HCl

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | TAL Metals | SPLP TAL Metals | 8270 Low Conc | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 Tal metals | 9012 Cyanide | 8011 VOA | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~12/5~~ | ~~1605~~ | ~~OLFS4-MW-21S-20'~~ | ~~MW21~~ | ~~19~~ | ~~20~~ | ~~SO~~ | ~~G~~ | ~~1~~ | 1 | | | | | | | | | Extract for SPLP |
| 12/6 | 0930 ~~1400?~~ | OLFS4-MW-25S-10' | MW25 | 9 | 10 | SO | G | 2 | ~~12~~ 1 | 1 | Changed to 27S | | | | | | | but hold pending |
| 12/6 | 1000 | OLFS4-MW-25S-45' | MW25 | 44 | 45 | SO | G | 2 | ~~12~~ 1 | 1 | | | | | | | | TAL analysis to |
| 12/6 | 1300 | OLFS4-MW06S-001 | MW06S | | | GW | G | [illegible] | | | 2 | 2 | 1 | 2 | 1 | 1 | 3 | determine any |
| 12/6 | | Trip Blank 4306 | | | | GW | G | 2 | | | | | | | | | 2 | exceedances. |
| 12/6 | 1700 | OLFS4-MW03S-001 | MW03S | | | GW | G | 12 | | | 2 | 2 | 1 | 2 | 1 | 1 | 3 | |
| 12/6 | 1700 | OLFS4-MW03S-001-MS | MW03S | | | GW | G | 12 | | | 2 | 2 | 1 | 2 | 1 | 1 | 3 | |
| 12/6 | 1700 | OLFS4-MW03S-001-MSD | MW03S | | | GW | G | 12 | | | 2 | 2 | 1 | 2 | 1 | 1 | 3 | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY: Gary J. Davis | DATE 12-6-06 | TIME 1630 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2814 | **PAGE** ___ **OF** ___

| | | | |
|---|---|---|---|
| **PROJECT NO:** 112G00389 | **FACILITY:** Savannah River Site | **PROJECT MANAGER** Gerry Walker | **PHONE NUMBER** 850-385-9899 |
| **SAMPLERS (SIGNATURE)** | | **FIELD OPERATIONS LEADER** Gary J Davis | **PHONE NUMBER (Cell)** 404-642-9470 |
| | | **CARRIER/WAYBILL NUMBER** | |

**LABORATORY NAME AND CONTACT:** Marcia Enviro Tech Laboratories / Mr. Gowity
**ADDRESS** 227 French Landing Dr suite 550
**CITY, STATE** Nashville, TN 37228

**STANDARD TAT** ☐
**RUSH TAT** ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | | | PRESERVATIVE USED | | | | | | | | TYPE OF ANALYSIS | | | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | G | G | G | P | P | G | G | | 4C | 4C | 4C | 4C | $HNO_3$ | NaOH | HCl | HCl | | | | | | | | |
| 12-7 | 1200 | OLFS4-MW085-001 | MW085 | | | GW | G | 15 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | | | 8270 low conc | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL metals | 9012 Cyanide | 8011 EDB | 8260 BTEX | |
| 12-7 | 1200 | OLFS4-MW085-001-D | MW085 | | | GW | G | 15 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | | | | | | | | | | |
| 12-7 | | Tr. Blank 4309 | | | | QC | | 2 | | | | | | | 2 | | | | | | | | | | | | | | | | | | |
| 12-7 | 1730 | OLFS4 MW055-001 | MW055 | | | GW | G | 15 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | | | | | | | | | | |
| 12-7 | 1600 | OLSF4-MW-165-001 | MW165 | | | GW | G | 15 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | | | | | | | | | | |
| 12-7 | 1600 | OLSF4-MW-195-001 | MW195 | | | GW | G | 12 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY | | DATE 12-7-06 | TIME 1830 | 1. RECEIVED BY | DATE / TIME |
| 2. RELINQUISHED BY | | DATE | TIME | 2. RECEIVED BY | DATE / TIME |
| 3. RELINQUISHED BY | | DATE | TIME | 3. RECEIVED BY | DATE / TIME |

**COMMENTS**

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

**TETRA TECH NUS, INC.** — **CHAIN OF CUSTODY** | NUMBER 2815 | PAGE 1 OF 1

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 112G00389 | FACILITY: Saufley Site 4 | PROJECT MANAGER: Gerry Walker | PHONE NUMBER: 850-385-9899 | LABORATORY NAME AND CONTACT: Empirical Lab / Marcia McGinnity |
| SAMPLERS (SIGNATURE): Gary J. Davis | | FIELD OPERATIONS LEADER: Gary J. Davis | PHONE NUMBER: 404-642-9470 | ADDRESS: 227 French Landing Dr - Ste 550 |
| | | CARRIER/WAYBILL NUMBER | | CITY, STATE: Nashville, TN 37228 |

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | CONTAINER TYPE PLASTIC (P) or GLASS (G) | P/G | P/G | G | G | G | | | | |
| | | | | | | | | PRESERVATIVE USED | H2O-MeOH +4°C | Without MeOH +4°C | 4°C | 4°C | 4°C | | | | |
| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | TYPE OF ANALYSIS: TCL VOCs + App IX | SPLP TCL VOCs + App IX | TCL SVOCs + App IX, PCBs, TRPH, TAL Metals | SPLP TCL SVOCs + App IX + TRPH, TAL Metals | TAL Metals | SPLP TAL Metals | | | COMMENTS |
| 12-7 | 1025 | OLF54-MW25-S-10' | MW25 | – | 10 | SO | G | 2 | | | | | 1 | 1 | | | |
| 12-7 | 1055 | OLF54-MW25-S-40' | MW25 | – | 40 | SO | G | 12 | 4 | 4 | 2 | 2 | | | | | |
| 12-7 | 1346 | OLF54-MW26-S-25' | MW26 | – | 25 | SO | G | 6 | 4 | | 2 | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY Gary J. Davis | DATE | TIME | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2817 | **PAGE** ___ **OF** ___

| | | | | |
|---|---|---|---|---|
| **PROJECT NO:** 112G00389 | **FACILITY:** Sawley Site 41 | **PROJECT MANAGER** Gary Wallace | **PHONE NUMBER** 850-385-9899 | **LABORATORY NAME AND CONTACT:** Empirical Laboratories, Marcia McGuire |
| **SAMPLERS (SIGNATURE)** | | **FIELD OPERATIONS LEADER** Gary S. Davis | **PHONE NUMBER** 404-642-9470 | **ADDRESS** 227 French Landing Dr, Ste 550 |
| | | **CARRIER/WAYBILL NUMBER** 8592 3079 9187 | | **CITY, STATE** Nashville, TN 37228 |

**STANDARD TAT** ☒
**RUSH TAT** ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | PRESERVATIVE USED | TYPE OF ANALYSIS: TAL metals | 8270 low conc | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL metals | 9012 Cyanide | 8011 EDBE CO | 8260B VOCs | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | 4°C | | | | | | | | | | |
| | | | | | | | | | G | 4°C | | | | | | | | | | |
| | | | | | | | | | G | 4°C | | | | | | | | | | |
| | | | | | | | | | G | 4°C | | | | | | | | | | |
| | | | | | | | | | G | 4°C | | | | | | | | | | |
| | | | | | | | | | P | HNO3 | | | | | | | | | | |
| | | | | | | | | | P | NaOH | | | | | | | | | | |
| | | | | | | | | | G | HCl | | | | | | | | | | |
| | | | | | | | | | G | HCl | | | | | | | | | | |
| 12/5 | 1605 | DLFS4-MW24S-20' | MW24 | 19' | 20' | SO | G | 1 | 1 | | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | |
| | | Trip Blank (4305) | | | | | | | | | | | | | | | | 2 | | |
| 12/8 | 1600 | DLFS4-MWD7S-001 | MWD7S | | | GW | G | 5 | | | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY | | DATE 12-8-06 | TIME 1830 | 1. RECEIVED BY | DATE / TIME |
| 2. RELINQUISHED BY | | DATE | TIME | 2. RECEIVED BY | DATE / TIME |
| 3. RELINQUISHED BY | | DATE | TIME | 3. RECEIVED BY | DATE / TIME |

**COMMENTS**

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2818 | **PAGE** 1 **OF** 1

| | | | |
|---|---|---|---|
| **PROJECT NO:** 112G00389 | **FACILITY:** Sanford Site 4 | **PROJECT MANAGER** Gerry Walker | **PHONE NUMBER** 850-385-9899 |
| **SAMPLERS (SIGNATURE)** Gary J. Davis | | **FIELD OPERATIONS LEADER** Gary J. Davis | **PHONE NUMBER** 404-642-9470 |
| | | **CARRIER/WAYBILL NUMBER** 8425.9627.9707 | |

**LABORATORY NAME AND CONTACT:** Empirical Lab / Marcia McGinnity
**ADDRESS** 227 French Landing Dr. Ste 550
**CITY, STATE** Nashville, TN 37228

**STANDARD TAT** [X]
**RUSH TAT** [ ] 24 hr. [ ] 48 hr. [ ] 72 hr. [ ] 7 day [ ] 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | P/G | G | | | | | | | |
| | | | | | | | | | PRESERVATIVE USED | | 4°C MeOH | 4°C | 4°C | | | | |
| | | | | | | | | | TYPE OF ANALYSIS | | TCL VOCs + App IX | TCL SVOCs + App IX TOPH | TAL Metals | | | | |
| 12-14 | 1120 | OLFS4-MW33S-5' | MW-33 | 4' | 5' | SO | G | 6 | 4 | 2 | | | | | | | Screened 2.2 ppm |
| 12-14 | 1135 | OLFS4-MW33S-26' | MW-33 | 25' | 26' | SO | G | 6 | 4 | 2 | | | | | | | Screened 75 ppm |
| 12-14 | 1340 | OLFS4-MW35S-29' | MW-35 | 28' | 29 | SO | G | 6 | 4 | 2 | | | | | | | Screened = 117 ppm |
| 12-14 | 1510 | OLFS4-MW36S-25' | MW36 | 24' | 25' | SO | G | 6 | 4 | 2 | | | | | | | Screened = 150 ppm |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

| | DATE | TIME | | DATE | TIME |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY Gary J. Davis | 12-14-06 | 1730 | 1. RECEIVED BY | | |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

**COMMENTS**

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2819 | **PAGE** 1 **OF** 1

| | | | | |
|---|---|---|---|---|
| **PROJECT NO:** 112G00389 | **FACILITY:** Swafley Site 4 | **PROJECT MANAGER** Gerry Walker | **PHONE NUMBER** 850-385-9899 | **LABORATORY NAME AND CONTACT:** Empirical Laboratories/Marcia McGinnity |
| **SAMPLERS (SIGNATURE)** | | **FIELD OPERATIONS LEADER** Gary J. Davis | **PHONE NUMBER** 404-642-9470 | **ADDRESS** 227 French Landing Dr. Ste 350 |
| | | **CARRIER/WAYBILL NUMBER** | | **CITY, STATE** Nashville, TN 37228 |

**STANDARD TAT** [X]
**RUSH TAT** [ ] [ ] 24 hr. [ ] 48 hr. [ ] 72 hr. [ ] 7 day [ ] 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | P/G | G | G | G | | | | | | |
| | | | | | | | | | PRESERVATIVE USED | Preservation +4°C | 4°C | 4°C | 4°C | | | | | |
| | | | | | | | | | TYPE OF ANALYSIS | TCL VOCs + App IX | TCL SVOCs + App IX + TPH + TAL Metals | TAL Metals | SPLP TAL Metals | | | | | |
| 12/15 | 0850 | OLFS4-SB2-S-10' | SB2 | 9 | 10' | SO | G | ~~2~~ 1 | | | 1 | | | | | | | Do SPLP extraction and hold pending analysis to see if exceedances. |
| 12/15 | 0855 | OLFS4-SB2-S-26' | SB2 | 25 | 26 | SO | G | 6 | 4 | 2 | | | | | | | | |
| 12/15 | 0925 | OLFS4-SB3-S-10' | SB3 | 9 | 10 | SO | G | 1 | | | 1 | | | | | | | |
| 12/15 | 0930 | OLFS4-SB3-S-26' | SB3 | 25 | 26 | SO | G | 6 | 4 | 2 | | | | | | | | |
| 12/15 | 1055 | OLFS4-SB4-S-10' | SB4 | 9 | 10 | SO | G | 1 | | | 1 | | | | | | | |
| 12/15 | 1110 | OLFS4-SB4-S-45' | SB4 | 44 | 45 | SO | G | 1 | | | 1 | | | | | | | |
| 12/15 | 1130 | OLFS4-SB5-S-10' | SB5 | 9 | 10 | SO | G | 1 | | | 1 | | | | | | | |
| 12/15 | 1145 | OLFS4-SB5-S-45' | SB5 | 44 | 45 | SO | G | 1 | | | 1 | | | | | | | |
| 12/15 | 1320 | OLFS4-SB6-S-16' | SB6 | 15 | 16 | SO | G | 6 | 4 | 2 | | | | | | | | |
| 12/15 | 1410 | OLFS4-SB7-S-12' | SB7 | 11 | 12 | SO | G | 2 | | | 1 | 1 | | | | | | |
| 12/15 | 1440 | OLFS4-SB8-S-12' | SB8 | 11 | 12 | SO | G | 2 | | | 2 | | | | | | | |
| 12/15 | 1610 | Trip Blank 4307 | — | — | — | QC | G | 2 | 2 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY Gary J. Davis | DATE 12-15-06 | TIME 1400 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |
| COMMENTS | | | | | |

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

# EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

40985

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

| Send Results to: | Send Invoice to: |
|---|---|
| Name Gary Walker | Name |
| Company Tetra Tech NUS | Company |
| Address 5360 Capital Circle NE Ste 8 | Address |
| City Tallahassee | City |
| State, Zip FL 32308 | State, Zip |
| Phone 850 385-9899 | Phone |
| Fax | Fax |
| E-mail gary.walker@tetratech.com | E-mail |
| **Project No./Name:** 112 G00389 | **Sampler's (Signature):** |

**Analysis Requirements:**

8270 PAH
8270 SVOC
8082 PCB
FL-PRO
6010/7470 TAL metals
9012 Cyanide
8011 EDB
8260B VOC

**Lab Use Only:**

| | | | |
|---|---|---|---|
| VOA Headspace | Y | N | NA |
| Field Filtered | Y | N | NA |
| Correct Containers | Y | N | NA |
| Discrepancies | Y | N | NA |
| Cust. Seals Intact | Y | N | NA |
| Containers Intact | Y | N | NA |

Airbill #:

CAR #:

| Lab Use Only Lab # | Date/Time Sampled | Sample Description | Sample Matrix | 8270 PAH | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL metals | 9012 Cyanide | 8011 EDB | 8260B VOC | Comments | No. of Bottles | Lab Use Only Containers/Pres. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-5-07 1145 | OLFS4-MW29D-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | 15 | |
| | 1-5-07 1110 | OLFS4-MW32S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | 15 | |
| | | tip blank (4313) | | | | | | | | | 2 | | 2 | |
| | 1-4-07 1620 | OLFS4-MW26D-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | 15 | |
| | 1-5-07 1445 | OLFS4-MW36S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | 15 | |
| | 1-5-07 1515 | OLFS4-MW31S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | 15 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Sample Kit Prep'd by: (Signature) | Date/Time | Received By: (Signature) | REMARKS: |
| Relinquished by: (Signature) | Date/Time 1-5-07 1830 | Received By: (Signature) | |
| Relinquished by: (Signature) | Date/Time | Received By: (Signature) | |
| *Received for Laboratory by: (Signature)* | Date/Time | *Temperature* | |

Details:

Page ____ of ____

Cooler No. ____ of ____

Date Shipped ____

Shipped By ____

Turnaround ____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

# EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

40969

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

| Send Results to: | Send Invoice to: Same as left |
|---|---|
| Name: Gerry Weller | Name: |
| Company: Tetra Tech NUS | Company: |
| Address: 3354 Apalachee Pkwy NE Ste B | Address: |
| City: Tallahassee | City: |
| State, Zip: FL 32308 | State, Zip: |
| Phone: (850) 385 9899 | Phone: |
| Fax: | Fax: |
| E-mail: gerry.weller@ttnus.com | E-mail: |
| Project No./Name: 112G00389 / Sutherland | Sampler's (Signature): |

**Analysis Requirements:**

| Lab Use Only Lab # | Date/Time Sampled | Sample Description | Sample Matrix | 8270 PAH | 8260 SVOC | 8082 PCB | FL-PRO | Gold/Hg/TAL metals | 9012 Cyanide | 8011 EDB | 8260B VOC | | | | | | Comments | No. of Bottles | Lab Use Only Containers/Pres. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-6-07 1115 | OLFS4-MW02D-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-6-07 1040 | OLFS4-MW01D2-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-6-07 1520 | OLFS4-MW25S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-6-07 1430 | OLFS4-MW09S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-6-07 1625 | OLFS4-MW24S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-7-07 1122 | OLFS4-MW27S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-7-07 1100 | OLFS4-MW21S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-9-07 1541 | OLFS4-MW14D-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-8-07 1035 | OLFS4-MW35S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-8-07 1050 | OLFS4-MW35S-001-D | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-8-07 1015 | OLFS4-MW34S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 1-8-07 1230 | OLFS4-MW28S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |

**Lab Use Only:**

| | | | |
|---|---|---|---|
| VOA Headspace | Y | N | NA |
| Field Filtered | Y | N | NA |
| Correct Containers | Y | N | NA |
| Discrepancies | Y | N | NA |
| Cust. Seals Intact | Y | N | NA |
| Containers Intact | Y | N | NA |

Airbill #:

CAR #:

| Sample Kit Prep'd by: (Signature) | Date/Time | Received By: (Signature) |
|---|---|---|
| Relinquished by: (Signature) | Date/Time 1-8-07 1450 | Received By: (Signature) |
| Relinquished by: (Signature) | Date/Time | Received By: (Signature) |
| *Received for Laboratory by: (Signature)* | Date/Time | *Temperature* |

REMARKS: Trip Blank 3011 for VOCs included

Details:

Page ____ of ____

Cooler No. ____ of ____

Date Shipped ____

Shipped By ____

Turnaround ____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

# EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

40601

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

| Send Results to: | Send Invoice to: |
|---|---|
| Name Sally Walker | Name |
| Company Tetra Tech NUS | Company |
| Address 3360 Capital Circle NE Ste B | Address |
| City Tallahassee | City |
| State, Zip FL 32308 | State, Zip |
| Phone (850) 385 9999 | Phone |
| Fax | Fax |
| E-mail sally.walker@tnus.com | E-mail |
| **Project No./Name:** 112600389 | **Sampler's (Signature):** |

**Lab Use Only:**

| | | | |
|---|---|---|---|
| VOA Headspace | Y | N | NA |
| Field Filtered | Y | N | NA |
| Correct Containers | Y | N | NA |
| Discrepancies | Y | N | NA |
| Cust. Seals Intact | Y | N | NA |
| Containers Intact | Y | N | NA |

Airbill #: 8595 5351 4490

CAR #:

| Lab Use Only Lab # | Date/Time Sampled | Sample Description | Sample Matrix | 8270 PAH | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL metals | 9012 Cyanide | 8011 EDB | 8260B VOCs | | | | | | | Comments | No. of Bottles | Lab Use Only Containers/Pres. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1-4-07 1245 | OLFS4-MW15S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | 15 | |
| | 1-4-07 1245 | OLFS4-MW04D-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | 15 | |
| | 1-4-07 1245 | OLFS4-MW04D-001-MS | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | 15 | |
| | 1-4-07 1245 | OLFS4-MW04D-001-MSD | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | 15 | |
| | | trip blank (4312) | | | | | | | | | 2 | | | | | | | | 2 | |
| | 1-4-07 1600 | OLFS4-MW30S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | hotel | 15 | |
| | 1-4-07 1600 | OLFS4-MW33S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | | 15 | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |

| | | |
|---|---|---|
| Sample Kit Prep'd by: (Signature) | Date/Time | Received By: (Signature) |
| Relinquished by: (Signature) | Date/Time 1-4-07 1630 | Received By: (Signature) |
| Relinquished by: (Signature) | Date/Time | Received By: (Signature) |
| *Received for Laboratory by: (Signature)* | Date/Time | *Temperature* |

REMARKS:

MW30S had strong petrol odor. Do last

Details:

Page ____ of ____

Cooler No. ____ of ____

Date Shipped ____

Shipped By ____

Turnaround ____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

# EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

**SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426**

40972

| **Send Results to:** | **Send Invoice to:** |
|---|---|
| Name Gerry Walker | Name |
| Company Tetra Tech NUS | Company |
| Address 3320 Capital Circle NE ste B | Address |
| City Tallahassee | City |
| State, Zip FL, 32308 | State, Zip |
| Phone (850) 570-1818 | Phone |
| Fax | Fax |
| E-mail g.j.walker@ttnus.com | E-mail |
| **Project No./Name:** | **Sampler's (Signature):** |

**Analysis Requirements:**

8270 low conc. PAH | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL mets | 9012 cyanide | 8011 EDB | 8260B VOC

**Lab Use Only:**

| | | | |
|---|---|---|---|
| VOA Headspace | Y | N | NA |
| Field Filtered | Y | N | NA |
| Correct Containers | Y | N | NA |
| Discrepancies | Y | N | NA |
| Cust. Seals Intact | Y | N | NA |
| Containers Intact | Y | N | NA |

Airbill #:

CAR #:

| *Lab Use Only* Lab # | Date/Time Sampled | Sample Description | Sample Matrix | 8270 low conc. PAH | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL mets | 9012 cyanide | 8011 EDB | 8260B VOC | | | | | | Comments | No. of Bottles | *Lab Use Only* Containers/Pres. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 12-20-06 0915 | OLFS4-MW10D-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 12-20-06 1115 | OLFS4-MW11S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 12-20-06 1000 | OLFS4-MW13S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | | Trip Blank (4310) | | | | | | | | | 2 | | | | | | | | |
| | 12-20-06 1420 | OLFS4-MW20S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | | | | | | 15 | |
| | 12-20-06 | OLFS4-MW27S-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | 10 | | | | | | 15 | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Sample Kit Prep'd by: (Signature) | Date/Time | Received By: (Signature) | REMARKS: |
| Relinquished by: (Signature) | Date/Time 12-20-06 1830 | Received By: (Signature) | |
| Relinquished by: (Signature) | Date/Time | Received By: (Signature) | |
| *Received for Laboratory by: (Signature)* | Date/Time | *Temperature* | |

**Details:**

Page ____ of ____

Cooler No. ____ of ____

Date Shipped ____

Shipped By ____

Turnaround ____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

# EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

40971

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

| Send Results to: | Send Invoice to: Same as results |
|---|---|
| Name Gerry Walker | Name |
| Company Tetra Tech NUS | Company |
| Address 3560 Thomasville Rd Suite 8 | Address |
| City Tallahassee | City |
| State, Zip Florida, 32308 | State, Zip |
| Phone (850) 385-9899 | Phone |
| Fax | Fax |
| E-mail gerry.walker@tetratech.com | E-mail |
| Project No./Name: | Sampler's (Signature): |

**Analysis Requirements:**

8270 Low Conc (SIM) | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL metals | 9012 Cyanide | 8011 EDB | 8260B VOC

**Lab Use Only:**

| | | | |
|---|---|---|---|
| VOA Headspace | Y | N | NA |
| Field Filtered | Y | N | NA |
| Correct Containers | Y | N | NA |
| Discrepancies | Y | N | NA |
| Cust. Seals Intact | Y | N | NA |
| Containers Intact | Y | N | NA |

Airbill #:

CAR #:

| Lab Use Only Lab # | Date/Time Sampled | Sample Description | Sample Matrix | 8270 Low Conc (SIM) | 8270 SVOC | 8082 PCB | FL-PRO | 6010/7470 TAL metals | 9012 Cyanide | 8011 EDB | 8260B VOC | Comments | No. of Bottles | Lab Use Only Containers/Pres. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 12-21-09 1100 | DLFSG-MW185-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 3 | | 15 | |
| | | Trip Blank (4308) | | | | | | | | | 2 | | 2 | |
| | 12-21-09 1245 | DLFSG-MW175-001 | GW | 2 | 2 | 1 | 2 | 1 | 1 | 3 | 3 | | 15 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Sample Kit Prep'd by: (Signature) | Date/Time | Received By: (Signature) | REMARKS: |
| Relinquished by: (Signature) | Date/Time 12-21-09 | Received By: (Signature) | |
| Relinquished by: (Signature) | Date/Time | Received By: (Signature) | |
| *Received for Laboratory by: (Signature)* | Date/Time | *Temperature* | |

Details:

Page ____ of ____

Cooler No. ____ of ____

Date Shipped ____

Shipped By ____

Turnaround ____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2805 | **PAGE** 1 **OF** 2

| | | | |
|---|---|---|---|
| **PROJECT NO:** 112G00389 | **FACILITY:** Sanfley Site 4 | **PROJECT MANAGER** Gerry Walker | **PHONE NUMBER** 850-385-7899 |
| **SAMPLERS (SIGNATURE)** Gary J Davis | | **FIELD OPERATIONS LEADER** Gary J. Davis | **PHONE NUMBER** 404 642-9470 cell |
| | | **CARRIER/WAYBILL NUMBER** 842596279659 | |
| **LABORATORY NAME AND CONTACT:** Empirical Laboratories / Marcia McGimmity | | | |
| **ADDRESS** 227 French Landing Dr., Ste 550 | | | |
| **CITY, STATE** Nashville, TN 37228 | | | |

**STANDARD TAT** ☒ **RUSH TAT** ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | TYPE OF ANALYSIS: 8260B BTEX+MTBE | PAHs | TRPH | PPL VOHs, BTEX, MTBE, 8260B | PCBs | Total Metals AS,CD,CR,PB | PCBs, TRPH, Total Metals AS,Cd,Cr,Pb | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **CONTAINER TYPE PLASTIC (P) or GLASS (G)** | | | | | | | P+G | G | G | P+G | G | G | G | |
| | | **PRESERVATIVE USED** | | | | | | | MeOH/H2O/4°C | 4°C | 4°C | MeOH/H2O/4°C | 4°C | 4°C | 4°C | |
| 9/6 | 1220 | OLFS4-DP1-S20 | DP1 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/6 | 1315 | OLFS4-DP-2-S20 | DP2 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/6 | 1530 | OLFS4-DP-3-S20 | DP3 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/6 | 1620 | OLFS4-DP4-S20 | DP4 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/6 | 1730 | OLFS4-DP5-S20 | DP5 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/7 | 0845 | OLFS4-DP6-S20 | DP6 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/7 | 0930 | OLFS4-DP7-S20 | DP7 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/7 | 1025 | OLFS4-DP8-S20 | DP8 | 18 | 20 | SO | C | 8 | | 1 | 1 | 4 | 1 | 1 | | |
| 9/7 | 1140 | OLFS4-DP9-S20 | DP9 | 18 | 20 | SO | C | 6 | | 1 | | 4 | | | 1 | |
| 9/7 | 1535 | OLFS4-DP10-S20 | DP10 | 18 | 20 | SO | C | 6 | | 1 | | 4 | | | 1 | |
| 9/7 | 1615 | OLFS4-DP11-S20 | DP11 | 18 | 20 | SO | C | 6 | 4 | 1 | 1 | | | | | |
| 9/7 | 1650 | OLFS4-DP12-S20 | DP12 | 18 | 20 | SO | C | 6 | | 1 | | 4 | | | 1 | |
| / | / | OLFS4-TB2 | / | / | / | / | / | 2 | | | | 2 | | | | |

| | | | |
|---|---|---|---|
| 1. RELINQUISHED BY Gary J Davis | DATE 9-7-06 | TIME 1630 | 1. RECEIVED BY |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2806 | **PAGE** 2 **OF** 2

| | | | | |
|---|---|---|---|---|
| **PROJECT NO:** 112Gnn389 | **FACILITY:** Sanford Site 4 | **PROJECT MANAGER** Gerry Walker | **PHONE NUMBER** 850-385-9899 | **LABORATORY NAME AND CONTACT:** Empirical Laboratories / Marcia McGinnity |
| **SAMPLERS (SIGNATURE)** Gary J. Davis | | **FIELD OPERATIONS LEADER** Gary J. Davis | **PHONE NUMBER** 404-642-9470 cell | **ADDRESS** 227 French Landing Dr., Ste 550 |
| | | **CARRIER/WAYBILL NUMBER** 8425 9627 9659 | | **CITY, STATE** Nashville, TN 37228 |

**STANDARD TAT** [X]
**RUSH TAT** [ ]
[ ] 24 hr. [ ] 48 hr. [ ] 72 hr. [ ] 7 day [ ] 14 day

| DATE YEAR | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G): G | PRESERVATIVE USED: HCl | TYPE OF ANALYSIS: PPL VOHs, BTEX+MTBE 8260B | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | ✓ | OLFS4-TB3 | ✓ | ✓ | ✓ | ✓ | ✓ | 2 | 2 | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY Gary J. Davis | DATE 9-7-06 | TIME 1630 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2683 | PAGE ___ OF ___

| | | | |
|---|---|---|---|
| PROJECT NO: 112G06387 | FACILITY: Site 4 Sawtelle | PROJECT MANAGER: Gerry Walker | PHONE NUMBER: 850-3859899 |
| SAMPLERS (SIGNATURE) | | FIELD OPERATIONS LEADER: Gary Davis | PHONE NUMBER: 4046429470 |
| | | CARRIER/WAYBILL NUMBER: 842596279659 | |

LABORATORY NAME AND CONTACT: Empirical Laboratories / Marcia McGinity
ADDRESS: 227 Franklin Parkway, Drive Suite 550
CITY, STATE: Nashville, TN

STANDARD TAT ☑
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | PRESERVATIVE USED | TYPE OF ANALYSIS: BTEX+MTBE | PAH | FL-PRO | PP VOA, BTEX, MTBE | PCB, PAH, FL-PRO | As, Cd, Cr, Pb | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | G | G | G | G | G | | | |
| 9-6 | 1340 | OLFS4-DP16-S6 | | 4' | 6' | Soil | G | 6 | 4 | | 1 | 1 | | | | | |
| 9-6 | 1530 | OLFS4-DP17-S10 | | 8' | 10' | Soil | G | 6 | 4 | | 1 | 1 | | | | | |
| 9-6 | 1645 | OLFS4-DP18-S6 | | 4' | 6' | Soil | G | 6 | 3 | | 1 | 1 | 1 | | | | |
| 9-6 | 1755 | OLFS4-DP19-S12 | | 10' | 12' | Soil | G | 6 | 4 | | 1 | 1 | | | | | |
| 9-7 | 1000 | OLFS4-DP20-S10 | | 8' | 10' | Soil | G | 6 | 4 | | 1 | 1 | | | | | |
| 9-7 | 1100 | OLFS4-DP21-S10 | | 8' | 10' | Soil | G | 6 | 4 | | 1 | 1 | | | | | |
| 9-7 | 1210 | OLFS4-DP22-S18 | | 16' | 18' | Soil | G | 6 | 3 | | | | 1 | 1 | 1 | | |
| 9-7 | 1530 | OLFS4-DP23-S8 | | 6' | 8' | Soil | G | 6 | 4 | | 1 | 1 | | | | | |
| 9-7 | 1705 | OLFS4-DP24-S8 | | 6' | 8' | Soil | G | 6 | 3 | | | | 1 | 1 | 1 | | |
| 9-6 | 1340 | OLFS4-TB01 | | — | — | QA | C | 2 | | | | | 2 | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY | DATE 9-7-06 | TIME 1830 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |
| COMMENTS | | | | | |

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2807 | PAGE 1 OF 1

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 112G00389 | FACILITY: Sanfley Site 4 | PROJECT MANAGER Gerry Walker | PHONE NUMBER 850-385-9899 | LABORATORY NAME AND CONTACT: Empirical Laboratories / Marcia McGimmity |
| SAMPLERS (SIGNATURE) Gary J. Davis | | FIELD OPERATIONS LEADER Gary J Davis | PHONE NUMBER 414-642-9470 Cell | ADDRESS 227 French Landing Dr., Ste 550 |
| | | CARRIER/WAYBILL NUMBER 8425 9627 9660 | | CITY, STATE Nashville, TN 37228 |

STANDARD TAT [X]
RUSH TAT [ ]
[ ] 24 hr. [ ] 48 hr. [ ] 72 hr. [ ] 7 day [ ] 14 day

| DATE (YEAR 2006) | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | TCL VOCs + App IX MeOH + H2O + 4°C | TCL SVOCs + App IX + PCBs + TAL Metals 4°C | BTEX+MTBE MeOH + H2O + 4°C | PAHs 4°C | TRPH 4°C | PPL VOHs + BTEX+MTBE MeOH + H2O + 4°C | PCBs + TRPH + Total Hydrides 4°C | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/8 | 0900 | OLFS4-DP13-S20 | DP13 | 18 | 20 | SO | C | 6 | | | 4 | 1 | 1 | | | |
| 9/8 | 1015 | OLFS4-DP14-S20 | DP14 | 18 | 20 | SO | C | 6 | | | | 1 | | 4 | 1 | |
| 9/8 | 1120 | OLFS4-DP15-S20 | DP15 | 18 | 20 | SO | C | 6 | | | 4 | 1 | 1 | | | |
| 9/8 | 1430 | OLFS4-DPW1-S45 | DPW1 | 40 | 45 | SO | C | 6 | 4 | 2 | | 1 | | | | |
| 9/8 | 1530 | OLFS4-DPW-G53-55 | DPW1 | 53 | 55 | GW | G | 3 | 3 | | | | | | | |
| 9/8 | 0900 | OLFS4-DP13-S20 | DP13 | 18 | 20 | SO | C | 12 | | | 8 | 2 | 2 | | | ← MS/MSD |

| | | | |
|---|---|---|---|
| 1. RELINQUISHED BY Gary J Davis | DATE 9-8-06 | TIME 1830 | 1. RECEIVED BY |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2684 | PAGE ___ OF ___

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 112G00389 | FACILITY: South, S. Ft 4 | PROJECT MANAGER: Gary Walker | PHONE NUMBER: 850 385 9845 | LABORATORY NAME AND CONTACT: Elab Marcia McGinty |
| SAMPLERS (SIGNATURE) | | FIELD OPERATIONS LEADER: Gary Davis | PHONE NUMBER: 404-642-9470 | ADDRESS: 227 French Landing Drive suite 550 |
| | | CARRIER/WAYBILL NUMBER: 842596279660 | | CITY, STATE: Nashville, TN 37228 |

STANDARD TAT ☑
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | G | P | G | G | G | P | | |
| | | | | | | | | | PRESERVATIVE USED | | | | | | | | |
| | | | | | | | | | TYPE OF ANALYSIS: BTEX+MTBE | As, Cd, Cr, Pb | PBI VOH + BTEX + MTBE | PAH | FL-PRO | PCB, PAH FL-PRO | BTEX+MTBE | | COMMENTS |
| 9-8 | 0825 | OLFS4-DP25-S10 | | 8' | 10' | soil | G | 6 | 3 | | | 1 | 1 | | 1 | | |
| 9-8 | 0825 | OLFS4-TB03 | | | | GW | G | 2 | | | 2 | | | | | | |
| 9-8 | 0825 | OLFS4-FB01 | | | | GW | G | 3 | 3 | | | | | | | | |
| 9-8 | 1044 | OLFS4-DP26 S6 | | 4' | 6' | soil | G | 6 | 3 | | | 1 | 1 | | 1 | | |
| 9-8 | 1135 | OLFS4-DP27-S4 | | 2' | 4' | soil | G | 6 | 3 | 1 | 1 | | | 1 | | | |
| 9-8 | 1408 | OLFS4-DP28-S8 | | 6' | 8' | soil | G | 6 | 3 | | | 1 | 1 | | 1 | | |
| 9-8 | 1135 | OLFS4-DUP01S | | 2' | 4' | soil | G | 6 | 3 | 1 | 1 | | | 1 | | | |
| 9-8 | 1503 | OLFS4-DP29-S4 | | 2' | 4' | soil | G | 6 | 3 | 1 | 1 | | | | | | |
| 9-8 | 1503 | OLFS4-DUP02S | | 2' | 4' | soil | G | 6 | 3 | 1 | 1 | 1 | 1 | 1 | | | Yes / No PCB w/ Metals |
| 9-8 | 1620 | OLFS4-DP30-S8 | | 6' | 8' | soil | G | 6 | 3 | 1 | 1 | | | 1 | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

| | DATE | TIME | | DATE | TIME |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY | 9-8-06 | 1430 | 1. RECEIVED BY | | |
| 2. RELINQUISHED BY | | | 2. RECEIVED BY | | |
| 3. RELINQUISHED BY | | | 3. RECEIVED BY | | |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TINUS-001

**TETRA TECH NUS, INC.** | **CHAIN OF CUSTODY** | **NUMBER** 2808 | **PAGE** 1 **OF** ____

| PROJECT NO: | FACILITY: | PROJECT MANAGER | PHONE NUMBER | LABORATORY NAME AND CONTACT: |
|---|---|---|---|---|
| 112G00389 | Sanfley Site 4 | Gerry Walker | 850-385-9899 | Empirical Lab / Marcia McGinnity |
| **SAMPLERS (SIGNATURE)** | | **FIELD OPERATIONS LEADER** | **PHONE NUMBER** | **ADDRESS** |
| Gary J. Davis | | Gary J. Davis | 404-642-9470 cell | 227 French Landing Dr. Ste 550 |
| | | **CARRIER/WAYBILL NUMBER** | | **CITY, STATE** |
| | | 8425 9627 9681 | | Nashville, TN 37228 |

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE (YEAR 2006) | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | PRESERVATIVE USED | TYPE OF ANALYSIS: TCL VOCs + Appendix IX | TCL VOCs + Appendix IX | TCL SVOCs + App IX, RBS TRDH / TAL Metals | *SPLP TCL VOCs, App IX, RBS TRDH / TAL Metals | *SPLP TCL VOCs + Appendix IX | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | HCl 4°C | | | | | | |
| | | | | | | | | | P/G | MeOH H2O 4°C | | | | | | |
| | | | | | | | | | G | 4°C | | | | | | |
| | | | | | | | | | G | 4°C | | | | | | |
| | | | | | | | | | P/G | MeOH H2O 4°C | | | | | | |
| 9/9 | 1215 | OLFSA-DPW3-G53-55 | DPW3 | 53 | 55 | GW | G | 3 | 3 | | | | | | | |
| 9/9 | 1755 | OLFSA-DPW5-G53-55 | DPW5 | 53 | 55 | GW | G | 3 | 3 | | | | | | | # Hold SPLP |
| 9/10 | 1405 | OLFSA-DPW9-G53-55 | DPW9 | 53 | 55 | GW | G | 3 | 3 | | | | | | | pending |
| / | / | OLFSA-DUP02G | / | / | / | GW | G | 3 | 3 | | | | | | | analysis |
| 9/11 | 0530 | OLFSA-DPW10-S45 | DPW10 | 40 | 45 | SO | C | 5 | | 4 | 1 | | | | | Will run SPLP |
| 9/11 | ~~1005~~ 1015 | OLFSA-DPW11-G53-55 | DPW11 | 53 | 55 | GW | G | 3 | 3 | | | | | | | only if exceedance |
| 9/11 | 1000 | OLFSA-DPW11-S45 | DPW11 | 40 | 45 | SO | C | 5 | | 4 | 1 | | | | | |
| 9/11 | 1001 | OLFSA-DPW11-SA5 | DPW11 | 40 | 45 | SO | C | 5 | | | | 1 | 4 | | | |
| 9/11 | 1410 | OLFSA-DPW7-S45 | DPW7 | 40 | 45 | SO | C | 5 | | 4 | 1 | | | | | |
| 9/11 | 1500 | OLFSA-DPW7-G53-55 | DPW7 | 53 | 55 | GW | G | 3 | 3 | | | | | | | |
| 9/11 | 1635 | OLFSA-DPW12-S45 | DPW12 | 40 | 45 | SO | C | 5 | | 4 | 1 | | | | | |
| 9/11 | / | OLFSA-TB5 | / | / | / | $H_2O$ | / | 3 | 3 | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY: Gary J. Davis | DATE: 9-11-06 | TIME: 1830 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2685 | PAGE ___ OF ___

| | | | |
|---|---|---|---|
| PROJECT NO: 112G00389 | FACILITY: Southley Site 4 | PROJECT MANAGER Gerry Walker | PHONE NUMBER 850 385-9899 |
| SAMPLERS (SIGNATURE) | | FIELD OPERATIONS LEADER Gary Davis | PHONE NUMBER 404-642-9470 |
| | | CARRIER/WAYBILL NUMBER 842596279681 | |

LABORATORY NAME AND CONTACT: E-Labs (Marco McGuire)
ADDRESS 227 Front Landing, Ste 550
CITY, STATE Nashville, TN 37226

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | PRESERVATIVE USED | TYPE OF ANALYSIS: TCL VOCs + App. IX | BTEX + MTBE | TCL VOCs + App IX | TCL SVOCs + App IX, PCBs, TRPH, TAL Metals | SPLP TCL VOCs + App IX | SPLP BTEX + MTBE | SPLP TCL SVOCs + App IX PCBs, TRPH, + TAL Metals | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | | G | G | P | G | G | P | G | G |
| | | | | | | | | | | HCl | | | | | | | | |
| 9-9 | 1102 | OLFS4-DPW13-34-36 | | 34 | 36 | GW | G | 3 | 3 | | | | | | | | | |
| 9-9 | 1515 | OLFS4-DPW15-36-38 | | 36 | 38 | GW | G | 3 | 3 | | | | | | | | | |
| 9-10 | 0928 | OLFS4-DPW17-34-36 | | 34 | 36 | GW | G | 3 | 3 | | | | | | | | | |
| 9-10 | 0928 | OLFS4-MS01 | | 34 | 36 | GW | G | 3 | 3 | | | | | | | | | |
| 9-10 | 0928 | OLFS4-MSD01 | | 34 | 36 | GW | G | 3 | 3 | | | | | | | | | |
| 9-11 | 0922 | OLFS4-DPW22-32-34 | | 32 | 34 | GW | G | 3 | 3 | | | | | | | | | |
| 9-11 | 0845 | OLFS4-DPW22-526 | | 24 | 26 | S | G | 5 | 1 | 3 | 1 | 1 | | | | | | |
| 9-11 | 1125 | OLFS4-DPW23-30-32 | | 30 | 32 | GW | G | 3 | 3 | | | | | | | | | hot |
| 9-11 | 1505 | OLFS4-DPW24-30-31 | | 30 | 31 | GW | G | 3 | 3 | | | | | | | | | hot |
| 9-11 | 1540 | OLFS4-DPW13-S4 | | 2 | 4 | S | G | 10 | | 3 | 1 | 1 | | 1 | 3 | 1 | | hot |
| 9-11 | 1615 | OLFS4-DPW14-S6 | | 4 | 6 | S | G | 5 | | 3 | 1 | 1 | | | | | | hot |
| 9-11 | 1640 | OLFS4-DPW15-S4 | | 2 | 4 | S | G | 5 | | 3 | 1 | 1 | | | | | | hot |
| 9-11 | 1655 | OLFS4-DPW16-S4 | | 2 | 4 | S | G | 5 | | 3 | 1 | 1 | | | | | | hot |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY | DATE 9-11-06 | TIME 1830 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS hold SPLP Pending Analysis

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2809 | PAGE ___ OF ___

| PROJECT NO: 112G00389 | FACILITY: Saufley site 4 | PROJECT MANAGER: Gary Walker | PHONE NUMBER: 850 385-9899 | LABORATORY NAME AND CONTACT: ELabs / Maria McGinty |
|---|---|---|---|---|
| SAMPLERS (SIGNATURE): [signature] | | FIELD OPERATIONS LEADER: Gary Davis | PHONE NUMBER: 404-642-9470 | ADDRESS: 227 French Landing Dr Ste 550 |
| | | CARRIER/WAYBILL NUMBER: 8425 9627 9681 | | CITY, STATE: Nashville, TN 37228 |

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G / P / G

PRESERVATIVE USED:

TYPE OF ANALYSIS: BTEX + MTBE / TCL VOCs + App IX / TCL SVOCs + App IX / PCBs, TRPH, & TAL metals

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAB (G) COMP (C) | No. OF CONTAINERS | BTEX + MTBE | TCL VOCs + App IX | TCL SVOCs + App IX / PCBs, TRPH, & TAL metals | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9-11 | 1710 | OLFS4-DPW17-S12 | | 10 | 12 | | | | | | | | | | | | |

| 1. RELINQUISHED BY: [signature] | DATE: 9-11-06 | TIME: 1430 | 1. RECEIVED BY | DATE | TIME |
|---|---|---|---|---|---|
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2812 | PAGE 1 OF 1

| PROJECT NO: | FACILITY: | PROJECT MANAGER | PHONE NUMBER | LABORATORY NAME AND CONTACT: |
|---|---|---|---|---|
| 112G00389 | Sanfley Sit 4 | | | Empirical Lab / Marcia McGinnity |
| **SAMPLERS (SIGNATURE)** | | **FIELD OPERATIONS LEADER** | **PHONE NUMBER** | **ADDRESS** |
| Gary J Davis | | Gary J. Davis | 404-642-9470 cell | |
| | | **CARRIER/WAYBILL NUMBER** | | **CITY, STATE** |
| | | 8425-9627 9692 | | Nashville, TN |

STANDARD TAT [X]
RUSH TAT [ ]
[ ] 24 hr. [ ] 48 hr. [ ] 72 hr. [ ] 7 day [ ] 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | P | G | G | | | | | | |
| | | | | | | | | | PRESERVATIVE USED | | | MeOH; H2O+4°C | 4°C | | | | |
| | | | | | | | | | TYPE OF ANALYSIS | TCL VOCs 8260B | TCL SVOCs + Appendix IX | TCL Pest/PCBs | TCL SVOCs + Appendix IX | TRPH | TAL Metals | | |
| 9/12 | 0815 | OLFS4-DPW2-S10 | DPW2 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |
| 9/12 | 0830 | OLFS4-DPW3-S10 | DPW3 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |
| 9/12 | 0900 | OLFS4-DPW4-S10 | DPW4 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |
| 9/12 | 0920 | OLFS4-DPW5-S10 | DPW5 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |
| 9/12 | 1015 | OLFS4-DPW6-S10 | DPW6 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |
| 9/12 | 1030 | OLFS4-DPW8-S10 | DPW8 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |
| 9/12 | 1055 | OLFS4-DPW9-S10 | DPW9 | 5 | 10 | SO | C | 5 | 4 | 1 | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1. RELINQUISHED BY Gary J Davis | DATE 9-12-06 | TIME 1630 | 1. RECEIVED BY | DATE | TIME |
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2810 PAGE ___ OF ___

| PROJECT NO: | FACILITY: | PROJECT MANAGER | PHONE NUMBER | LABORATORY NAME AND CONTACT: |
|---|---|---|---|---|
| 112600389 | Sarkey's Field | Gerry Walker | 850 385-9699 | E-Lab / Marco McGinty |
| SAMPLERS (SIGNATURE) | | FIELD OPERATIONS LEADER | PHONE NUMBER | ADDRESS |
| | | Gary Davis | 404 642 9470 | 227 Fleet Landing Drive ste 550 |
| | | CARRIER/WAYBILL NUMBER | | CITY, STATE |
| | | 8425-9627 9697 | | Nashville TN |

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

| DATE YEAR 2006 | TIME | SAMPLE ID | LOCATION ID | TOP DEPTH (FT) | BOTTOM DEPTH (FT) | MATRIX (GW, SO, SW, SD, QC, ETC.) | COLLECTION METHOD GRAP (G) COMP (C) | No. OF CONTAINERS | CONTAINER TYPE PLASTIC (P) or GLASS (G) | | | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | G | P | G | G | P | G | | | |
| | | | | | | | | | PRESERVATIVE USED | | | | | | | | |
| | | | | | | | | | TYPE OF ANALYSIS: BTEX + MTBE | TCL VOCs + App IX | TCL SVOCs + App IX, TRPH + TAL metals | SPLP BTEX + MTBE | SPLP TCL VOCs + App IX | SPLP TCL SVOCs + App IX, TRPH + TAL metals | | | |
| 9-12 | 0757 | DLFS4-DPW18-S12 | | 10 | 12 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 0819 | DLFS4-DPW19-S12 | | 10 | 12 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 0843 | DLFS4-DPW20-S12 | | 10 | 12 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 0915 | DLFS4-DPW21-S12 | | 10 | 12 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 0915 | DLFS4-DPW21-S12-MS | | 10 | 12 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 0915 | DLFS4-DPW21-S12-MSD | | 10 | 12 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 1010 | DLFS4-DPW23-S26 | | 24 | 26 | Soil | G | 5 | 3 | 1 | 1 | | | | | | |
| 9-12 | 1043 | DLFS4-DPW24-S26 | | 24 | 26 | Soil | G | 10 | 3 | 1 | 1 | 3 | 1 | 1 | | | VOCs SPLP |
| | | DLFS4-TB06 | | | | | QA | 2 | | 2 | | | | | | | should be taken from 16oz jar |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

| 1. RELINQUISHED BY | DATE | TIME | 1. RECEIVED BY | DATE | TIME |
|---|---|---|---|---|---|
| 2. RELINQUISHED BY | DATE | TIME | 2. RECEIVED BY | DATE | TIME |
| 3. RELINQUISHED BY | DATE | TIME | 3. RECEIVED BY | DATE | TIME |

COMMENTS Hold SPLP pending analysis

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

# APPENDIX C

# BORING AND SOIL / SEDIMENTS LOG

Tetra Tech NUS, Inc.

# GROUNDWATER LEVEL MEASUREMENT SHEET

**Project Name:** Site 4 RI
**Location:** Southern Field
**Weather Conditions:** Sunny 90's
**Tidally Influenced:** Yes ___ No ✓

**Project No.:** 112G00389
**Personnel:** C. Cohen, S. Hallihill
**Measuring Device:**
**Remarks:**

| Well or Piezometer Number | Date | Time | Elevation of Reference Point (feet)* | Total Well Depth (feet)* | Water Level Indicator Reading (feet)* | Thickness of Free Product (feet)* 6-14-07 | Groundwater Elevation (feet)* | Comments |
|---|---|---|---|---|---|---|---|---|
| MW-01 | 6-11-07 | 1626 | | 129.80 | 50.47 | | | |
| MW-02 | | 1629 | | 79.50 | 49.58 | | | |
| MW-03 | | 1631 | | 59.02 | 46.82 | | | |
| MW-04 | | 1556 | | 79.02 | 50.78 | | | |
| MW-05 | | 1612 | | 55.09 | 48.45 | | | |
| MW-06 | | 1608 | | 55.53 | 46.21 | | | |
| MW-07 | | 1610 | | 54.83 | 48.25 | | | |
| MW-08 | | 1558 | | 55.72 | 49.66 | | | |
| MW-09 | | 1602 | | 51.88 | 48.86 | | | |
| MW-10 | | 1532 | | 84.96 | 46.20 | | | |
| MW-11 | | 1451 | | 39.83 | ~~35.12~~ 35.33 | 35.33 | | |
| MW-12 | | 1537 | | 45.15 | 38.02 | | | |
| MW-13 | | 1542 | | 45.00 | 36.78 | | | |
| MW-14 | | 1637 | | 79.82 | 48.70 | | | |
| MW-15 | | 1730 | | 56.65 | 49.50 | | | |
| MW-16 | | 1726 | | 54.69 | 49.48 | | | |
| MW-17 | | 1653 | | ~~45.15~~ 45.27 | 47.15 | | | |
| MW-18 | | 1656 | | 54.97 | 43.81 | | | |
| MW-19 | | 1727 | | 55.72 | 49.28 | | | |
| MW-20 | | 1717 | | 44.65 | 42.74 | | | |
| MW-21 | | 1715 | | 44.80 | 43.24 | | | |
| MW-22 | | 1326 | | 90.37 | 53.55 | | | |
| MW-23 | | 1325 | | 39.87 | 27.13 | | | |
| MW-24 | ↓ | 1552 | | 55.53 | 49.73 | | | |
| MW-25 | | 1604 | | 55.20 | 47.67 | | | |

* All measurements to the nearest 0.01 foot

~~starting with the MW-11 (1451) 4' harder added~~

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 3

PROJECT NAME: S.t. 4 RI
PROJECT NUMBER: 112G02385
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Failure Rig
BORING NUMBER: MW37
DATE: 6-4-07
GEOLOGIST: C. Odum
DRILLER: Mark Nelson

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | | | | | hand auger | | | | |
| | | | | | | brn | clayey silty sand | | | | | | |
| | | | | | | lt brn | silty sand | | | 0.0 | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | red brn | silty sand | | | | | | |
| | 15 | | | | | | silty sandy clay | | | | | | |
| | 16 | | 6/10 | | | red brn | silty sand | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | red brn | | clayey silty sand | | | | | | |
| | | | | | | | | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 23 | | | | yellow brn | | silty sand | | | | | | |
| | 25 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes Y No Well I.D. #: MW37

Located near Hangar 807 by Trailer

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Savanna S.t.4 RT
PROJECT NUMBER: 112G02389
DRILLING COMPANY: Boart Longyear
DRILLING RIG:
BORING NUMBER: MW37
DATE:
GEOLOGIST:
DRILLER:

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 26 | | 10/10 | | yellow brown | | silty sand | | | 0.0 | | | |
| | 30 | | | | yellow brown | | silty sand | | | 0.0 | | | |
| | | | | | white | | silty sand | | | | | | |
| | 35 | | | | | | | | | | | | |
| | 36 | | 0/0 | | white | | silty sand | | | 0.0 | | 0.0 | |
| | 45 | | | | yellow brown | | silty sand w/some clay 20% | | | 0.0 | | | |
| | 46 | | | | yellow brown | | silty sand (sat) | | clayey but incoherent | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

Converted to Well: Yes ____ No ____ Well I.D. #:

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: ______ BORING NUMBER: MW37
PROJECT NUMBER: ______ DATE: ______
DRILLING COMPANY: ______ GEOLOGIST: ______
DRILLING RIG: ______ DRILLER: ______

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | yellow org mottled | | | | | | |
| | | | | | | | silty sandy clay | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 54 | | | | | yellow org mottled | | ~~org~~ silty sandy clay | | | 0.0 | | | |
| | | | | | yellow org pur | | mottled silty sandy clay | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 60 | | | | | red | | red clay | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 64 | | | | | | | silty sand | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ______

Remarks: ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saltly Site 4 RI
PROJECT NUMBER: 112G00385
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Roto-Sonic
BORING NUMBER: MW38
DATE: 6-4-07
GEOLOGIST: [illegible]
DRILLER: Mark Metzler

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | 8/10 | | yellow orange | [illegible] | silty sand | | | | | | |
| | | | | | yellow brown rock | | silty sand | | | | | | |
| | 2 | | | | brown | | clayey silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | 5 | | | | | | | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | 10/10 | | | brown | clayey silty sand | | | 0.0 | | | |
| | 16 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | 21 | | | | 4" rd | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 25 | | | | brown | | silty sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks:

Converted to Well: Yes X No ____ Well I.D. #: ____

Between Walnut Post Street and Sprague Ave

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW-38

PROJECT NUMBER: _____ DATE: _____

DRILLING COMPANY: _____ GEOLOGIST: _____

DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | red brn | | silty sand | | | | | | |
| | | | 10/20 | | yellowish | | silty fine sand | | | 0.0 | | 0.0 | |
| | | | | | white | | silty fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | white | | silty fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | white | | silty fine sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | white | | silty fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | white | | silty fine sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW38
PROJECT NUMBER: _____ DATE: _____
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 55 | | | | | | | | | | | | | |
| 54 | | | | | Loose | | silty fine sand | | | 00 | | 00 | |
| | | | | | Med dense | | clayey silty fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | |
| 61 | | | | | Med dense | | clayey silty fine sand | | | | | | |
| | | | | | | | gray, multicolored | | | | | | |
| | | | | | | | clayey silty fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 66 | | | | | | | gray-multicolored | | | 00 | | 00 | |
| | | | | | | | silty fine sand | | TD | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of ___

PROJECT NAME: Sanford S.t.p. RI
PROJECT NUMBER: 112G00389
DRILLING COMPANY: Bay State Drilling
DRILLING RIG: Roto Sonic
BORING NUMBER: MW39
DATE: 6-5-07
GEOLOGIST: E. Ogden
DRILLER: Mark McFarlane

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/FL) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | red brn | | clayey silty fine sand | | | | | | |
| | | | | | red brn | | clayey silty fine sand | | | 0.0 | | | |
| | | | | | red brn | | clayey silty fine sand | | red brick color | | | | |
| | | | | | red brn | | clayey silty fine sand | | | | | | |
| | | | 10/10 | | yell brn | | silty fine sand | | | 0.0 | | 0.0 | |
| | | | | | ltbrn | | silty clayey fine sand | | | | | | |
| | | | | | ltbrn | | silt, clay, some fine sand | | | | | | |
| | | | | | tan mottled | | silty fine sand | | | | | | |
| | | | | | red brn | | clayey silty fine sand | | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: 10 ft samples located @ intersection of Varney & Sprague Ave

Converted to Well: Yes ✓ No ____ Well I.D. #: MW39

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: 
PROJECT NUMBER: 
DRILLING COMPANY: 
DRILLING RIG: 

BORING NUMBER: MW39
DATE: 6-5-07
GEOLOGIST: 
DRILLER: 

| | Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm) Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 10/10 | | yell brn | | clayey silty fine sand | | | | | | |
| 25 | | | | | | | | | | | 0.0 | | 0.0 | |
| | | | | | | lt gry | | clayey silty fine sand | | | | | | |
| | | | | | | gray tan | | clayey silty fine sand | | | | | | |
| | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | |
| | | | | | | gray tan w/lt | | clayey silt fine sand | | | | | | |
| | | | | | | white pink | | silty fine sand | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 35 | | | | 10/10 | | white pink | | silty fine sand | | | | | | |
| 36 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | white pink | | silty fine sand | | | | | | |
| 45 | | | | 10/10 | | yell gray | | silty fine sand | | | 0.0 | | 0.0 | |
| 46 | | | | | | red brn | | sandy clay | | | | | | |
| | | | | | | lt yellow | | [redacted] silty sand | | laminated | | | | |
| | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: 

Drilling Area Background (ppm): 

Converted to Well: Yes ✓ No ____ Well I.D. #: 

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW39
PROJECT NUMBER: _____ DATE: 6-5-07
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | saturated | | | | |
| | | | | | | | | | ↓ | | | | |
| SS SC | | | 10/10 | | [illegible] | | silty fine sand TD with set well @ 55' | | saturated | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4 RI
PROJECT NUMBER: 112G00389
DRILLING COMPANY: Boart Longyear
DRILLING RIG: 10 ft Geoprobe Rig
BORING NUMBER: MW40
DATE: 6-5-02
GEOLOGIST: C. Odom
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | root bri | | clayey silty fine sand | | brick red | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | |
| | 16 | | 18/18 | | root bri | | clayey silty fine sand | | brick red | 00 | | 00 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | root bri | | clayey silty fine sand | | brick red | | | | |
| | | | | | phi. br | | silty fine sand | | | | | | |
| | | | | | " | | " " | | | | | | |
| | | | | | clayey | | clayey silty fine sand | | | | | | |
| | | | | | " | | " " | | | | | | |
| | 25 | | | | " | | " | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks: located between bldg 808 & [illegible] flagpole

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW40
PROJECT NUMBER: _____ DATE: 6-5-07
DRILLING COMPANY: _____ GEOLOGIST: E. Squier
DRILLING RIG: _____ DRILLER: Mark McLea

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 25 | | 7/10 | | orange | | silty clay, fine sand | | | | | | |
| | | | | | tan | | fine sand | | | 0.0 | | 0.0 | |
| | | | | | tan | | fine sand | | | | | | |
| | 30 | | | | light pink | | silty fine sand | | | | | | |
| | | | | | | | | | | 0.0 | | | |
| | | | | | white | | fine sand | | | | | | |
| | 35 | | | | | | | | | | | | |
| | 36 | | 10/10 | | white & light pink | | fine sand<br>fine sand | | | 0.0 | | 0.0 | |
| | | | | | " | | fine sand | | | | | | |
| | 40 | | | | orange | | sandy silty clay | | | 0.0 | | 0 | |
| | 45 | | | | | | | | | | | | |
| | 46 | | 10/10 | | orange | | sandy silty clay | | | 0.0 | | 0.0 | |
| | | | | | white orange | | clayey silty sand<br>sandy silty clay | | | 0.0 | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: _____
PROJECT NUMBER: _____ DATE: _____
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | tan brown | | clayey silty sand | | mottled | | | | |
| | | | | | brown | | silty sandy clay | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | |
| 58 | | | 4/10 | | orange | | clayey silty sandy clay | | tube | 0.0 | | 0.0 | |
| | | | | | tan brown | | clayey silty sand | | saturated | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 60 | | | | | tan brown | | clayey silty sand | | | 0.0 | | | |
| | | | | | | | fine silty sand | | micaceous | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 65 | | | | | tan | | fine silty sand | | micaceous | | | | |
| 68 | | | 10/10 | | tan | | fine silty sand | | micaceous | 0.0 | | 0.0 | |
| | | | | | | | TD | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Sawtelle Fieldstone RI
PROJECT NUMBER: 112G0P0389
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Roto sonic SR

BORING NUMBER: MW41
DATE: 6-5-07
GEOLOGIST: C. Odin
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | lt brn | | silty fine sand | | | | | | |
| | | | | | lt brn | | silty fine sand | | | | | | |
| | | | | | red brn | | clayey silty sand | | brick red | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | red lgt brn | | clayey silty sand | | light red | | | | |
| | | | | | red brn | | silty fine sand | CL | | | | | |
| | | | | | red brn | | silty fine sand | CL | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | clayey silty fine sand | | brick red | | | | |
| | | | | | red brown | | silty fine sand | | light brown orange | | | | |
| | | | | | red brown | | silty fine sand | | light red orange | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: located between firehouse & light pole

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW41
PROJECT NUMBER: _____ DATE: _____
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ* | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 25 | | | 5/10 | | red orange | silty fine sand | | light red orange | 00 | | 00 | |
| | | | | | | | fine sand | | | | | | |
| | 30 | | | | | | fine silty sand | | | | | | |
| | | | | | | | silty fine sand | | lt red orange | | | | |
| | 35 | | | | | | silty fine sand | | lt red orange | | | | |
| | 36 | | | 10/10 | | | silty fine sand | | lt red orange | 00 | | 00 | |
| | 40 | | | | | | " | | " | | | | |
| | | | | | | | " | | " | | | | |
| | | | | | | | silty fine sand | | lt red orange | | | | |
| | | | | | | | clayey silty sand | | laminated | | | | |
| | 45 | | | | | | | | | | | | |
| | 46 | | | 10/10 | | | clayey silty sand | | laminated | 00 | | 00 | |
| | | | | | | | " | | " | | | | |
| | | | | | | | | | saturated | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: ______ BORING NUMBER: MW41
PROJECT NUMBER: ______ DATE: ______
DRILLING COMPANY: ______ GEOLOGIST: ______
DRILLING RIG: ______ DRILLER: ______

| | Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 55 / 56 | | | | 9/10 | | tan/olive gray | | clayey silty sand | | saturated | 00 | | 00 | |
| | | | | | | tan/red orange | | silty fine sand | | | | | | |
| | | | | | | | | " | | | | | | |
| | | | | | | | | " | | | | | | |
| | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | tan orange | | clay silty fine sand | | saturated/mottled | | | | |
| 64 | | | | | | tan gray | | clay | | | | | | |
| 65 | | | | | | " | | " | | | | | | |
| 66 | | | | | | tan orange | | clay | | | | | | |
| | | | | | | | | TD@67 | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ______

Remarks: ______

Converted to Well: Yes ______ No ______ Well I.D. #: ______

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: site 4 RI
PROJECT NUMBER: 112G00389
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Reto-Sonic

BORING NUMBER: MW47
DATE: 6-6-07
GEOLOGIST: C. Solan
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | tan | | clayey silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | tan | | clayey silty sand | | | | | | |
| | | | | | red brn | | clayey silty sand | | brick red | | | | |
| | | | | | | | | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | 8/10 | | red brn | | clayey silty sand | | brick red | 0.0 | | 0.0 | |
| | | | | | red brn | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

0
5
6
10
15
16
20
25

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: located behind bldg 810 E w fenced grassed area

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW 42
PROJECT NUMBER: _____ DATE: 6-6-07
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | | | | | | | | | |
| 26 | | | 5/10 | | soft | | silty sand | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | soft | | silty sand | | | | | | |
| | | | | | Pw soft | | clayey silty sand | | | | | | |
| 30 | | | | | | | | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | |
| 36 | | | 10/10 | | Pw soft | | clayey silty sand | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | |
| | | | | | pw soft | | clayey silty sand | | | 0.0 | | | |
| | | | | | firm/ hard | | silty sand | | | | | | |
| | | | | | soft | | clayey silty sand | | | | | | |
| | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | |
| 46 | | | 10/10 | | soft | | silty sand TD | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of ___

PROJECT NAME: site 4 KI
PROJECT NUMBER: 112G0388
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Rotosonic

BORING NUMBER: MW43
DATE: 6-6-07
GEOLOGIST: [illegible]
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ' | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 5 | | | | brown | | silty sand | | | | | | |
| | 6 | | | | | | | | | | | | |
| | | | | | red brn | | clayey silty sand | | brick | | | | |
| | 10 | | | | | | | | | 00 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | |
| | 16 | | 4/4 | | red brn | | clayey silty sand | | brick M | 00 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | no sample recovery | | | | | | |
| | 20 | | | | Heaving sand | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | Heaving sand | | silty sand | | | | | | |
| | 25 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: located just west at intersection of Spruce Ave + Bunker St. Across road from SID.

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: _____ BORING NUMBER: _____
PROJECT NUMBER: _____ DATE: _____
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | | | | | | | | | |
| 26 | | | 8/10 | | fcsd stn | | silty sand | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 30 | | | | | fcsd | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | |
| 36 | | | 7/10 | | fcsd | | f-c sandy silty | | | 0.0 | | 0.0 | |
| | | | | | fcsd pale | | silty clayey sand | | | | | | |
| | | | | | fcsd pale brown | | silty clayey sand | | | | | | |
| 40 | | | | | fcsd brown | | silty clayey sand | | | | | | |
| | | | | | lt sdy R | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | |
| 46 | | | | | lt sdy | | silty sand | | | 0.0 | | 0.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | 4/5 | | lt sdy | | sand & water | | ID 51 | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Site 4 RI
PROJECT NUMBER: 112G00389
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Rotosonic Rig

BORING NUMBER: MW-46
DATE: 6-6-07
GEOLOGIST: C. Odom
DRILLER: Mark Molea

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | tan | | silty sand | | | | | | |
| | | | | | red | | silty clayey sand | | brick red | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | 20 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | red brn | | silty clayey sand | | brick red | | | | |
| | | | 10/10 | | tan orange | | silty sand | | | 20 | | 20 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

0 5 10 15 16 20 25

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals of borehole. Increase reading frequency if elevated reponse read.

Remarks: Located NNE of bldg 826 in Basin 5A

Drilling Area Background (ppm):

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW44

PROJECT NUMBER: _____ DATE: 6-6-07

DRILLING COMPANY: _____ GEOLOGIST: _____

DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | | | | | | | | | |
| 26 | | | 7/10 | | lt orange | | silty sand | | | | | | |
| | | | | | brown | | | | | | | | |
| | | | | | lt gry | | silty clayey sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | |
| 36 | | | 7/10 | | brn lt gry | | fine sand | | | | | | |
| | | | | | lt orange | | silty clayey sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | brown | | silty clayey sand | | | | | | |
| | | | | | lt gry | | fine silty sand | | | | | | |
| 45 | | | | | | | | | | | | | |
| 46 | | | 10/10 | | lt gry | | fine silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 50 | | | | | lt gry | | fine silty sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW 49

PROJECT NUMBER: _____ DATE: 6-6-07

DRILLING COMPANY: _____ GEOLOGIST: _____

DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | Hard | | fine silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | |
| 56 | | | | | Hard | | fine silty sand | | | 2.0 | | 2.0 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 3

PROJECT NAME: Seneca Field Site 4 RI
PROJECT NUMBER: 112G00388
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Roto-Sonic
BORING NUMBER: ~~SB45~~ MW45
DATE: 6-7-04
GEOLOGIST: C. Oakley
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | trace | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | trace | | silty sand | | | 20 | | | |
| | | | | | mixed | | silty clayey sand | | bricks red | | | | |
| | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | |
| | | | | 12/10 | | | | | | | | | |
| | | | | | last sec | | silty clayey sand | | bricks red | 20 | | 20 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | last two | | silty clayey sand | | bricks red | | | | |
| | 20 | | | | mostly | | silty sand | | white, angular | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks: Located in parking lot at bridge

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: _____
PROJECT NUMBER: _____ DATE: _____
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | | | | | | | | | | | | | |
| 26 | | | 7/10 | | wt | | silty sand | | organic/peat | 00 | | 00 | |
| | | | | | | | 2 | | | | | | |
| | | | | | | | 0 | | | | | | |
| | | | | | | | | | | | | | |
| 30 | | | | | | | peat | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | |
| 36 | | | | | sf | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 40 | | | | | | | | | | 00 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | 00 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | |
| 46 | | | 10/12 | | sf | | silty sand | | | 00 | | 0.0 | |
| | | | | | 4.7 | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW45
PROJECT NUMBER: _____ DATE: 6-7-07
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | | | | | | | |
| | | | | | loose | | silty fine sand | | saturated | | | | |
| | | | | | | | ↓ | | | | | | |
| 55 | | | | | loose | | silty fine sand | | saturated | 0.0 | | 0.0 | |
| 56 | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | |
| 61 | | | | | loose | | silty fine sand | | saturated | 0.0 | | | |
| | | | | | | | TD wtr @ 61 | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Sawtelle Field Site 4 RI
PROJECT NUMBER: 112G00388
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Rot. Sonic

BORING NUMBER: MW46
DATE: 6-7-07
GEOLOGIST: C. Dolan
DRILLER: Co - Mark Metzler/Ryan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | |
| | 6 | | | | tn | | silty sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | tn | | silty sand | | | 20 | | | |
| | | | | | tn/bk | | clayey silty sand | | finished | | | | |
| | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | 22 | | | |
| | | | | | | | | | | | | | |
| | | | | | bk/tn | | clayey silty sand | | brick red | | | | |
| | | | | | lt orang | | silty sand | | | | | | |
| | 15 | | | | | | | | | | | | |
| | 16 | | | 10/10 | lt orng | | silty sand | | | 20 | | 0.3 | |
| | | | | | | | | | | | | | |
| | | | | | lt orng | | silty sand | | | | | | |
| | | | | | multi | | silty sand | | white, orange, tan | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 25 | | | | multi | | silty sand | | white, orange, tan | | | | |

39
43

* When rock coring, enter rock brokeness.

** Include monitor reading in 5 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks: located between pads 5/6 + 7/8 + building 4 bldg on bank. set bldg 226

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: _____
PROJECT NUMBER: _____ DATE: 6-7-04
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | | | 7/10 | | | | silty sand | | white clayey | 0.0 | | 0.0 | |
| 26 | | | | | loose | | sand | | | | | | |
| | | | | | | | ↓ | | | | | | |
| 20 | | | | | | | ↓ | | | 0.0 | | | |
| | | | | | | | ↓ | | | | | | |
| | | | | | | | ↓ | | | | | | |
| | | | | | | | ↓ | | | | | | |
| | | | | | | | ↓ | | | | | | |
| | | | | | loose | | sand | | | | | | |
| 54 | | | 10/10 | | poorly graded | | silty sand | | | 0.0 | | 0.0 | |
| 36 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | poorly graded | | silty sand | | | 0.0 | | | |
| 100 | | | | | | | | | | | | | |
| | | | | | 13'6"-13'8" | | sandy silty clay | | | | | | |
| | | | | | last sample | | sandy silty clay | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | |
| 46 | | | 10/10 | | last sample | | sandy silty clay | | | 0.0 | | 0.0 | |
| | | | | | | | ↓ | | | | | | |
| | | | | | | | ↓ | | | | | | |
| | | | | | | | ↓ | | | | | | |
| 50 | | | | | last sample | | sandy silty clay | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

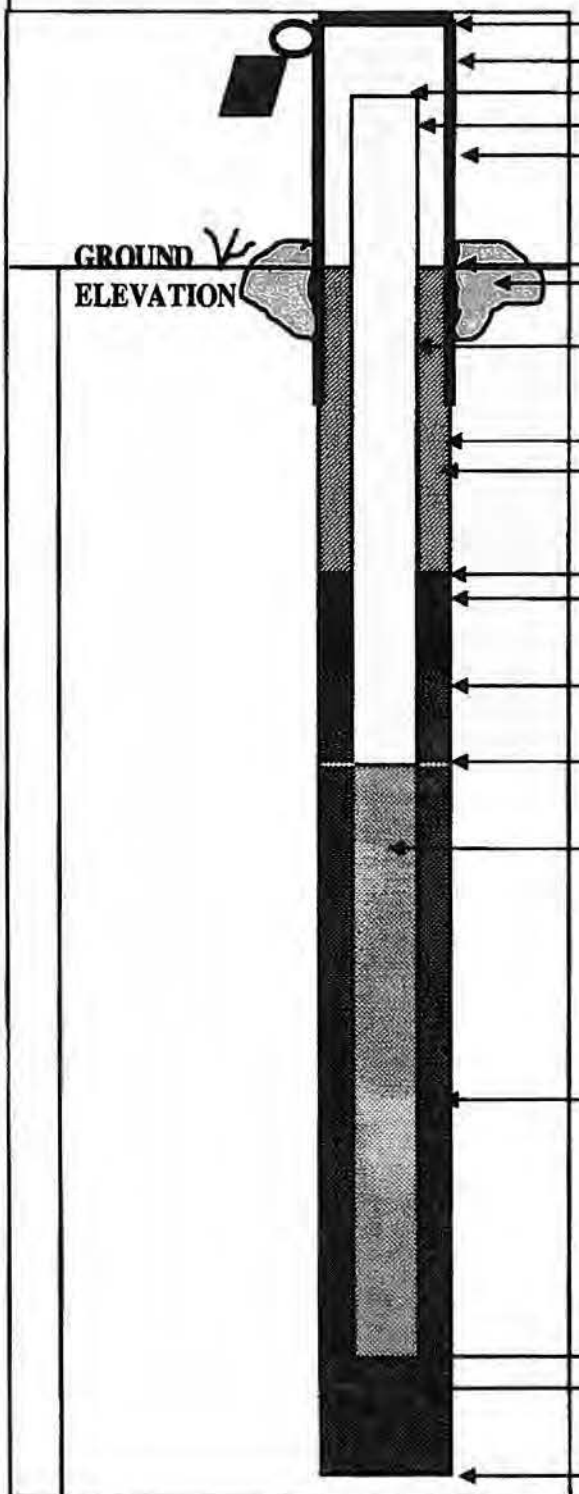
Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | s.t. 4 Savley | DRILLING Co.: | Boart Longyear | BORING No.: | MW 46 |
| PROJECT No.: | 112 G00389 | DRILLER: | M. McLean | DATE COMPLETED: | 6-7-07 |
| SITE: | 4 | DRILLING METHOD: | Hydraulic | NORTHING: | |
| GEOLOGIST: | C. Dacon | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: _____

RISER PIPE I.D.: PVC

TYPE OF RISER PIPE: 20'

BOREHOLE DIAMETER: 6.0"

TYPE OF SEAL: grout

ELEVATION / DEPTH OF SEAL: 35'

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 43'

ELEVATION / DEPTH TOP OF SCREEN: 45.85'

TYPE OF SCREEN: slotted PVC

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -55.85'

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

TYPE OF BACKFILL BELOW WELL: -55.85

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-01D-2
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0915 | | | | | | | | | Asphalt surf. | | | | |
| | | N/A | | | Loose | Brown | silty clayey sand ~10% silt ~20% clay remainder fine sand | SC | Non cond. Post-hole to 5' | | | | |
| | | | 100% | | | | | | | | | | |
| | 5 | | | | | | | | Damp | 0.0 | | 0.0 | |
| | | | | | Loose | Yellowish brown as above | | | | | | | |
| 6-16 | 10 | | | | | | | | | | | | |
| | | | | | | Dark Reddish Brown | silty clayey sand. ~10% clay ~10% silt remainder fine sand | SC | Dry | | | 0 | 0 |
| | 15 | | | | | | | | | | | | |
| | | | | | Loose | Mottled Reddish to yellowish to ~~Dark~~ Gray and otherwise same | | SC | Dry | | | | |
| 16-26 | 20 | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No ____ Well I.D. #: OLFS4-MW01D

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-01D-2
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | as above | SC | some white sandy clay at bottom | | | | |
| | | NA | 100% | Sloughed out of way? | | | | | | | | | |
| | 30 | | | | | | | | | | | | |
| 1000 26-36 | | | | No Recovery | | | | | | | | | |
| | 35 | | | | | | | | | | | | |
| | | | 100% Rec | | | | Yellowish to Reddish Brown mottled silty clayey sand ~ 5% clay fine sand | SC | | | | | |
| 1015 36-46 | 40 | | | | | | | | | | | | |
| | 45 | | ~ | | | | light tan to white to Reddish to pinkish silty sand w/ trace clay | | wet at Bottom | | | | |
| | | | | | | | tan to yellowish brown mottled silty clayey sand ~ 5% clay | SC | saturated | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DLFS4-MW-01D-2
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NR | 60% | | | | | | | | | | |
| 56 | 55 | | | | Loose | | Same as above | SC | Saturated | | | 0 | 0 |
| 1020 56- | | | | | | | | | | | | | |
| 66 | 60 | | | | | | | CL | Aquiclude | | | | |
| | | | 100% | | Stiff | | Lt gray mottled to Reddish brown silty sandy clay ~60% clay 10% silt remainder fine sand | | Damp to Wet | | | | |
| | 65 | | | | | | | CL | | | | 0 | 0 |
| | 70 | | | | Med Stiff | | Gray to purplish same as above | CL | | | | | |
| | 75 | | | | | | | CL | | | | | |

*When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW01D-2
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SC | | | | | | | | | |
| | | | | SC | | | Silty clayey sand | SC | | | | | |
| | | NA | | | | | Yellowish Brown | | Saturated | | | | |
| | | | | | Loose to Med | | ~30% clay 10% silt remainder fine sand | | | | | | |
| | 80 | | | | | | to ~50% clay | | Alternating layers clay rich to clay poor | | | 0 | 0 |
| 1035 76-66 | | | | | Stiff | | | | | | | | |
| | | | | SC | | | | | | | | | |
| | 85 | | | SC | | Tan | to Lt. pink | SC | | | | 0 | 0 |
| | | | | | | | silty clayey sand ~10% silt ~10% clay | | | | | | |
| | | | | | Loose to Med Stiff | | Yellowish Brown to tan alternates ~5% to 30% clay ~10% silt Remainder fine Sand | | Saturated alternating as above | | | | |
| 1045 86 to 1055 96 | 90 | | | | | | | | | | | 0 | 0 |
| | 95 | | | | | | | | | | | | |
| | | | | | | | Yellowish Brown | SC | ~1' clay layers | | | 0 | 0 |
| | | | | | | | Same as above except thicker layers silty sandy clay | to CL | Aquiclude? | | | | |
| 1055 | 100 | | | | N | | silty sandy clay ~10% silt ~30% sand | | | | | | |

*When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OL-FSA-MW-01D-2
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Same as above | | | | | | |
| 96-106 | | | 10/9 | | | | Yellowish to Reddish Brown - less clay | SC | | | | | |
| | | NR | | | | | clay varies ~30% to <5% | | | | | | |
| 1055 | 105 | | | | | | ~10% silt remains fine sand | | PID reads ~2.8 off liners | 3.8 | 0 | 0 | 0 |
| 106-116 | 110 | | | | | | | | | | | | |
| | | | | | | | | SM | | | | | |
| | 115 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | 10.1 | 0 | | |
| 1115 116-126 | 120 | | | | | | | SC | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 125 | | | | | | | SC | | | 0 | | |

When rock coring, enter rock brokeness. SM

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

7.7 Drilling Area
Background (ppm): 0.3

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFSA-MW-01D-2
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NR | 100% | | | | Reddish to Pinkish Clayey sandy Silt w 3% clay ~ 20% fine sand remainder silt | SM | | | | | |
| | 130 | | | SM | | | | | | | | | |
| 126-136 | | | | SC | | | Yellowish Brown Silty clayey sand ~ 18% silt ~ 5% clay | SC | | 3.7 | 0 | 0 | 0 |
| | | | | CL | | | | CL | remainder fine sand | | | | |
| | 135 | | | | | | Yellowish Brown to tan to Lt. Gray Silty Clay. trace silt + fine sand | | Aquidude | | | | |
| 136-141 | | | | | Boulder? | | | CL | | | | | |
| 1145 | 140 | | | | | | | | | | | | |
| | | | | SC | | | | SC | | 5.6 | 0 | 0 | 0 |
| | | | | | | | TD 141 Terminated | | | | | | |
| | | | | | | | | | Setting well at 130' w/ 5' screen | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DLFS4-MW02D
DATE: 11-29-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | See Adjacent Boring log of MW-01D2 | | | | |
| | | NA | NA | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 60 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| 1550 | 80 | | | | | | | | | | | 0 | 0 |
| | | | | | | | Terminated at 80' Setting w/ 5' screen | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW03-S
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0800 | | | | | | | | | See Adjacent | | | | |
| NA | NA | NA | NA | | | | | | Boring Log of | | | | |
| | | | | | | | | | MW-02-D2 | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | ~45 | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 60 | | | | | | | | | | | | |
| 0850 | | | | | | | Terminated at | | | | | | |
| | | | | | | | 60' setting w | | | | | | |
| | | | | | | | 20' screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DLFS4 - MW-04D
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| 1015 | | | | | | | | | Non-cond. Post Hole to 5' | | | | |
| | | NA | | | | | Brown silty clayey Sand | | | | | | |
| | | | | | Loose | | ~10% silt ~20% clay remainder fine Sand | SC | | | | | |
| | | | 10% | | | | | | | | | | |
| | 5 | | | | | | | | | | | 0 | 0 |
| | | | | | | | Lt. Brown to tan silty clayey sand ~10% silt ~5% clay | SC | | | | | |
| | | | | | | | | | dry | | | | |
| | 10 | | | | | | | | | | | 0 | 0 |
| 6- | | | | | | | Dark reddish brown silty clayey sand ~10% silt ~ 20% clay remainder fine Sand | SC | | | | | |
| 16 | | | | | | | | | | | | | |
| | 15 | | | | Loose | | | | | | | 0 | 0 |
| | | | | | | | | SC | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | dry | | | | |
| 1050 | | | | | | | Same as above | SC | | | | | |
| 16- | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | Lt. Brown to reddish brown to white mottled silty sand w/ trace to 5% clay | SC | | 9.4 | 0 | | |
| 26 | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | |

21.1

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: Hot Plastic liners off gassing?

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-04D
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | As above | | | | | | |
| | | NR | 100% | | Loose | | | SC | | | | | |
| | | | | | | | | | Dry | | | | |
| | 30 | | | | | | | | | | | | |
| | | | | | | | Dark Reddish Brown silty clayey sand | SC | | | | | |
| | 35 | | | | | | | | | 16.8 | | | |
| | | | | | | | | | | 24.3 | | | |
| | | | | | | | Mottled White to tan to Yellowish to Reddish Brown to pinkish mottled silty sand ~20% silt ~5% clay fine sand | SM | | 12.1 | | | |
| | 40 | | | | | | | | | | | | |
| | 45 | | | | color chg | | Yellowish at 45' | | wet | 13.7 | 0 | 0 | 0 |
| | | | | | Loose | | Silty clayey Sand ~10% silt ~20% clay remainder fine sand | | | 10.8 | 0 | 0 | 0 |
| | 50 | | | | | | | | | | | | |

26-36

11/20 36-46

46-56

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-04D
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | Loose | Yellowish Brown | silty clayey sand as above | SC | Saturated | | | | |
| | 55 | | | | | | | | | 78 | 0 | 0 | 0 |
| | 60 | | | | | | | | | | | | |
| | | | | | | | Yellowish to pinkish to tan silty sand w/ trace clay very fine at top to medium grained | SC to SM | | 12.1 | 0 | 0 | 0 |
| | 65 | | | | | | | | | | | | |
| | | | | | | | Mottled yellowish brown to white silty clayey sand | | 2-5% clay | | | | |
| | 70 | | | | (Silty sandy clay | | | CL | Upp | | 0 | 0 | 0 |
| | | | | | ~ 40% silt or 5% fine sand | | | SC to SM | | 13.1 | | | |
| | | | | | ~ 72-75' clay | | | | | | | | |
| | 75 | | | | Lt. Gray | | | CL | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-04D
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 100% | | | | White to Lt. tan to Lt. Pink silty sand w/ trace clay | SM | | 12.9 | | | |
| | 80 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | Terminated at 81' setting at 80' w/ 5' screen | | | 20.1 | | | |
| | 85 | | | | | | | | | | | | |

T1-
1145 81

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-05-S
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Not logged. see adjacent | | Concrete Surface | | | | |
| | | | | | | | MW-01-D2 and MW-04-D | | | | | | |
| | | NA | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | 45 | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | Terminated at 55' | | | | | | |
| | 60 | | | | | | setting w/ 15' screen | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-06-S
DATE: 11-30-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Not Logged see adjacent MW-01D2 and MW-04D | | Grass Surface | | | | |
| | | NA | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | | | ~V 45 | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | — | | | Terminated at 55' setting w/ 15' screen | | | | | | |
| | 60 | | | | | | | | | | | | |

1545

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-07-S
DATE: ~~11-30-06~~ 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Post-hole | | | | |
| | | | | | | | Not logged see adjacent concrete surf | | | | | | |
| | | | | | | | MW-01D2 and MW-04-D | | | | | 0 | 0 |
| | | NA | | | | | will Drill Tomorrow morning | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | Terminated at 55' | | | | | | |
| | 60 | | | | | | setting w/ 15' Screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

11-30-06 1630

Drilling 0715 12-1-06

0815

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-08-S
DATE: 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. Post-Hole to 5' | | | | |
| | | NA | | | | | Not logged, see adjacent MW-01-D2 and MW-04D and associated DPT locations. | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | V | | | | | | | | | | 0 | 0 |
| | 60 | | | | | | Terminated at 55' setting w/ 15' screen | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS 4 - MW-09-S
DATE: 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

1040

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Not Logged | | Grass Surface | | | | |
| | | NA | | | | | See adjacent MW-04D | | | | | 0 | 0 |
| | | | | | | | and associated | | DPT | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | Terminated at 55' | | | | | 0 | 0 |
| | 60 | | | | | | setting w/ 15' screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: _____

Converted to Well: Yes √ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-10D
DATE: 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf | | | | |
| | | | | | Brown Silty clayey sand | | | SC | | | | | |
| | | N/A | | | | | | | | | | | |
| | | | 100% | | Loose | | ~10% silt. ~20% clay remainder fine sand | | | | 0 | 0 | 0 |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 6-16 1410 | 10 | | | | | | | | | | | 0 | 0 |
| | | | | | Dark Reddish Brown | | | SC | | | | | |
| | | | | | Silty clayey sand | | | | | | | | |
| | | | | | ~10% silt ~30% clay | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | 0 | 0 |
| | | | 1' | | | | | | | 16.4 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | Same as above | | | SC | | | | | |
| 16-26 1415 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 25 | | | | Color change to white to yellowish brown | | | | | 13.4 | | | |
| | | | | | Silty sand W/ ~5% clay | | | SM to SC | | | | | |

*When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-10D
DATE: 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | as above | | | | | | |
| | | NA | | | | | | | | | | | |
| 26- | | | | | | | | SC | | | | 0 | 0 |
| | | | 1' | | Loose | | silty, sand w/ | SM | | | | | |
| 36 | 30 | | 6out | | to | | trace clay | | | | | | |
| | | | of | | | | white to tan | | | | | | |
| 1420 | | | 11 | | Very | | | | | | | | |
| | | | to | | loose | | | | Loose sand | | | | |
| | | | | | | | | | probable fell | | | | |
| | | | | | | | clay grains from | | out of | | | 0 | 0 |
| | 35 | | | | | | trace to 5% | | Tassell | 10.5 | | | |
| | | | | | | | | | | | | | |
| | | | | | Loose | | | | wet to | | | | |
| | | | | | | | | | Saturated | | | | |
| | | | | | | | Same as | | | | | 0 | 0 |
| | 40 | | 100% | | | | | | | 4.4 | | | |
| 36' | | | | | | | above | | | | | | |
| | | | | | | | | | | | | | |
| 1435 46 | | | | | | | | SC | | | | | |
| | | | | | | | | to | | | | | |
| | 45 | | | | | | | SM | | | | 0 | 0 |
| | | | | | | | | | | 6.8 | | | |
| | | | | | Loose | | increasing clay | SC | | | | | |
| | | | | | | | content ~ 20% | | | | | | |
| 46' | | | | | | | otherwise same | | | | | | |
| 56 | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area to 0.2
Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-10D
DATE: 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1445 | | | | | | | As above | SM to SC | | 2.1 | | 0 | 0 |
| 46' | | | | | | | Silty clayey sand | SC | | | | | |
| 56 | | NA | | | Loose | Yellowish (olive) Brown | | | Saturated | | | | |
| | | | | | to | ~20% silt, ~30% clay | | | | | | | |
| | 55 | | | | Stiff | remainder fine sand | | | | | | 0 | 0 |
| | | | | | | | | | | 4.4 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| 56' | 60 | | | | | | | | | | | | |
| 66 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 1450 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 65 | | | | Reddish brown | | | SC | | 2.1 | | | |
| | | | | | to yellowish brown | | | | | | | | |
| | | | | | mottled | | | | Saturated | | | | |
| | | | | | silty clayey sand | | | | | | | | |
| 1500 | 65' | | | | clay varies 10-30% | | | | | | | 0 | 0 |
| 11 | 70 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 75 | | | | | | | | | 1.1 | | 0 | 0 |

*When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0.2

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-10D
DATE: 12-1-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | as above | SC | | | | | |
| | | WOH | | | | | | | | | | | |
| | | | | | | | Lt. gray to reddish brown | CL | (77-79') | | | | |
| | | | | | | | silty sandy clay | | | | | | |
| | 80 | | | | | | | | | 3.1 | | | |
| | | | | | | | Yellowish Brown to tan | SM to | | | | | |
| | | | | | | | silty sand w/ | SC | | | | | |
| | | | | | | | trace clay | | | | | | |
| | | | | | | | | | | | | | |
| 1530 | 85 | | | | | | Setting well w/ | | 5' screen | 3.1 | | | |
| | | | | | | | Terminated at | | | | | | |
| | | | | | | | 85' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.1

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-11S
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surf. | | | | |
| | | NA | | | | | | | | | | 0 | 0 |
| | | | | | | | See adjacent MW-10D for more lithologic information | | | | | | |
| | 10 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | 4' | | | | White to tan to yellow & Brown Mottled fine Silty Sand w/ trace clay | SM | Dry | 0 | | 0 | 0 |
| 0930 26-A1 | 30 | | 1' out of 5 | | | | Remainder washed out or fell out of barrell | | | | | | |
| | 40 | | | | | | Terminated at 41 setting w/ 13' screen. | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-12-S
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | See log of Adjacent MW 10D and assoc. DPT | SC | | | | | |
| | 10 | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | 30 | | | | | | | | Drilled Dry to ~ 32-33' where started collapsing | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | Terminated at 45 setting w/ 20' screen | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-13S
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Not logged | | | | | | |
| | | | | | | | | | | | | | |
| | | NA | | | | | See Adjacent | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 10 | | | | | | MW-10D | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 30 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | Terminated at 45' set w/ 20' screen | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-14D
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surf | | | | |
| | | NR | | | | | Brown silty clayey sand | SC | | | | | |
| | | | 100% | | | | ~10-20% clay | | Dry | | 0 | 0 | 0 |
| | 5 | | | | | | ~10% silt remainder fine sand | | | | | | |
| | | | 1 | | | | | | | | | | |
| | | | 10/ | | | | | | | | 0 | 0 | 0 |
| 6-16 1540 | 10 | | 1 | | | | Same reddish brown silty clayey sand ~10% silt ~30% clay remainder fine sand | SC | Damp | 4.4 | | | |
| | | | 10" | | | | | | | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 8.2 | | | |
| | | | 1 | | | | | | | | | | |
| | | | 10/ | | | | | | | | 0 | 0 | 0 |
| 16-26 1550 | 20 | | 1 | | | | Same as above | SC | | 9.1 | | | |
| | | | 10 | | | | | | | | | | |
| | | | | | | | Mottled white to tan to yellow brown to reddish brown Less clay ~5% ~15% silt remainder fine sand | SC to SM | | | 0 | 0 | 0 |
| | 25 | | | | | | | | | 8.3 | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-14D
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | NA | | | | | Mottled as above. | SC to | | | | | |
| | | | 1' | | | | trace clay to 5% | SM | | | 0 | 0 | 0 |
| | 30 | | 10" | | | | | | | 8.5 | | | |
| | | | 1' | | | | | | | | | | |
| | | | 10" | | | | | | | | | | |
| | | | | | | | | SC to | | | | | |
| | 35 | | | | | | white silty sand at bottom 6" | SM | | | 0 | 0 | 0 |
| | | | | | | | | | | 6.6 | | | |
| | | | | | | | | SM | | | | | |
| | 40 | | | | | | | | 11 " Beach Sand 11 | | 0 | 0 | 0 |
| | | | | | | | White to lt. pinkish silty sand w/ trace clay fine sand | SM | | 8.0 | | | |
| | | | | | | | Mottled white to tan to yellowish brown silty sand trace to 5% clay | SC SC | | | 0 | 0 | 0 |
| | 45 | | | | | | | | | 6.8 | | | |
| | | | | | | | | | | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW14D
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46-56 | | | | | | yellowish ochre brown | silty clayey sand | to | | | | | |
| | | | | | | | ~10% silt ~20% remainder fine sand clay | SM | | | 0 | 0 | 0 |
| | 55 | | | | | | | | | 5.9 | | | |
| | | | | | | | Alternating 6-inch to 4' thick beds of tan silty sand SM 40-50% fines | | | | | | |
| 56- | | | | | | | | | | | 0 | 0 | 0 |
| | 60 | | | | | | | SC | | 9.7 | | | |
| 66 | | | | | | | ~~30-40%~~ clay | to | | | | | |
| | | | | | | | Clay increasing content. | CL | | | | | |
| | | | | | | | silty clay ~ 80% clay 10% silt | | | | | | |
| | 65 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | 6-inch lean clay ~~Greenish Gray~~ | CL | silty | 46.3 | | | |
| 66- | | | | | | | | SC | | | | | |
| | | | | | | Brown to reddish brown | to Lt gray clay laminae | silty sand | | | | | |
| 76 | 70 | | | | | | silty clayey sand ~ 20-30% clay | SC | | 23.6 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 100 | | | | | | | 74' | | | | 0 | 0 | 0 |
| | 75 | | | | | | Tan silty sand Trace clay | SM | Trace clay | 11.2 | | | |

Terminated at 80'

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: Setting w/ 5' screen
Seal to 6ft

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW14D
DATE: 12-2-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Screen | | Tan to white | silty sand w/ trace clay as above | SM | | | | | |
| | | NR | | | | | | | | | 0 | 0 | 0 |
| | 80 | | | | | | | SM | | 0.2 | | | |
| | | | | | | | Terminated at 81' setting 5' screen w/ seal extending to 65' | | | | | | |
| | 85 | | | | | | | | | | | | |

To 81

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF34-MW-15S
DATE: 12-3-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Not logged see adjacent MW14D and associated DPT borings at Bldg 807 Also MW-47 | | | | | 0 | 0 |
| | | WH | 100% | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 60 | | | | | | Terminated at 55' setting w/ 15' screen | | | | | | |

1230

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-16S
DATE: 12-3-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Not logged see adjacent MW14D DPT at 807 Bldg & MW-47 | | | | | 0 | 0 |
| | | NA | | | | | | | | | | | |
| | | | 100% | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 60 | | | | | | Terminated at 55' setting w/ 15' screen | | | | | | |

1335

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-17S
DATE: 12-3-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 0 | 0 |
| | | NA | | | | | Not logged see adjacent MW | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | Terminated at 55' setting w/ 20' screen | | | | | | |
| | 60 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-18-S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Conrock Surf. Post-hole to 5' | | | | |
| | | NA | 10/10 | | Loose | | Brown silty clayey sand ~10% silt ~20% clay | SC | | | | 0 | 0 |
| 0855 | 5 | | | | | | | | | | | 0 | 0 |
| | | | | | | | Dark Reddish brown silty sandy clayey sand. 10% silt ~20% clay | SC | | | 0 | 0 | 0 |
| | 10 | | | | | | | | | 10.8 | | | |
| 6-16 | | | 10/10 | | | | | | | | | | |
| | 15 | | | | | | | | | 5.8 | | 0 | 0 |
| | | | | | Loose | | Mottled white to tan to yellowish to reddish brown silty clayey sand to silty sand 5-10% clay to silty sand w/trace clay | SC to SM | | | | | |
| 0905 | | | | | | | | | | | | 0 | 0 |
| 16-26 | 20 | | 10/10 | | | | | | | 13.2 | | | |
| | | | | | Loose | | | | | | | 0 | 0 |
| | 25 | | | | | | | | | 27.6 | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 5 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-18-S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | SM | | 19.2 | 0 | 0 | 0 |
| | | NR | | | | | as above | | | | | | |
| | | | | | loose | | | | | 6.8 | | | |
| 0910 26-36 | 30 | | 10/ | | | | | | | | 0 | 0 | 0 |
| | | | 10 | | | | Sandy silt | ML | | 3.2 | | | |
| | | | | | | | White "beach" sand trace clay. | | Dry | | | | |
| | 35 | | | | | | Tan to yellowish | SM | | | 0 | 0 | 0 |
| | | | | | loose | to | reddish brown | | | 11.8 | | | |
| | | | | | | | silty sand w trace clay | | | | 0 | 0 | 0 |
| | | | 10/ | | | | | | | 2.2 | | | |
| 9AP 36- | 40 | | | | | | | to | | | | | |
| 46 | | | 10 | | | | Same as above except w 5-10% clay | SC | | 1.7 | | | |
| | | | | | | | | | | 0.9 | | | |
| | | | | | loose | | increasing clay | | | | 0 | 0 | 0 |
| 46' to H2O in adj MW-17S | 45 | | | | to | | | | | | | | |
| | | | | | med | | 20-40% clay, | SC | Saturated | | | | |
| | | | | | stiff | | silt ~10-20% remainder fine sand yellowish "ochre" brown | | | 4.2 | 0 | 0 | 0 |
| 46- 56 | | | 10/10 | | | | | | | | | | |
| | 50 | | | | | | | SC | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-18-S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46-51 | | NA | 10/10 | | | | same as above | | | 1.6 | 0 | 0 | 0 |
| | | | | | | | | SC | Saturated | | | | |
| | 55 | | | | | | | | | | | | |
| 12 | | | | | | | | | | 1.2 | 0 | 0 | 0 |
| | | | | | | | Terminated boring at 56' setting well at 55 w/ 15' screen | | | | | | |
| | 60 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF34-MW-19S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | | | | | | | | Post Hole to 5' | | | | |
| | | NA | 100% | | Loose | Brown | silty clayey sand ~10% silt ~20% clay remainder fine sand | SC | Dry | | 0 | 0 | 0 |
| | 5 | | | | | | | | | | | | |
| | | | | | | Dark Reddish Brown | silty clayey sand as above | | Dry to Damp | 0.8 | 0 | 0 | 0 |
| 1200 | 10 | | 1'/1' | | Loose | | | | | | | | |
| 6- | | | 10 | | | | | | | | | | |
| 16 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | |
| | | | | | | | | | | | 0.8 | | |
| | | | | | | | Same as above | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | 10'/ | | | | | | | 2.3 | | | |
| 1205 16- | | | | | Very Loose | Tan to White to Yellowish Brown mottled to reddish brown | ~10-20% silt ~5% clay remainder fine sand | SM to SC | Dry | | | | |
| 26 | | | 10 | | | | | | | | | | |
| | 25 | | | | | | | | | 10.0 | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-19-B
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | Same as above | SM to SC | Dry | | | | |
| | 30 | NA | | | | | | | | | 0 | 0 | 0 |
| | | | 10/10 | | | | | | | 2.9 | | | |
| | | | | | | | White silty SS ~50-60% silt sandy silt fine sand | SM | "Beach" Sand fine sand (Dry) | | | | |
| | 35 | | | | | | Mottled as above | SM to SC | | 8.6 | 0 | 0 | 0 |
| | | | 10/10 | | | | | | | | | | |
| | 40 | | | | | | | | | 6.1 | | | |
| | | | | | | | Mottled Same as above | SC to SM | Dry to Damp | | | | |
| | 45 | | | | | | | | | 4.9 | | | |
| | | | 5/10 | | | | Yellowish "Ochre" Brown silty clayey sand ~20% silt & 30% clay remainder fine sand | SC | wet | | | | |
| | 50 | | | | | | | | | | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes V No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-19-S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | | Same as above | SC | | | | | |
| | | N/A | 5/1 | | | | | | Saturated | | | | |
| | | | 10 | | | | | | | | | | |
| | 55 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 0.8 | | | |
| | | | | | | | Terminated Boring at 55' setting w/ 15' screen | | | | | | |
| | 60 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 65 | | | | | | | | | | | | |

46'
56

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-20S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

1420

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | See Adj MW-21S | SC | Concrete Surf. Post-hole 5' | | | | |
| | | NA | | | | | and MW 10D | | | | | 0 | 0 |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 30 | | | | | | | | | | | 0 | 0 |
| | | | | MW@15S | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | Terminated at 45' | | — | | | 0 | 0 |
| | | | | | | | setting w/ 15' screen | | | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-21-S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | | | | | | | | Post-hole to 5' | | | | |
| | | | | | Loose | Brown | silty clayey sand ~10% silt ~10% clay | SC | Dry | | | 0 | 0 |
| | 5 | | | | | | | | | 8.5 | 0 | | |
| | | | | | Loose | Dark Reddish Brown | silty clayey sand ~18% silt ~20-30% clay | SC | Dry | 6.8 | 0 | 0 | 0 |
| | 15 | | | | Loose | | | | | 6.1 | 0 | 0 | 0 |
| | | | | | | Same as above | | | Dry | | | | |
| | 25 | | | | Very Loose | | Silty sand w/ trace fine to med. grained | SM to SC | Dry | 4.1 | | | |
| | | | | | | Mottled White to tan to yellowish to reddish brown | | | | | | 0 | 0 |
| | | | | | | | | | | 8.8 | | | |

When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-21-S
DATE: 12-4-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Same as above | | SM | | 8.8 | 0 | 0 | 0 |
| | | NR | | | very loose | | | to | fine to med. grained | | | | |
| | | | | | | | | SC | | | | | |
| | 30 | | 8/1 | | | | | | | | 0 | 0 | 0 |
| 1625 26' 36 | | | 8/10 | | | | | | | 9.2 | | | |
| | 35 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 5.8 | | | |
| | | | | | | tan to yellowish brown | | | | | | | |
| | | | 10/ | | | | | | | | | | |
| 1630 36' | 40 | | | | | Same as above | | | | | 0 | 0 | 0 |
| 46 | | | 10 | | | | | | | 5.2 | | | |
| | | | | | | | | | | | | | |
| | 45 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 5.9 | | | |
| | | | | | | | Terminated at 46' | | | | | | |
| | | | | | | | will set well in morning | | | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 4

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-22D
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surface<br>Post-Hole 5' | | | | |
| | | NA | 100% | | Loose | | Brown silty clayey sand<br>~10% silt ~20% clay<br>remainder fine sand | SC | | | 0 | 0 | 0 |
| | 5 | | | | | | | | | | | | |
| 6-16' | 10 | | 1<br>2/10 | | | | Sand as above | | | | 0 | 0 | 0 |
| | 15 | | | | Loose | | Dark Reddish brown<br>silty clayey sand<br>~10% silt ~20% clay<br>remainder fine sand | | 0.0<br>Dry | | | | |
| 16-26' | 20 | | 1<br>10/10 | | | | | | | | 0 | 0 | 0 |
| | | | | ~▼? | | | | SC | | | | | |
| | 25 | | | Very Loose | | | | SM | Damp to Moist 25.8 | | 0 | 0 | 0 |

Filter

Filter 0.0

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: MicroFID screening

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-22D
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | White to tan to yellowish | | SM | | | | | |
| | | NR | | | Very Loose | Brown to Reddish Brown | mottled silty sand | to | | | | | |
| | | | | | | | w/ trace clay to ~5% clay | SC | | | | | |
| | 30 | | 10'/1' | | Loose | | ~30% clay | | wet to saturated | | 0 | 0 | 0 |
| | | | 10 | | Very Loose | | | | | | | | |
| | 35 | | | | Loose | | ~30% clay increase | SC | saturated (1981) | | 0 | 0 | 0 |
| | | | | | | Tan to yellowish "ochre" | | SM | | | | | |
| | | | | | Very Loose | Brown silty sand | to silty clayey sand | to SC | | | | | |
| | | | 1 10'/ | | | | ~10-20% clay | | saturated | | | | |
| | 40 | | 10' | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | 45 | | | | | Same as above | | SM to SC | | 0.0 | 0 | 0 | 0 |
| | | | 1 10'/ 10' | | | Same as above | | SM to SC | | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-22D
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1115 46-56 | | AK | 10/10 | | | | | | Saturated | | | | |
| | 55 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 9.0 | | | |
| 56-66' | 60 | | 10/10 | | | | | | | | | | |
| | 65 | | | | | | Increasing clay content to 30-40% | | | 0.0 | | | |
| | 70 | | 10/10 | | Stiff to Med-Stiff | | Lt gray to reddish brown to yellowish brown silty clay w/ 2-5% fine sand | CL | laminated | | | | |
| 66-76' | 75 | | | | | | | CL | | 0.0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-22D
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1130 76-81 | | NR | | | | | silty clay as above | CL | | | | | |
| | | | | | | | | | Saturated | | | | |
| | | | | | Stiff | | | | | | 0 | 0 | 0 |
| | 80 | | | | to | | | | | | | | |
| | | | | | Med- | | | CL | | | | | |
| | | | | | Stiff | | | | | | | | |
| 81-91 | | | | | | | | | | | 0 | 0 | 0 |
| | 85 | | | | | | | CL | | | | | |
| | | | | | | | White to tan to Yellowish "ochre" brown silty sand trace clay | SM | | | 0 | 0 | 0 |
| | 90 | | | | | | | | | 0 | 0 | | |
| | | | | | | | Yellowish silty clayey sand ~ 10-20% clay | SC | | | | | |
| | | | | | | | Terminated at 91' Setting w/ 5' screen | | | | | | |
| | 95 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-23-S'
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Nan K McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | NA | | | | | Not logged see adjacent MW-22D | | | | | | |
| | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 30 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | Terminated at 40' setting w/ 20' screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-24-S
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete surf. | | | | |
| | | | | | | | | | Post Hole 5' | | | | |
| | | | | | | | Brown silty clayey | | | | | | |
| | | NA | 100% | | loose | | Sand ~ 10% silt | SC | | | | | |
| | | | | | | | ~ 20% clay | | Dry | | | | |
| | 5 | | | | | | remainder fine sand | | | | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | Dark Reddish Brown | | | | | | |
| | 10 | | 10'/ | | loose | | silty clayey sand | SC | Dry | | 0 | 0 | 0 |
| | | | 10' | | to | | ~ 10% silt ~ 30% clay | | | | | | |
| | | | | | med | | | | | | | | |
| | | | | | stiff | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SC | | | | | |
| | | | | | very | | Mottled white to tan to | SM | 1605 | | | | |
| | 20 | | 10' | | loose | | yellowish to reddish brown | to | * Lab Sample | | 0 | 0 | 0 |
| | | | | | | | silty sandy trace | SC | for AS | | | | |
| | | | 10' | | | | clay to ~ 5% clay | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | 0 | 0 | 0 |

1545
6-16
1600
16.26'
1602

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DCFS4-MW24-S
DATE: 12-5-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LL | | | | | | | | | | | | | |
| | | NA | | | Loose | | Same as above SM to SC | SM to SC | | | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | 10'/1 | | | | | | | | | | |
| 25-26 | 30 | | | | | | | | | | | | |
| | | | /10 | | Very loose | | White silty sand trace clay 20-30% silt remainder fine sand | SM | "Beach" sand | | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 35 | | | | | | | | | | | | |
| | | | | | | | | SM | | | 0 | 0 | 0 |
| | | | | | | | Brown to Yellowish brown 20% clay | SC | | | | | |
| | | | 1 | | | | White silty sand trace clay | SM | | | | | |
| | | | 10/1 | | | | | | | | | | |
| 36-46 | 40 | | /10 | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | Dry | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 45 | | | | | | Yellowish brown silty clayey sand ~10% silt & 20% clay w/ remainder fine sand | SC | Moist | | 0 | 0 | 0 |
| LL | | | | | | | | | | | | | |
| | | | 0/2 | | | | | | | | | | |
| | | | 9 | Lost Rec. | | | | | | | | | |
| 1630 | | | | | | | | | | | | | |
| 55 | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: Will set in monitoring.

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-25-S
DATE: 12-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0930 | | | | | | | | | Concrete surf. | | | | |
| | | | | | | | | | Post-hole 5' | | | | |
| | | NA | | | Loose | Brown | silty clayey sand | SC | | | | | |
| | | | 10% | | | | ~10% silt ~10% clay | | | | | | |
| | 5 | | | | | | | | Dry | | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | Loose | | | | | | | | |
| 1025 | | | | | | | | | | | | | |
| 6-16 | | | | | | Dark Reddish Brown | | SC | | | | | |
| | 10 | | 10/10 | | | | silty sandy clay to clayey sand | | # Soil Sample (AS) plus SPLP 13-8 | | 0 | 0 | 0 |
| | | | | | | | ~10% silt ~20-30% clay | | | | | | |
| | | | | | | | Remainder fine sand | | Dry to Damp | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | SC | | 45.2 | | | |
| | | | 8'/10' | | | | | | | | | | |
| 1030 | 20 | | | | | | | | | | 0 | 0 | 0 |
| 16-26 | | | | | | | | SC | | 10.3 | | | |
| | | | | | Very Loose | White to tan to yellowish to reddish brown mottled silty clayey sand to silty sand | | SM to SC | ~10% silt ~5-20% clay remainder fine sand | | | | |
| | 25 | | | | | | | | | | | | |

Filt. 6.9
Filt. 11.8
Filt. 0.0

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-25-S
DATE: 12-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 149.2 | | | |
| | | | | | very loose | | Same as above | SM to SC | | | 0 | 0 | 0 |
| | 30 | | 8/1 | | | | | | | | 0 | 0 | 0 |
| | | | 1/10 | | very loose | | White to pinkish silty sand trace clay | SM | "Beach" sand Dry | 28.8 | | | |
| | 35 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | Yellowish brown | | | | 2,490 | | | |
| | | | | | | White to tan to yellowish to reddish brown | | SC to SM | Sample | | | | |
| | 40 | | 1/10 | | loose to very loose | | silty clayey sand to silty sand | | | over 4045 | | | |
| | 45 | | | | | | | | | | | | |
| | | | | | | | | | | over 4045 | | | |
| | | | 1/10 | | loose to med stiff | Yellowish Brown | silty clayey sand ~10% silt ~30% clay remainder fine sand | SC | Saturated | | | | |
| | 50 | | | | | | | | | | | | |

Fil Hexane 120.9
Filt. 1.7
Filt. 876.0
Filt. 1,185
Filt. 4045

1035 26' 36
1055 36' 46
1110 56

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Terminated at 56' setting 15' screen

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OL-FSA-MW-26D
DATE: 12-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surf. | | | | |
| | | | | | | | | | Post-hole to 5' | | | | |
| | | NA | 100% | | Brown silty clayey sand | | | | | | | | |
| | | | | | Loose | | | | Dry | | | 0 | 0 |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 10 | | 1' | | Dark Reddish Brown | | | SC | | | | | |
| | | | 1' | | | | silty clayey sand | | | | | | |
| | | | 10 | | Loose | | ~10% Silt ~30% clay | | | | | | |
| | 15 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | 29.1 | | | |
| | | | | | | | | | | | | | |
| | | | 7' | | | | | | | | | | |
| | 20 | | 10' | | | | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | | | | | Very Mottled white to tan to | | | SM to | | | | 0 | 0 |
| | 25 | | | | Loose | | yellowish to Reddish brown silty sand w/ trace clay to silty clayey sand w/ 5-10% clay | SC | ¼ Soil Sample | 28.5 | | | |

15.5

10.5

16.26

1345

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Drilling Area Background (ppm): 0.0

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DLFS4-MW-26D
DATE: 12-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | SC | | | | | |
| | | NA | | | | | as above | to | | | | | |
| | | | | | | | | SM | | | | | |
| | | | 7'/10' | | | | | | | | | | |
| | 30 | | | | | | | | | | 0 | 0 | 0 |
| 26' | | | | | | | | | | | | | |
| 36 | | | | | | | | | Dry to Damp | | | | |
| | | | | | | | Screen Zone | | | 32.0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | 35 | | | | | white to tan | | SM | | | | | |
| | | | | | very loose | | Silty sand w/ trace clay fine sand w 10-20% silt | | Estimated | 168.9 | | | |
| | | | | | | | | | | | 0 | 0 | 0 |
| | | | 10/10 | | | | | | | | | | |
| 36-46 | 40 | | | | | | | SM | | | | | |
| | | | | | loose to stiff | | yellowish Brown ~ 30% clay | SC | | | | | |
| | | | | | | | white to tan as above | SM | | | | | |
| | | | | | | | very loose | | | | | | |
| | 45 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | yellowish brown increasing clay content to 30-40% | SC | | 2.1 | | | |
| | | | 10/16 | | | | silty clayey sand | | | | | | |
| | 50 | | | | | Lt. Gray to tan | as above | SC | | | | | |

Filter

16.8

35.4

0.0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF59-MW-26D
DATE: 12-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | | | | | | | | | | | | |
| | | NA | 10'/10' | | Loose to Med Stiff | | 40-50% clay very fine sand & silt | SC to CL | Saturated | | | | |
| | 55 | | | | | | | | | 47.3 | | | |
| | 60 | | 1'/10' | | | | increasing clay content | | | | | | |
| | 65 | | 5'/5' | | very loose | | Pinkish med grained silty sand | SM | | 0.0 | | | |
| | 70 | | | | Med Stiff to loose | | Silty sandy clay yellowish to reddish Brown ~20% silt & 20% fine sand | CL | | 19.8 | | | |
| | 75 | | 10'/10' | | very loose | | Pinkish silty sand w/ trace clay | SM | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

AG-55

55-66

66-71

Filter

0.0

22.7

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4 MW-26 D
DATE: 12-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Very loose | Pinkish | silty sand w/ trace clay | SM | | | | | |
| | | NR | 10'/10' | | | | | | | | | | |
| | 80 | | | | | | | | | | | | |
| | | | | | | | | | | 163.0 | | | |
| | | | | | | | Terminated at 81' set. w/ 5' screen. | | | | | | |
| | 85 | | | | | | | | | | | | |

F: filtered

7'-81'

15'0

49.1

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-25-S
DATE: 12-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0915 | | | | | | | | | Concrete Seal | | | | |
| | | | | | | | | | Post-Hole @ 5' | | | | |
| | | NA | 100% | | | | Brown silty clayey sand | SC | | | | | |
| | | | | | Loose | | ~10% silt ~ 10-20% clay remainder fine sand | | | | 0 | 0 | 0 |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | Not change of sample (As) | | | | |
| 0930 1 6-16 | 10 | | 8/1' | | | | Dark Reddish Brown | | * Sample 2.7 | | 0 | 0 | 0 |
| | | | 10/1' | | Loose | | Silty clayey Sand ~20-30% clay, ~10% silt remainder fine sand | SC | | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 23.1 | | | |
| | | | 10'/1' | | | | | | | | | | |
| | | | | | | | | | | | 0 | 0 | 0 |
| 16-26' | 20 | | | | | | | | | 8.1 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | Loose | | as above | | | | | | |
| | | | | | | | | SC | | | | | |
| | 25 | | | | Very Loose | | | SC to SM | | 79.9 | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Filter 0

Filter 0

Filter 0

Filter 36.4

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-25-S
DATE: 12-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | SP | | Coarse | | | | | |
| | | | | | | Brown | silty clayey sand | SC | | | | | | |
| | | | | | very loose | | silty sand w/ trace to 10% clay | SC to SM | Dry | | | | | |
| 0945 | 30 | | 10/1 | | | | Turn to white to yellowish to reddish brown | | | | 0 | 0 | 0 | Filter 0 |
| 26-36' | | | 10 | | | | | | | 15.8 | | | | |
| | | | | | | | | SC | | | | | | |
| | 35 | | | | | | White silty sand w/ | SM | "Beach" sand | | 0 | 0 | 0 | Filter 0 |
| | | | | | very loose | | trace clay | | Damp | 11.2 | | | | |
| 1000 | | | | | | | White to pinkish silty sand w/ trace clay | | | | | | | |
| 36-46' | 40 | | | | | | | | Damp to Moist | 11.4 | 0 | 0 | 0 | Filt. 2.4 |
| | | | | | | | | | Note change (45) of sample # | | | | | |
| | 45 | | | | loose | | Yellowish to reddish | SM SC | # Sample | | 0 | 0 | 0 | Filt 19.4 |
| | | | | | | | brown silty clayey sand w 10% silt & 10-20% clay | | Damp | 26.4 | | | | |
| 1020 | | | | | | | | | Saturated | | | | | |
| 46-56 | | | | | | | Yellowish "ochre" brown silty clayey sand w 10% silt & 20-30% clay | SC | | | | | | |
| | 50 | | | SC | | | | | | | | | | |
| | | | | | | | SM | | | | | | | |
| | 56 | | | SC to CL | | | 52-56' w 50-60% clay & silty sand clay bottom | CL | | 0.6 | | | | Filt. 0 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Terminated at 56' setting w/ 15' screen

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-28S
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass surface | | | | |
| 0800 | | | | | | | | | Post-hole 5' | | | | |
| | | NA | | | | | Not logged see | | | | | | |
| | | | 100% | | | | Adjacent MW-26D | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 10 | | NA | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 30 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| 0845 | | | | | | | | | Terminated at 45' | | | | |
| | | | | | | | | | Setting w/ 15' screen | | | | |
| | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW 29D
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | | Filter |
| | | | | | | | | | Post-Hole to 5' | | | | | |
| | | NA | 100/10 | | Brown silty clayey sand ~10% silt ~20% clay | | | SC | | | 0 | 0 | 0 | |
| | | | | | Loose | | | | | | | | | |
| | 5 | | | | | | | | Dry | | | | | |
| | | | | | | | | | | | 0 | 0 | 0 | |
| 1150 6-16 | 10 | | 8/10 | | Dark Reddish Brown silty clayey sand ~10% silt ~20-30% clay remainder fine sand | | | SC | | 14.5 | | | | 12.8 |
| | | | | | Loose | | | | Dry | | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 | |
| | | | | | | | | | | 43.8 | | | | 14.4 |
| | | | | | | | | | Dry | | | | | |
| | | | 8/10 | | | | | | | | 0 | 0 | 0 | |
| 1200 6-26 | 20 | | | | | | | | | 14.8 | | | | 13.0 |
| | | | | | Very rocky | | Mottled white to tan to Reddish to yellowish Brown to clay varies from trace to 10% | SM SC | Dry | | 0 | 0 | 0 | |
| | 25 | | | | | | | | | | | | | |

1045 Fueled Rig

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area 12.2
Background (ppm): 0.0 Hg

Remarks: Adjacent to DPW-24 Wind Shifted

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-29D
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | Fill. |
| | | NA | | | very loose | | Same as above | | | 23.9 | | | | 13.4 |
| | | | | | | | | | | | 0 | 0 | 0 | |
| 1210 26-36 | | | | | | | White to tan to yellowish brown silty sand to | SM to | | | 0 | 0 | 0 | |
| | 30 | | 1' | | | | | | | | | | | |
| | | | 10/10' | | loose | | Silty clayey sand trace sand clay to | | Saturated | 1023 | | | | 138.1 |
| | | | | | | | 3 yellowish ± 10% Alternates | SC | | | | | | |
| | 35 | | | | tan | | | SM | | | 0 | 0 | 0 | |
| | | | | | loose | | | | | 208.4 | | | | 120.4 |
| | | | | | 3 white | | | SM | | | | | | |
| | | | | | loose | | | | | | | | | |
| 1220 36-46 | 40 | | 10' | | | | | | | | | | | |
| | | | 10/10' | | | | Lt gray | SC | | | | | | |
| | | | | | loose | | | | | | | | | |
| | 45 | | | | | | Yellowish brown silty | SM | | | 0 | 0 | 0 | |
| | | | | | | | clayey sand to silty clay | to SC | | 15.4 | | | | 13.3 |
| | | | | | | | Lt gray to tan | SC | | | | | | |
| 46-56 | | | 10'/10' | | loose | | ± 20% silt ± 5-10% clay | | remainder fine sand | | | | | |
| | 50 | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area 12.2
Background (ppm): 0.0 N/D

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-29D
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Lt. Gray to tan | | SC | Saturated | | | | |
| | | N/A | 1' | | Loose | | silty clayey sand | | | | | | |
| | | | 10/ | | | | 25-10% clay 20% silt | | | | | | |
| | | | 10' | | | | remainder fine sand | | | | 0 | 0 | 0 |
| | 55 | | | | | | | | | | | | |
| | | | | | | | | | | 15.0 | | | |
| | | | | | | | | | increasing clay content | | | | |
| | | | | | Loose | | Pinkish silty clayey sand | SC | | | | | |
| | 60 | | 10/ | | | | | | | | | | |
| | | | 10' | | | | | | | | | | |
| | | | | | | | Reddish brown | SC | | | | | |
| | | | | | | | ~ 20-30% clay | | | | | | |
| | | | | | | | Yellowish Brown | | | | | | |
| | 65 | | | | | | silty clayey sand | | | | 0 | 0 | 0 |
| | | | | | | | ~ 10% clay | | | 15.6 | | | |
| | | | | | | | silty sandy clay | CL | | | | | |
| | | | 5' | | Med | | ~ 28% silt or 10% to | | | | | | |
| | | | 5' | | Stiff | | 20% fine sand | | | | | | |
| | 70 | | | | | | remainder yellowish Brown clay | | | | | | |
| | | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 14.4 | | | |
| | | | | | | | White to tan to | SM | | | | | |
| | | | | | | | yellowish to reddish | | | | | | |
| | 75 | | | | | | Brown silty sand w/ trace to 5% clay | | | | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area 12.2
Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DLFS4-MW-29D
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 10' | | | | Same as above | SM | | | | | |
| | | | 10' | | | | | | | | 0 | 0 | 0 |
| | 80 | | | | | | | | | 19.7 | | | 15.1 |
| | | | | | | | Terminated at 81' | | | | | | |
| | | | | | | | Setting w/ 5' screen | | | | | | |
| | 85 | | | | | | | | | | | | |
| | 90 | | | | | | | | | | | | |

F.H.

71-81'

1300

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area 12.2

Remarks:

Background (ppm): 0.0 BZ

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW30S'
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

1500

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf | | | | |
| | | | | | | | | | Post hole to 3' | | | | |
| | | NA | | | Loose | Brown | Silty clayey Sand | SC | | | | 0 | 0 |
| | | | 10of6 | | | | | | | | | | |
| | | | | | | | Not logged see adjacent | | | | | | |
| | 10 | | | | | | DPW-23 and MW-29D | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | . | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 30 | | | ~~~ | ← From MW-29 Boring | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | | |
| | | | | | | | Terminated at | | | | | | |
| | | | | | | | 40' setting w/ 15' Screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Adjacent to DPW-23 ← No Exceedances @ 26'
Screening already performed

Drilling Area Background (ppm): 12.2

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFSA-MW 31S
DATE: 12-13-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

1610

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surface | | | | |
| | | | | | | | Post-hole to 5' | | | | | | |
| | | NA | | | | | Brown silty clayey sand | SC | | | | 0 | 0 |
| | | | | | | | Not logged, see adjacent DP-30 bor. and MW-29D | | | | | | |
| | 10 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 30 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | 0 | 0 |
| | 40 | | | | | | | | | | | | |
| | | | | | | | Terminated at 40' setting w/ 15' screen | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: DP-30 screened clean and No exceedances from soil at 8'. Screening not required

Drilling Area Background (ppm): 12.2

Converted to Well: Yes V No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OL FS4 - MW 32S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NA | 7 100% | | | Brown | silty clayey sand | & | Post hole 5' | | | 0 | 0 |
| | | | -4 | | | | | | | | | | |
| | | | | | | | Lithology Not logged see adjacent DPW13 and MW-29D boring logs. | | | | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | 30 | | | | | | | | | | | | |
| | | | | | | | | | | | | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | 0 | 0 |
| | | | | | | | Terminated at 40' | | | | | | |
| | | | | | | | setting w/ 15' screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: Adjacent to DPW-13, and MW-29D for Lithology (No soil Exceedance only GW exceedance

Converted to Well: Yes V No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW-33S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | | F.H. |
| | | NA | | | Loose | | Brown silty clayey sand ± 10% silt ± 10% clay | SC | Damp to moist | | | | | |
| 1120 4-5' sample | 5 | | | | | | | | * Sample | 2.2 | 0 | 0 | 0 | 0.0 |
| | | | | | | | Dark Reddish Brown silty clayey sand ± 10% silt ± 20% clay | SC | Dry | | | | | |
| 1130 6-16 | 10 | | 9/11 10 | | Loose | | | | | 16.1 | 0 | 0 | 0 | 2.4 |
| | 15 | | | | | | | | | 48.3 | 0 | 0 | 0 | 17.3 |
| 1135 16-26' | 20 | | 6/11 10 | | Very Loose | | Mottled White to tan to Yellowish to reddish Brown clay varies from trace to 10% | SM to SC | Dry | 13.8 | 0 | 0 | 0 | 1.1 |
| | 25 | | | | | | | | * Sample | 105.6 | | | | 25.0 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW33S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark Melean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | Filt. |
| | | 11 | | | Very loose | White | silty sand w/ trace clay | SM | Wet to Saturated | 16.6 | 0 | 0 | 0 | 2.7 |
| | 30 | | | | | | | | | 6.4 | | | | 1.4 |
| | | | | | Loose to med stiff | Yellowish brown | Silty clayey sand ~10% silt and 30-40% clay | SC | Increasing clay content / Saturated | | 0 | 0 | 0 | |
| 1150 | 35 | | | | | | | | | | 0 | 0 | 0 | |
| | | | | | | | | | | 12.1 | | | | 1.4 |
| | | | | | Loose | Pinkish | silty clayey sand ~10% silt ~10% clay | SC | | | | | | |
| 1200 | 40 | | | | | | | | | | | | | |
| | | | | | | | Terminated at 40' Setting w/ 20' screen | | | | 0 | 0 | 0 | |
| | | | | | | | | | | 2.6 | | | | 1.1 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: DLFS4-MW-34S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | | | | | | | | Post-hole #5' | | | | |
| | | AA | | | | | | | | | | | |
| | | | | | | | Not logged see | | | | | | |
| | | | | | | | Adj. MW-29D - MW-26D | | | | | | |
| | 10 | | | | | | DP 18, 19, 20 | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 30 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | Terminated at 40' | | | | | | |
| | | | | | | | to set w/15' screen | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): [ ]

Remarks: _____

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW35S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surf. Post-hole to 5' | | | | | |
| | | NR | 10% | | | Brown | silty clayey Sand | SC | | | | | | |
| | 5 | | | | | | | | | | 0 | 0 | 0 | |
| | 10 | | 5/1/10 | | | Dark Reddish brown | silty clayey Sand | SC | | 8.9 | | | | 0.0 |
| | 15 | | | | | | | | | | 0 | 0 | 0 | |
| | | | | | | | | | | 46.1 | | | | 22.0 |
| | 20 | | 6/1/10 | | | Mottled white to tan to yellowish to reddish brown | | SW to SC | trace to 10% clay | 10.3 | | | | 1.2 |
| | 25 | | | | | | | | | | 0 | 0 | 0 | |
| | | | | | | | | | | 128.7 | | | | 53.6 |

1300 1320 MW
1320 6-16'
1325 16-26'
Filt.

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW35S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | SM to SC | | | | | | |
| | | NA | 1 | | | | Same as above | | | | | | | |
| | | | 1 | | | | | | 28-29' | | | | | |
| | | | 1 | | | | | | # Sample | 138.2 | | | | 21.8 |
| | 30 | | 1 | | | | | | | | | | | |
| | | | | | | | | | wet to saturated | 1323 | | | | 48.5 |
| | | | | | | | Grade to White to Lt. Gray Silty clayey sand ~10% silt ~ 10%-20% clay | | Saturated | 200 | 0 | 0 | 0 | 200 48.5 |
| | 35 | | | | | | | | | 172.5 | | | | |
| | | | 1 | | | | | | | 7.2 | | | | 0.6 |
| | | | 5 | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | |
| | | | 5 | | | | | | | | | | | |
| | 40 | | | | | | | | | | 0 | 0 | 0 | |
| | | | | | | | Terminated at 41' to set well | | | 2.5 | | | | 1.2 |

1340 26-36

1350 36-41'

* When rock coring, enter rock brokeness.

** Include monitor reading in 5 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-MW-36S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surface | | | | |
| | | | | | | | | | Post hole 5' | | | | |
| | | Air | 10% | | Loose | Brown | silty clayey sand | SC | Damp | | 0 | 0 | 0 |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | | | | | | | | | | | 0 | 0 | 0 |
| | | | 1' | | 3 | Dark Brown to Black w/ white | | | | 1.4 | | | 0.3 |
| | 10 | | 10/ | | | Brown | | | | | | | |
| | | | 1 | | | Reddish Brown | | SC | | | | | |
| | | | 10 | | | silty clayey sand | | | | | | | |
| | | | | | | Dark Reddish Brown | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 16.8 | | | 8.1 |
| | | | 8' | | | Mottled silty sand to | | SM | | | | | |
| | 20 | | / | | Very | | silty clayey sand | SC | | | | | |
| | | | 1 | | Loose | | clay varies from trace | | Dry | | | | |
| | | | 10 | | | | to 20-15% | | | | | | |
| | | | | | | | | | | | | | |
| | 25 | | | | | | | | ± 25' Soil Sample | | 0 | 0 | 0 |
| | | | | | | | | | | 174.7 | | | 27.2 |

Drilling Area Background (ppm): 0.0

1430 — 1510 — 6-16' — 16-26'

Filt.

*When rock coring, enter rock brokeness.
**Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Converted to Well: Yes ✓ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-MW36S
DATE: 12-14-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | As Above | SM to SC | | | 0 | 0 | 0 |
| 1520 26-31 | | NA | 1' 5/5' | | Very loose | | white to tan silty sand w/ trace clay | SM | | 48.1 | | | 12.9 |
| | 30 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 21.2 | | | 0.5 |
| | | | | | Loose | | Yellowish Brown silty clayey sand ~ 10% silt + ~ 30 to 40% clay | SC | | | | | |
| 1530 31-41 | 35 | | | | | | Lt. gray to white to yellowish brown mottled ~ 10% clay | | | | | | |
| | | | | | | | Yellowish brown silty sandy clay ~ 30 to 40% clay | SC | | | | | |
| | 40 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | Lt. gray as above Terminated at 41' to set w/ 15' screen | | | 3.7 | | | 0.1 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-807 SB1
DATE: 12-3-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| 1045 | | | | | | | | | Post hole to 5' | | | | |
| | | NA | | | | | Brown silty clayey sand | | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | SC | | | | | |
| 1. | | | | | | | | | | | | | |
| | | | 10/ | | | | | | | | | | |
| 6'1 | 10 | | 10 | | | | Dark Reddish Brown silty clayey sand | | | | | | |
| 16' | | | | | | | | | No Obstructions | | | | |
| | 15 | | | | | | | SC | | | | | |
| 1100 | | | | | | | Terminated Boring at 16' | | No Tanks | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: Location Geophysical anomaly to search for possible USTs

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFSA-SB-2
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surface<br>Post-hole to 5' | | | | |
| | | NA | 10" | | Loose | Brown | silty clayey Sand | SC | | | | | |
| | 5 | | 4' | | | | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | | | 8' | | | | | | SB-2-S10'<br>* Sample<br>TAL metals | | | | |
| | 10 | | 10" | | | | | | | | | | |
| | | | | | Dark Reddish Brown<br>Loose | | silty clayey sand | SC | Dry | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 26.7 | | | 13.7 |
| | | | | | | | | | Dry | | | | |
| | 20 | | 8' | | | | | | | | | | |
| | | | 10" | | Very Loose | Mottled White to tan to Yellowish to Reddish Brown | clay, varies from trace to 10% | SM to SC | | | | | |
| | | | | | | | | | Dry | | | | |
| | 25 | | | | | | | 25-26' | * Sample | 397.3 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

0845
Sample 1 9-10 ft
0850 1 * G-16
0855 1 16-26
118.4

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-SB2
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | NR | | | Very loose | | Mottled as above | SM to SC | | | | | |
| | 30 | | 8/10 | | | | | | Dry | | | | |
| | 35 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | very loose | | Pinkish to yellowish silty sand w/ trace clay to 20-30% silt trace clay | SM to ML | (Same color yellow @ bit in 2.5' @ 40') | A9.1 | | | 19.3 |
| | 40 | | | | | | | | Dry | | | | |
| | | | | | | | Same as above | | | | | | |
| | 45 | V | | | | | | | | 26.7 | | | 9.9 |

0900 26-36

0905 36-46'

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-SB-3
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surf. Post-Lok to 5' | | | | |
| | | NR | 10% | | Loose | Brown | | | | | | | |
| | 5 | | | | | | | | | | 0 | 0 | 0 |
| | 10 | | 10'/10' | | | Dark Reddish Brown | | | #1S sample 9-10' | | | | |
| 0925 6-16 | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 12.3 | | | 1.3 |
| | | | 9'/10' | | | | | | | | | | |
| 0930 10-26 | 20 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 99.6 | | | 18.9 |
| | | | | | Loose | Mottled gray | silty sand to silty clayey sand | SM to SC | | | | | |
| | 25 | | | | | | | | #2S 25'-26' sample | | 0 | 0 | 0 |
| | | | | | | | | | | 104.6 | | | 26.8 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-SB-3
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER:

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Mottled | SM to SC | | | | | | |
| | | WH | | | | | As above | | | | | | | |
| | | | | | | | | | | | | | | |
| | 30 | | 8'/10' | | | | | | | | | | | |
| 0935 | | | | | | | White to pinkish white silty sand to sandy silt | SM to ML | | | | | | |
| | 35 | | | | | | | | | 25.6 | | | | 10.8 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | 8'/10' | | | | Same as above | | | | | | | |
| | 40 | | | | | | | | | | | | | |
| 0945 | | | | | | | | | | | | | | |
| | | | | | | | Yellowish to reddish Brown silty clayey sand ~ 10% clay | SC | | | | 000 | | |
| | 45 | | | | | | | | | 6.9 | | | | 1.1 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-SB4
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surf. | | | | |
| | | NA | | | Brown | | | SC | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | | | | | | | | | | | 20 | 0 | |
| | 10 | | 8'/10' | | | | | SC | 10' | 19.7 | | | 2.9 |
| | | | | | Dark Reddish Brown | | | | As Sample @ 12' bgs | | | | |
| | 15 | | | | | | | | | | 0 | 0 | |
| | | | | | | | | | Dry | 27.2 | | | 13.3 |
| | | | | | | | | | | | | | |
| | 20 | | 9'/10' | | Mottled White to tan to yellowish to reddish Brown | | | SM to SC | | | | | |
| | | | | | Very Loose | | | | Dry | | | | |
| | 25 | | | | | | | | | | 0 | 0 | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

87.3 23.9

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

1030
1055 - 6-16 -
1100 - 16-26 -

Tetra Tech NUS, Inc.

# BORING LOG

4 Page 2 of 2

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-SB 4C3 ~~Stpp~~ dRdy 2pp
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McKean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Mottled | as above | | | | | | | |
| | | | | | Very loose | White to pinkish | silty sand to sandy silt | SM to ML | Dry | | | | | |
| 1105-1110 26-36' | 30 | | | | | | | | | | | | | |
| | 35 | | | | | | | | | | 0 | 0 | 0 | |
| | | | | | | | | | | 10.3 | | | | 1.7 |
| | 40 | | | | | Yellowish brown | silty clayey sand ~10% silt ~20% clay | SC | | | | | | |
| | 45 | | | | | | | | #1 As Sample 45' | 28.4 | 0 | 0 | 0 | 9.5 |
| | | | | | | | Term. 46' | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-SB5
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surf | | | | | |
| | | N/A | | | Loose | Brown | Silty clayey sand | SC | | | | | | |
| | 5 | | | | | | | | Dry | | | | | |
| | | | 1' | | | | | | | | | | | |
| 1130 6-16 | 10 | | 6/ | | | | | | 10' #1 (As) sample | 2.6 | | 000 | | 0.0 |
| | | | 10' | | Loose | Dark reddish Brown | Silty clayey sand | SC | Dry | | | | | |
| | 15 | | | | | | | | | | | 000 | | |
| | | | | | | | | | | 14.2 | | | | 11.0 |
| 1135 16-26 | 20 | | 8/ | | | | | | | | | | | |
| | | | 10' | | | | | | Dry | | | | | |
| | 25 | | | | | | | | | | | 000 | | |
| | | | | | | | | | | 14.3 | | | | 11.0 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-SB5
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | same as above | SC | | | | | |
| | | NR | | | | | mottled yellowish to reddish to tan to white | SM TO SC | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 30 | | 8'/10' | | | | White to pinkish silty sand to sandy silt | SM TO ML | | | | | |
| | 35 | | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 26.9 | | | |
| | | | | | | | Yellowish Brown silty clayey sand ~10% clay | SC | | | | | |
| | 40 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 45 | | | | | | | | 15' *(Rs) Sample | | 0 | 0 | 0 |
| | | | | | | | | | | 24.7 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

1140 26-36'

1145 36-46'

8.4

500

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-SB-6
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surf. | | | | |
| | | | | | | Brown | | SC | | | | | |
| | | NA | | | Loose | | | | | | | | |
| | | | | | | | | | 4-5' Sample | | 0 | 0 | 0 |
| | 5 | | | | | | | | # Sample | 0.8 | | | |
| | | | | | | | | | Dry | | | | |
| | 10 | | 6'/10' | | | | | | | | | | |
| | | | | 14 | Loose | Dark Reddish brown | | SC | Dry | | | | |
| | 15 | | | | | | | | 16' Sample | | 0 | 0 | 0 |
| | | | | | | | | | # | 22.9 | | | |
| | | | | 18 | Very Loose | Mottled white to tan to Yellowish to reddish brown | | SM to SC | Dry | | | | |
| | 20 | | 8'/10' | | | | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | 25 | | | | | | | | | | 0 | 0 | 0 |

1300; 1320, 6-16; 1325, 16-26; 0.0; 12.4; 3.1

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read. Bkg 7.5 Drilling Area Background (ppm): 0.0

Remarks: Fenced area behind Bldg 810E, Flammables Storage 836 stained ground and Prisoner said "they pour that stuff all the time!"

Converted to Well: Yes ____ No √ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLFS4-SB-6
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| 1345 | | WH | 5' | | | | White-to lt.gray silty sand w/trace clay | SM | Dry | | | | |
| 26-31 | | 7 | 5' | | | | | | | 30.9 | | | 18.2 |
| | 30 | | | | 3 | | Yellowish Brown silty clayey sand fine sand (~20 / ~30-40%) | SC | Saturated | | | | |
| | | | | | | | Terminated @ 31' | | | 34.5 | | | 16.3 |
| | 35 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-SB-7
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1350 | | | | | | | | | | | | | |
| | | NA | | | Brown | | | | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | Dark Reddish Brown | | | SC | Dry | | 0 | 0 | 0 |
| 1410 6-16 | 10 | | 4/4 | | Loose | | | | | 3.5 | | | 1.2 |
| | | | 4.0' | | | | | | 12' *(As) Sample + SPLP | | | | |
| | 15 | | | | | | | | Dry | | 0 | 0 | 0 |
| | | | | | Very Loose | Mottled | | SM | | 43.2 | | | 17.7 |
| | | | | | | Terminated at 16' | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: ProSonic
DRILLING RIG: Sonic

BORING No.: OLF54-SB-8
DATE: 12-15-06
GEOLOGIST: Gary J. Davis
DRILLER: Mark McLean

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 5" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 1430 Concrete surf | | | | |
| | | | | | | | | | Post hole to 5' | | | | |
| | | NA | 10% | | | Brown | silty clayey sand | SC | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | | | | | Dry | | | | |
| | | | | | | Dark Reddish brown | | SC | | | | | |
| | | | | | | | silty clayey sand | | | | | | |
| 1440 5-16' | 10 | | 6' | | | | | | | | | | |
| | | | 10' | | | | | | B' (AS) sample | | | | |
| | | | | | | | | | Dry | | | | |
| | 15 | V | | | | | | | | | 0 | 0 | 0 |
| | | | | | | | | | | 16.2 | | | 10.3 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLF54-DP1-S Hyd
DATE: 9-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/FL) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ** | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N/A | | | | Brown to Lt. Brown | | | Grass Surf. | | | | |
| | | | 100% | | | Silty fine sand trace clay | | SM | Brown to | 0 | 0 | 0 | 0 |
| | | | 2 | | | | | | Lt. Brown | 0 | | | |
| | | | 12/12 | | Loose | | Dry Loose | | Silty sand w/ trace clay | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | fine sand | 0 | | | |
| | | | 36/ | | | | Same as above | | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | | | 0 | | | |
| | | | | | Loose | | except dark | | | 0 | 0 | 0 | 0 |
| 1207 | 10 | | | | | | reddish brown | | | 0 | | | |
| | | | | | | | ~5% clay | | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | 60 | | Loose | | damp | | | 0 | 0 | 0 | 0 |
| 1215 | 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as | | Sample OLF54-DP1- | | | | |
| | | | 60 | | Loose | | above moist | | 520 | 0 | 0 | 0 | 0 |
| 1220 | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | | | | | |

W/ Charcoal Filter

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DP2
DATE: 9-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Tighe

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | | | | Brown | silt sand | SM | 8-inch coreuk | | | | |
| | | | 10% | | loose | | w/ trace clay | | Hand Aug to 4' | 0 | | | |
| | | | 2 | | | | Dry - fine grained | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | 5 | | 12/12" | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | 44" | | Loose | | Lt. Brown | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | same as above | | | 0 | | | |
| | | | 60" | | | | | | | 0 | | | |
| 1305 | | | | | loose | | Reddish Brown | SM | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | sl. clay ~5% | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | Loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | | | | | | |
| | | | | | 11 | | | | | 0 | 0 | 0 | 0 |
| 1310 | 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | | | | | | |
| | | | | | 7 | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | * | Sample OLFS4-DP2-520 | | | | |
| 1315 | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | | | | | |

W Filter

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DP3
DATE: 9-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 5" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. Hand Augered to 4' | 0 | | | |
| | | NA | 100% | | Loose | Brown to Lt. Brown | | SM | | 0 | 0 | 0 | 0 |
| | | | 2 | | | | Silty sand w/ | | | 0 | | | |
| | | | | | Loose | | trace clay | SM | | 0 | 0 | 0 | 0 |
| | 5 | | 2/2 | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | | | Loose | | Same as above | | | 0 | | | |
| | | | 60/ | | | | damp | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | 60 | | Loose | Dark Reddish Brown | | SM | | 0 | 0 | 0 | 0 |
| 1520 | 10 | | | | | | sl. clay ~5% | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | Loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | Loose | | | SM | | 0 | 0 | 0 | 0 |
| 1525 | 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | Loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | Loose | | | SM | *Sample | 0 | 0 | 0 | 0 |
| 1530 | 20 | | | | | | | | OLFS4-DP3-S20 | | | | |
| | | | | | | | Terminated @ 20' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: 1st hole hit something @ ~3.5' offset 4' West

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DP4
DATE: 9-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Grass Surface | | | | |
| | | NA | 100% | | Loose | | Brown to Lt. Brown Silty fine sand w/ trace clay | SM | Hand Auger 4' | 0 | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | Loose | | Dry | SM | | 0 | | | |
| | 5 | | 12/12 | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 36/ | | Loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | damp | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| 1600 | 10 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | 48/ | | Loose | | | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | Dark Reddish Brown | | | | | | |
| | | | | | Loose | | same as above | SM | | 0 | 0 | 0 | 0 |
| 1615 | 15 | | | | | | Sl. clay ~ 3% | | | | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | Loose | | Same as | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | above | | | | | | |
| | | | | | | | | SM | Sample | 0 | 0 | 0 | 0 |
| 1620 | 20 | | | | | | | X | OLFS4-DP4-S20 | | | | |
| | | | | | | | Terminated at 20' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DP5
DATE: 9-6-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Brown to Lt Brown | | | Concrete Surf. Hand Auger to | 0 | | | |
| | | NA | 100% | | Loose | | silty sand w/ | SM | A' | 0 | 0 | 0 | 0 |
| | | | | | | | trace clay | | | 0 | | | |
| | | | ↓ | | Loose | | | SM | | 0 | 0 | 0 | 0 |
| | 5 | | 12/12" | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/60" | | Loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | | | Loose | | | SM | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | | | | 0 | | | |
| | | | | | | | Same as above | | | | | | |
| | | | 48/60 | | Loose | | changes to | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | Dark Reddish Brown | | | | | | |
| | | | | | Loose | | silty sand | SM | | 0 | 0 | 0 | 0 |
| 1720 | 15 | | | | | | Slight increase in clay content to 5-10% | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | Loose | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | Loose | | 11 | SM | * Sample | 0 | 0 | 0 | 0 |
| 1730 | 20 | ↓ | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | OLFS4-DP5-S20 | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DP-6
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | | Brown to lt. Brown | | | Hand Augered to 4' Concrete Sand. | 0 | | | |
| | | | | | Loose | | Silty sand tr. clay | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | 5 | | 12/12" | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | SM | | 0 | | | |
| | | | 60 | | | DK | Reddish Brown | | | 0 | 0 | 0 | 0 |
| 0825 | 10 | | | | | | Silty sand w/ 5-10% clay | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | | | | | | | |
| | | | | | | | Same as above | | | | | | |
| | | | 60 | | | | | | | 0 | 0 | 0 | 0 |
| | 15 | | | | | | | SM | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | | | | | | | | | | | |
| 0845 | 20 | | 60 | | | | | * | Sample OLFS4-DP6-S20 | 0 | 0 | 0 | 0 |
| | | | | | | | Terminated at 20' | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

FH.

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe ~~7730~~ DT

BORING No.: OLFS4-DP7
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 0 | | | |
| | | NA | 60% | | | Brown to Lt. Brown | | SM | | 0 | 0 | 0 | 0 |
| | | | 7 | | Loose | | Silty sand w/ | | | 0 | | | |
| | | | ↓ | | | | trace clay | | | 0 | 0 | 0 | 0 |
| | 5 | | 12/12 | | | | Damp | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | | | | | 0 | 0 | 0 | 0 |
| | | | 60 | | | DK | Reddish Brown | SM | | 0 | | | |
| | | | | | | | Silty sand w | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | ~5% clay | | | 0 | | | |
| | | | | | | | Damp | | | | | | |
| | | | 48/ | | | | | | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | Same as above | SM | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 15 | | | | | | | | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above | SM | | | | | |
| | | | 60 | | | | | | | 0 | 0 | 0 | 0 |
| | 20 | | | | | | | | * Sample | | | | |
| | | | | | | | Terminated at | | OLFS4-DP7- | | | | |
| | | | | | | | 20' | | 520 | | | | |

0930

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DP8
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Creek Surface | | | | |
| | | NA | 100% | | Loose | Brown to Lt. Brown | | SM | Hand Augered to 4' | 0 | | | |
| | | | | | | | Silty sand w trace clay | | | 0 | 0 | 0 | 0 |
| | 5 | | 12/12 | | | | | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | SM | | 0 | | | |
| | | | 60 | | | | Dark Reddish Brown | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | Silty sand w/ 5% clay | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above | SM | | | | | |
| | | | 60 | | | | | | | 0 | 0 | 0 | 0 |
| | 15 | | | | | | | | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | | SM | | | | | |
| | | | 66 | | | | | | * Samples OLFS4-DP8- | 0 | 0 | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | Plus S20 VOHs Metals & PCBs | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

2100
0725
1025

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFSA-DP89 Dup
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

7126

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/FL) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Brown to Lt. Brown | | | Concrete Surf. Hand Auger to 4' | 0 | | | |
| | | NR | 100% | | Loose | | silty sand w/ trace clay | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | 5 | | 12/12 | | | | Dry | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | Orangish Brown | | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | as above Damp | | | 0 | | | |
| | | | 60 | | | DK Reddish Brown | | SM | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | silty sand w/ ~5% clay | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | 60 | | | | | | | | | | |
| | 15 | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | | | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | SM | | | | | |
| | | | | | | | | | Sample # OLFSA-DP89520 | 0 | 0 | 0 | 0 |
| | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | Plus Volts, Metals & PCBs | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

1140

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DP10
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surf. | 0 | | | |
| | | NA | 100% | | | Brown to Lt. Brown | | | Hand Auger 4'@0 | 0.5 | 0 | 0 | 0 |
| | | | | | Loose | | silty sand | SM | | 0 | | | |
| | | | | | | | w/ trace clay | | | 0 | 0 | 0 | 0 |
| 1520 | 5 | | 12/12 | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | DK Reddish Brown | | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | silty Sand w/ | | | 0 | | | |
| | 10 | | | | | | ~5% clay | SM | | 0 | | | |
| | | | | | | | Damp | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | 52/ | | | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | | | 0 | 0 | 0 | 0 |
| | 15 | | | | | | | | | | | | |
| | | | | | | | | SM | | | | | |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 52/ | | | | | | | | | | |
| 1535 | 20 | | 60 | | | White to Buff silty sand | | | * Sample OLFS4-DP10-S20 | 0 | 0 | 0 | 0 |
| | | | | | | | trace clay. fine-med. Grained | | | | | | |
| | | | | | | | Damp | | | | | | |
| | | | | | | Terminated at 20' | | | Plus Volts Metals & PCBs | | | | |

BKG Reading

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.3

Remarks: Loc. is approx 2' lower in elevation than previous borings.

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DP11
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Asphalt Surface | | | | |
| | | NA | 100% | | Loose | Brown to Lt. Brown | Silty sand w/ trace clay | SM | Hand Augered 4' fine grained | 0 | 0 | 0 | 0 |
| | | | ↓ | | | | Dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | 12/12 | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | 52/ | | | | Same as above. | | | 0 | | | |
| | | | 60 | | | | | SM | | 0 | 0 | 0 | 0 |
| 1600 | 10 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | 44/ | | | | | | | | | | |
| | | | 60 | | | | Dark Reddish Brown | SM | | 0 | 0 | 0 | 0 |
| 1610 | 15 | | | | | | Silty sand w/ ~5% clay | | | | | | |
| | | | | | | | damp | | | | | | |
| | | | 52/ | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | | | | | | |
| 1615 | 20 | | ↓ | | | | Mottled White to Buff to reddish brown Silty sand - fine-med grained | SM | Sample OLFS4-DP11-S20 | 0 | 0 | 0 | 0 |
| | | | | | Terminated at 20' | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 8.3

Remarks: Loc. Also ~2' lower in elevation than DP1-DP9

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4 - DP12
DATE: 9-7-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WA | | | | | Brown silty sand trace clay | SM | Grass Surf. | 0 | | | |
| | | | | | Loose | | top 1' then | | | 0 | 0 | 0 | 0 |
| | | | | | | | Lt. Brown | SM | | 0 | | | |
| | | | | | | | very fine silty sand | | | 0 | 0 | 0 | 0 |
| 1635 | 5 | | | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | | | | | Lt. Brown silty sand | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | trace clay fine sand | | | 0 | | | |
| | | | | | | | Damp | SM | | 0 | 0 | 0 | 0 |
| 1640 | 10 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | Dark Reddish brown | | | | | | |
| | | | | | | | silty sand 25% clay | SM | | 0 | 0 | 0 | 0 |
| 1645 | 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | V | | | V | | Mottled white to Buff to reddish brown silty sand | SM | * sample OLFS4-DP12-S20 | 0 | 0 | 0 | 0 |
| 1650 | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | plus PPL Volts, Metals PCBs | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 8.3

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DP13
DATE: 9-8-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NA. | 100% | | | Brown to | | SM | Hand Auger to 4' | 0 | | | |
| | | | | | Loose | Lt Brown | silty sand | | | 0 | | | |
| | | | ↓ | | | | w/ trace clay | SM | | 0 | | | |
| | 5 | | 12/12 | | | | fine grained sand | | | 0 | | | |
| | | | | | | | Dry | | | 0 | | | |
| | | | 48/ | | | | | | | 0 | | | |
| | | | /60 | | | | | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | 10 | | | | | DK Reddish Brown | | | | 0 | | | |
| | | | | | | 90% | silty clay sand with | SM | | | | | |
| | | | 52/ | | | | ~5-10% clay | | | 0 | | | |
| | | | | | | | Damp | | | | | | |
| | | | /60 | | | | | SM | | 0 | | | |
| | 15 | | | | | | | | | | | | |
| | | | | | | | Same as above | | | 0 | | | |
| | | | 52/ | | | | | | | | | | |
| | | | /60 | | | | | SM | | | | | |
| | | | | | | | | | * Sample OLFS4-DP13-0-20 | 0 | | | |
| 0900 | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | | | | | |
| | | | | | | | | | Plus MS/MSD | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Our FID went out. Pine sending replacement. Screening with other field teams FID.

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DP14
DATE: 9-8-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Seal | | | | |
| | | NA | 100% | | | | | | Hand Auger | 0 | | | |
| | | | | | Loose | Brown to | | SM | to 4' | 0 | | | |
| | | | | | | Lt. Brown | Silty Sand | | | 0 | | | |
| | | | | | | | w/ trace Clay | SM | | 0 | | | |
| | 5 | | 12/12 | | | | clay | | | 0 | | | |
| | | | | | | | fine grained sd | | | 0 | | | |
| | | | 48/ | | | | Same as above | | | 0 | | | |
| | | | | | | | | SM | | 0 | | | |
| | | | 60 | | | | | | | 0 | | | |
| 1000 | 10 | | | | | | damp | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 52/ | | | DK | Reddish Brown | SM | | 0 | | | |
| | | | 60 | | | | Silty Sand w/ 25% clay | | | 0 | | | |
| | 15 | | | | | | damp | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | SM | - | 0 | | | |
| | | | 52/ | | | | | | | | | | |
| | | | 60 | | | | | | Sample | 0 | | | |
| 1015 | 20 | | | | | | | * | OLFS4-DP14 | | | | |
| | | | | | | | Terminated at 20' | | -S20 | | | | |
| | | | | | | | | | Plus PPL Volts meter, PCB | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DP-15
DATE: 9-8-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | N/A | 10/0 | | Loose | | Brown to Lt. Brown silty sand w/ trace clay Dry | SM | Hand Auger to 4' | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | 5 | | 12/12 | | | | | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 4/0 | | | | | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 6/0 | | | | | SM | | 0 | | | |
| 1100 | 10 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 4/6 | | | DK | Reddish Brown silty sand w/ 2-5% clay Damp | SM | | 0 | | | |
| | | | 6/0 | | | | | | | 0 | | | |
| 1115 | 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | 5/2 | | | | | SM | | 0 | | | |
| | | | 6/0 | | | | | | | | | | |
| | | | | | | | | * | Sample OLFS4-DP15-S20 | 0 | | | |
| 1120 | 20 | | | | | | | | | | | | |
| | | | | | | | Terminated at 20' | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW-1
DATE: 9-8-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NA | 100% | | Loose | Brown to Lt. Brown | silty sand w/ trace clay | SM | Hand Augered to 4' | 0 | | | |
| | 5 | | 10/12 | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 52/60 | | | | Same as above | SM | | 0 | | | |
| | 10 | | | | | DK Reddish Brown | | | | 0 | | | |
| | | | | | | | silty sand w ~5% clay | SM | | | | | |
| | | | 48/60 | | | | damp | | | | | | |
| 1335 | 15 | | | | | | | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/60 | | | | Same as above | | | | | | |
| | 20 | | | | | | | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 52/60 | | | | Same as above | | | | | | |
| | 25 | | | | | | | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe T730 DT

BORING No.: OLFS4-DPW-1 (2)
DATE: 9-8-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Azer

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | | | | | Mottled Yellowish brown loose to reddish brown to tan | SM | | | | | |
| | | | | | | | Tan to Buff white | SM | Gradational Color change over 1' | | | | |
| | 30 | | | | | | Silty sand w/ trace clay fine-med. grained "Beach Sand" w/ sl. ochre colored mottling (occassional) | SM | | 0 | | | |
| | 35 | | | | | | | | | 0 | | | |
| | | | | | | | Same as above | SM | | | | | |
| | 40 | | | | | | | | | 0 | | | |
| | | | | | | | Same as above | SM | Soil Sample OLFS4-DPW-1 @ 45 | | | | |
| | 45 | | | ▼ | | | | | 1530 Collecting sample 53-55 | 0 | | | |
| | | | | | | | Saturated | | | | | | |
| | 50 | | | | | | Yellowish Brown Silty Clayey Sand fine grained sand | SC | ~30% clay | 0 | | | |
| | | | | | | | Same as above | | Screened 600 ppm 50-55 | | | | |

1430
DTW 44.83 in MW26

*When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: TD 55

Converted to Well: Yes ____ No ✓ Well I.D. #:

Same unfiltered Sa methane

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DPW2
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf | | | | |
| | | | | | | | | | Hand Augered | 0 | | | |
| | | NA | 100% | | | | Brown to Lt. Brown | SM | to 4' | 0 | | | |
| | | | | | Loose | | silty sand w/ | | | 0 | | | |
| | | | | | | | trace clay | SM | | 0 | | | |
| | 5 | | 12/12 | | | | fine sand | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 52/ | | | | | | | 0 | | | |
| | | | 60 | | | DK | Reddish Brown | SM | | 0 | | | |
| | | | | | | | silty sand w/ | | | | | | |
| 0800 | 10 | | | | | | ~5% clay | | | 0 | | | |
| | | | | | | | Dry fine Sand | | | | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | Same as above | SM | | | | | |
| | | | 60 | | | | | | | | | | |
| | 15 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | Same as above | SM | | | | | |
| | | | | | | | | | | | | | |
| | 20 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 36/ | | | | Same as above | | | | | | |
| | | | 60 | | | | except mottled | | | | | | |
| | | | | | | | Yellowish Brown to | SM | | | | | |
| 0815 | 25 | | | | | | Reddish Brown | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DPW2
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NR | | | | | | | | | | | |
| | | | 48/ | | loose | Tan to Buff White | | | Gradational Color change | | | | |
| | | | 60 | | | | silty Sand w/ trace clay | SM | | | | | |
| 0820 | 30 | | | | | | | | f.w- med grained sand | 0 | | | |
| | | | | | | | some mottling of lt. ochre color | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | | | | | | | |
| 0825 | 35 | | | | | | same as above | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | same as above | | | | | | |
| 0830 | 40 | | | | | | | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | same as above | | | | | | |
| 0840 | 45 | V | | V | | | | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | 49' yellowish to reddish brown silty clayey sand + 20-30% clay | | | | | | |
| 0845 | 50 | | | | | | Terminated at 50' BG | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLF54-DPW3
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NA | 100% | | Loose | | Brown to Lt. Brown | SM | Hand Augered to 4' | 0 | | | |
| | | | | | | | Silty sand w/ | | | 0 | | | |
| 0950 | | | ↓ | | | | trace clay | | | 0 | | | |
| | 5 | | 12/12 | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 52/ | | | | | | | 0 | | | |
| | | | 60 | | DK | | Reddish Brown | SM | | 0 | | | |
| 1000 | 10 | | | | | | Silty sand w. | | | 0 | | | |
| | | | | | | | approx 5% clay | | | | | | |
| | | | 44/ | | | | damp | | | | | | |
| | | | 60 | | | | Same as above | | | | | | |
| 1005 | 15 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | 60 | | | | | SM | | | | | |
| 1010 | 20 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | 60 | | | | except mottled | | | | | | |
| | | | | | | | Yellowish to Reddish | SM | | | | | |
| 1015 | 25 | | | | | | Brown | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes ____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW3
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Ilse

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N/A | | | | | | | | | | | |
| | | | 46 | | loose | | same as above | SM | | | | | |
| | | | 60 | | | | Silty Sand ~5% clay | | | 0 | | | |
| 1020 | 30 | | | | | | | | | | | | |
| | | | | | | | mottled yellowish to reddish brown to buff white damp | | | | | | |
| | | | 48 | | | | | | | | | | |
| | | | 60 | | | | | SM | | | | | |
| 1030 | 35 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48 | | | | Same as above, | | | | | | |
| | | | 60 | | | | but some mottling | SM | | | | | |
| 1035 | 40 | | | | | | more tan to lt. gray | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | SM | | | | SM | | | | | |
| | 45 | | | | | | | | | 0 | | | |
| | | | | SC | | | Yellowish Brown ~~SM~~ SC | | | | | | |
| | | | | | | | increasing clay content | | | | | | |
| | | | | | | | to approx 20-30% | | | | | | |
| | | | | | | | Saturated | | 34,519 ppm | | | 33,574 | |
| | 50 | | | | | | | SC | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

1050 Remarks: Terminated @ 55' - same as above

31,212 ppm
23,949
22,558

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

1215 collected GW sample 53-55

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW4
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 8" Concrete Surf. | | | | |
| | | NA | 100% | | | | | | Hand Augered to 4' w/ 10" oyster shell gravel | | | | |
| | | | | | Loose | Brown to Lt. Brown | Silty sand w/ trace clay | SM | | 0 | | | |
| 1430 | | | | | | | | | | 0 | | | |
| | 5 | | 12/12 | | | | Dry | SM | | 0 | | | |
| | | | | | | | Fine sand | | | 0 | | | |
| | | | 48/ | | | | | SM | | 0 | | | |
| | | | | | | DK | Reddish brown | | | 0 | | | |
| | | | 60 | | | | silty sand w/ ~5% clay | | | 0 | | | |
| 1435 | 10 | | | | | | | SM | | 0 | | | |
| | | | | | | | Dry fine sand | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | Same as above | SM | | | | | |
| 1440 | 15 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 52/ | | | | Same as above | SM | | | | | |
| | | | 60 | | | | | | | | | | |
| 1445 | 20 | | | | | | | | | 0 | | | |
| | | | | | | | Same as above except mottled Yellowish brown to Reddish brown | | | | | | |
| | | | 50/ | | | | | | | | | | |
| | | | 60 | | | | | | | | | | |
| 1450 | 25 | | | | | | | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLF54-DPW4
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA. | 54/60 | | Loose | | Same as above | SM | | | | | |
| | 30 | | | | | | | | | 0 | | | |
| | | | 44/60 | | | | Buff white to Reddish (pink) Silty sand w/ 2% clay | SM | | | | | |
| 1505 | 35 | | | | | | | | | 0 | | | |
| | | | 48/60 | | | | Same as above | | | | | | |
| | 40 | | | | | | White buff silty fine sand | SM | | 0 | | | |
| | | | 54/60 | | | | fine-med grained sand Trace clay Mottled Yellowish to Reddish Brown | SM | | | | | |
| 1515 | 45 | | | | | | | | | 0 | | | |
| | | | | | | | Terminated at 45' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLF54-DPW5
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NA | 100% | | Loose | Brown to Lt. Brown | Silty sand w/ trace clay, dry | SM | Hand Auger to 4' | 0 | | | |
| | 5 | | 12/12 | | | | | | | 0 | | | |
| | | | 5% | | | | Same as above | SM | | 0 | | | |
| | 10 | | 60 | | | | | | | 0 | | | |
| | | | 48% | | | DK Brown | Red. Silty sand w/ ~5% clay | | | | | | |
| 1620 | 15 | | 60 | | | | | SM | | 0 | | | |
| | | | 42% | | | | Same as above damp | | | | | | |
| 1625 | 20 | | 60 | | | | | SM | | 0 | | | |
| | | | 44% | | | | Same as above except mottled Yellowish to Reddish Brown | | | | | | |
| 1635 | 25 | | 60 | | | | | SM | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DPW5
DATE: 9-9-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | | | | | Same as above | SM | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | Loose | Buff | White to tan silty sand | SM | | | | | |
| | 30 | | | | | | w/ trace clay | | | 0 | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | | | | | | | |
| | 35 | | | | | | | SM | | 0 | | | |
| | | | 42/ | | | | Same as above except some light mottling yellowish to reddish brown | | | | | | |
| | | | 60 | | | | | | | | | | |
| 1650 | 40 | | | | | | | SM | | 0 | | | |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | 60 | | | | | | | | | | |
| 1700 | 45 | | | ▼ | | | | SM | | 0 | | | |
| | | | | | | | Same as above | SM | | | | | |
| | | | 54/ | | | | Yellowish brown silty clayey sand ~20-30% clay | SC | Saturated | | | | |
| | | | 60 | | | | | SC | | | | | |
| 1710 | 50 | | | | | | | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Terminated at 55' same as above SC

Drilling Area Background (ppm): 0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

1755 collected GW sample 53-55'

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW6
DATE: 9-10-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | | | | | Concrete Surf. Hand Augered to | 0 | | | |
| | | | | | Loose | Brown to Lt. Brown | | SM | 4' | 0 | | | |
| | | | | | | | silty sand with | | | 0 | | | |
| | | | | | | | trace clay | | | 0 | | | |
| | 5 | | 12/12 | | | | fine sand | | | 0 | | | |
| | | | | | | | Dry | | | 0 | | | |
| | | | | | | | same as above | | | 0 | | | |
| | | | 52/ | | | | | SM | | 0 | | | |
| | | | 60 | | | | | | | 0 | | | |
| | 10 | | | | | | | | | 0 | | | |
| 0815 | | | | | | | | SM | | | | | |
| | | | 36/ | | | | Mottled DK red to yellowish | | | | | | |
| | | | 60 | | | | Brown, ~5% clay | SM | | | | | |
| 0820 | 15 | | | | | DK | Red silty sand | | | 0 | | | |
| | | | | | | | w/ ~5% clay | | | | | | |
| | | | 46/ | | | | damp | | | | | | |
| | | | 60 | | | | Same as above | SM | | | | | |
| 0822 | 20 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | Same as above | | | | | | |
| | | | 60 | | | | except mottled yell- | SM | | | | | |
| 0825 | 25 | | | | | | to reddish brown | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: QFSA-DPW6
DATE: 9-10-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 52/ 60 | | | lt | Same as above | SM | fine grained | | | | |
| 0830 | 30 | | | | | | Buff white to tan silty Sand w/ trace clay occassional lt ochre yellow mottling damp | SM | Gradational contact fine-med grained. | 0 | | | |
| | | | 48/ 60 | | | | Same as above | | | | | | |
| 0845 | 35 | | | | | | | SM | | 0 | | | |
| | | | 36/ 66 | | | | | | | | | | |
| 0853 | 40 | | | | | | Same as above | SM | | 0 | | | |
| | | | | | | | Same as above | | | | | | |
| 0900 | 45 | | | | | | | SM | | 0 | | | |
| | | | | | | | Terminated at 45' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFSA-DPW8
DATE: 9-10-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete surf. | | | | |
| | | NA | 10/8 | | | | | | Hand Augered to 4' | 0 | | | |
| | | | | | Loose | Brown to Lt. Brown | Silty sand w/ trace clay. | SM | | 0 | | | |
| | | | | | | | Dry | | | 0 | | | |
| | 5 | | 8/12 | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 5/4 | | | | | | | 0 | | | |
| | | | | | | | Same as above | SM | | 0 | | | |
| | | | 60 | | | | | | | 0 | | | |
| 1005 | 10 | | | | | Dk Reddish Brown | | | | 0 | | | |
| | | | | | | | Silty sand w/ ~5% clay | | | | | | |
| | | | 5/4 | | | | | | | | | | |
| | | | 60 | | | | damp | | | | | | |
| 1008 | 15 | | | | | | | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | Same as above | | | | | | |
| | | | 4/4 | | | | | | | | | | |
| | | | 60 | | | | | | | | | | |
| | 20 | | | | | | | SM | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | Same as above except mottled yell- to reddish brown | | | | | | |
| 1013 | 25 | | | | | | | SM | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLF54-DPW8
DATE: 9-10-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | | | | | Same as above | SM | gradational contact | | | | |
| | | | 48/60 | | loose | Lt tan to Buff White | Silty Sand with trace clay damp | SM | | 0 | | | |
| 1015 | 30 | | | | | | | | | | | | |
| | | | 48/60 | | | | Same as above w/ occassional Lt Yellowish (ochre) to Lt. pinkish red mottling | SM | | 0 | | | |
| 1020 | 35 | | | | | | | | | | | | |
| | | | 52/60 | | | | Same as above | SM | | 0 | | | |
| 1025 | 40 | | | | | | | | | | | | |
| | | | 48/60 | | ↓ | | Same as above | SM | | 0 | | | |
| | 45 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW9
DATE: 9-10-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | | | | | Concrete surf. Hand Auger | 0 | | | |
| | | | /60 | | Loose | Brown to Lt. Brown | | SM | to 4' | 0 | | | |
| | | | | | | | Silty sand w/ | | | 0 | | | |
| | | | ↓ | | | | trace clay | | | 0 | | | |
| | 5 | | 10/12 | | | | Dry | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 42/ | | | | Same as above | | | 0 | | | |
| | | | /60 | | | | | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| 1245 | 10 | | | | | | | | | | | | |
| | | | | | | DK | Reddish Brown | | | | | | |
| | | | | | | | silty sand w/ | | | | | | |
| | | | 48/ | | | | ~5% clay | | | | | | |
| | | | /60 | | | | clumps | SM | | | | | |
| 1250 | 15 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | Same as above | SM | | | | | |
| | | | /60 | | | | | | | | | | |
| | 20 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | | | | | same as above | | | | | | |
| | | | 48/ | | | | except mottled | | | | | | |
| | | | /60 | | | | red-reddish Brown | | | | | | |
| 1255 | 25 | | | | | | | SM | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 5 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes ____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW9
DATE: 9-10-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Same as above | SM | gradational | | | | |
| | | NA | | | | | | | contact | | | | |
| | | | 48/ | | Loose | Buff white to tan | | SM | | | | | |
| | | | 60 | | | | silty sand w/ | | | | | | |
| | | | | | | | trace clay | | | | | | |
| | 30 | | | | | | | | | 0 | | | |
| | | | | | | | Same as above | | | | | | |
| | | | | | | | | SM | | | | | |
| | 35 | | | | | | | | | 0 | | | |
| | | | | | | | Same as above | | | | | | |
| | | | | | | | except occasional | | | | | | |
| | | | | | | | Lt. yellow (ochre) to | | | | | | |
| 1305 | 40 | | | | | | Reddish pink | SM | | 0 | | | |
| | | | | | | | mottling. | | | | | | |
| | | | | | | | Same as above | | | | | | |
| 1310 | 45 | | | ▼ | | | | SM | | 0 | | | |
| | | | | | | | Yellowish brown | SC | | | | | |
| | | | | | | | silty clayey sand | | Saturated | | | | |
| | | | | | | | increasing clay content | | | | | | |
| | | | | | | | downwards. 20-30% | | | | | | |
| 1315 | 50 | | | | | | | SC | | 0 | | | |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: ~~Terminated~~ at 55' same as above SC

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

0ppm

RB01 off of Tubing and SS Bowl 1350

1405 GW + Duplicate DUP02 OLFS4-DPW9-G53-55

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLF54-DPW-10
DATE: ~~9-10-06~~ 9-11-06
GEOLOGIST: Gary D. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | N/A | 10% | | | | | | Hand Augered to 1' | 0 | | | |
| | | | | | Loose | Brown to Lt. Brown | Silty sand w/ trace clay | SM | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | 5 | | 8/12 | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 4% | | | | | | | 0 | | | |
| | | | | | | | Same as above | SM | | 0 | | | |
| | | | 60 | | | | | | | 0 | | | |
| | 10 | | | | | | | | | 0 | | | |
| | | | | | | | | SM | | | | | |
| | | | | | | DK Reddish Brown | | SM | | | | | |
| | | | 4% | | | | Silty sand w/ 25% clay | | | | | | |
| 0805 | | | 60 | | | | | | | | | | |
| | 15 | | | | | | damp | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 5% | | | | Same as above | SM | | | | | |
| | | | 60 | | | | | | | | | | |
| | 20 | | | | | | | | | 0 | | | |
| | | | | | | | | | | | | | |
| | | | 4% | | | | Same as above except mottled yellowish brown | | | | | | |
| | | | 60 | | | | | SM | | | | | |
| 0810 | 25 | | | | | | | | | 0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLF54-DPW-10
DATE: 9-11-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agle

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NR | | | | | | | | | | | |
| | | | 48/ | | | | same as above | SM | | | | | |
| | | | 60 | | Loose | | | | | | | | |
| 0815 | 30 | | | | | | White to buff white to tan silty sand w/ trace clay fine-med grained sand | SM | Gradational contact | 0 | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | | | | | | | |
| 0820 | 35 | | | | | | same as above some mottling yellow (ochre) to reddish pink | SM | | 0 | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | | | | | | | |
| | 40 | | | | | | | | | 0 | | | |
| | | | 48/ | | | | same as above | SM | | | | | |
| | | | 60 | | | | | | * Sample OLF54-DPW10-545 | 0 | | | |
| 0830 | 45 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS-4-DPW-11
DATE: 9-11-06
GEOLOGIST: Gary J. Davis
DRILLER:

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NR | 10/0 | | | | | | Hand Auger to 2' | 0 | | | |
| | | | | | Loose | | Brown to Lt Brown silty sand w/ trace clay Dry | SM | Auger to 4' | 0 | 0 | 0 | 0 |
| | 5 | | 8/12 | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | | | | | 0 | | | |
| | | | 60 | | | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | | | | 0 | | | |
| | | | 48/ | | | | DK. Reddish Brown silty sand w/ ~5% clay | SM | | | | | |
| | | | 60 | | | | | | | | | | |
| | 15 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above | SM | | | | | |
| | | | 60 | | | | | | | | | | |
| | 20 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/ | | | | Same as above except mottled yell-redish brown | | | | | | |
| | | | 60 | | | 10 | | SM | | | | | |
| | 25 | | | | | | | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 2.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLFS4-DPW11
DATE: 9-11-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NR | 48/60 | | Loose | | Same as above | SM | | | | | |
| | 30 | | | | | | White to Buff White to Tan silty sand w/ trace clay fine-med grained sand | | | 0 | 0 | 0 | 0 |
| | | | 48/60 | | | | | | | | | | |
| | 35 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/60 | | | | Same as above w/ some mottling yellow to Reddish pink | | | 11.6 | | | Flt. 7.6 |
| | 40 | | | | | | | | | | 0 | 0 | 0 |
| | | | 48/60 | | | | Same as above | | Sample * OLFS4-DPW11 | 12.1 | | | 3.0 |
| 1000 | 45 | | | | | | Yellowish Brown silty clayey sand | SC-SM | Plus SPLP | | 0 | 0 | 0 |
| | | | 48/60 | | | | | | | | | | |
| | 50 | | | | | | | | | 28.6 | | | 3.0 |
| 1015 | 55 | | 48/60 | | | | | | GW OLFS4-DPW11-G 53-55 1045 | 7.3 | | | 7.1 |

* When rock coring, enter rock brokeness.
** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: TD 55' set Screen 53-55 Same as above SC

Converted to Well: Yes ( ) No (✓) Well I.D. #:

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4 — BORING No.: OLF54 - DPW 7
PROJECT NUMBER: 112G00389 — DATE: 9-11-06
DRILLING COMPANY: M&W Drilling — GEOLOGIST: Gary J. Davis
DRILLING RIG: DPT Geoprobe 7730 DT — DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | NA | | | Concrete | | | SM | Hand Auger w/ Ext would not work angle of collapse Pushed Slow | | 0 | 0 | 0 |
| | | | No Rec | | Rock | | jammed end of Sampler | | | | | | |
| | 5 | | | | | | | | | | | | |
| | | | | | Loose | Brown to Lt. Brown | | | | 0 | | | |
| | | | 48/ | | | | Silty sand trace clay | | | 0 | | | |
| | | | 60 | | | | | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | Dry | | | 0 | | | |
| | 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | DK. Reddish Brown | | | | | | | |
| | | | 48/ | | | | Silty sand w/ | SM | | | | | |
| | | | 60 | | | | ~5% clay | | | | | | |
| | 15 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | damp | | | | | | |
| | | | 48/ | | | | | | | | | | |
| | | | 60 | | | | Same as above | SM | | | | | |
| 1345 | 20 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | 48/ | | | | Same as above except mottled reddish to yellowish (Ochre) | SM | | | | | |
| | | | 60 | | | | | | | | | | |
| | 25 | | | | | | | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 8.6

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730 DT

BORING No.: OLF54-DPW7
DATE: 9-11-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Kyle

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | same as above | SM | gradational contact | | | | |
| | | NA | 48/60 | | loose | | Mottled Reddish Brown to Yellowish Brown to Buff white to tan silty sand w/ trace clay | SM | | | | | |
| | 30 | | | | | | | | | 0 | 0 | 0 | 0 |
| 1355 | 35 | | 48/60 | | | | same as above except more tan | SM | | 0 | 0 | 0 | 0 |
| | 40 | | 48/60 | | | | same as above | SM | | 0 | 0 | 0 | 0 |
| 1410 | 45 | | 48/60 | | | | same as above | SM | Sample OLF54-DPW7--S45 | 0 | 0 | 0 | 0 |
| | | | 52/60 | | | | Yellowish brown (colw) silty clayey sand | SC | | | | | |
| 1415 | 50 | | | | | | | SC | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.
** Include monitoring reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0 to 8.6

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

55 TD 55' same as above SC
1500 GW OLF54-DPW7-G 53-55

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Geoprobe 7730DT

BORING No.: OLFS4-DPW12
DATE: 9-11-06
GEOLOGIST: Gary J. Davis
DRILLER: Dana Agee

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Concrete Surf. | | | | |
| | | | | | | | | | Hand Auger | 0 | | | |
| | | NA | 100% | | Loose | | Brown to Lt. Brown | SM | to 4' | 0 | 0 | 0 | 0 |
| | | | ↓ | | | | silty sand | | | 0 | | | |
| | | | | | | | w/ trace clay | | | 0 | 0 | 0 | 0 |
| | 5 | | 8/12 | | | | Dry | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | | | 48/ | | | | Same as above | SM | | 0 | 0 | 0 | 0 |
| | | | 60 | | | | | | | 0 | | | |
| | | | | | | | | | | 0 | | | |
| | 10 | | | | | | Damp | | | 0 | 0 | 0 | 0 |
| 1610 | | | | | | | | | | | | | |
| | | | | | | | Same as above | SM | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 15 | | | | | DK | Reddish Brown | SM | | 0 | 0 | 0 | 0 |
| | | | | | | | silty sand w/ ~5% clay | | | | | | |
| | | | | | | | Damp | | | | | | |
| | | | | | | | | SM | | | | | |
| 1615 | 20 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | | | | | Same as above except mottled yell to reddish brown | SM | | | | | |
| | 25 | | | | | | | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: _____

Converted to Well: Yes _____ No ✓ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4 — BORING No.: OLFS4-DPW12
PROJECT NUMBER: 112G00389 — DATE: 9-11-06
DRILLING COMPANY: M&W Drilling — GEOLOGIST: Gary J. Davis
DRILLING RIG: DPT beeprobe 7730DT — DRILLER: Dana Agel

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 48/60 | | loose | | Same as above | SM | | | | | |
| | 30 | | | | | | | | | 0 | 0 | 0 | 0 |
| 1620 | | | 40/60 | | | | Mottled Light Buff Wht to Reddish to Yellowish Brown trace clay | SM | | | | | |
| 1625 | 35 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 44/60 | | | | Mottled as above to A3' | | | | | | |
| | | | | | | | Then Buff white to tan | | | | | | |
| 1630 | 40 | | | | | | | SM | | 7.9 | 0 | 0 | 5.9 |
| | | | 48/60 | | | | | | very faint Odor | | | | |
| | | | | | | | Same as above | SM | Sample | | | | |
| | | | | | | | Yellowish Brown SC | SC | OLFS4-DPW12 | 3.9 | | | 0 |
| 1635 | 45 | | | | | | silty clayey sand 2% | | | | 0 | 0 | 0 |
| | | | | | | | Terminated at 45' | | -545 | | | | |
| | | | | | | | 10-20% clay | | | | | | |
| 1640 | 50 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

1655 55

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLF34-DPB1-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | | | | Brown to Lt. Brown | | | | | | | |
| | | | 48/60 | | loose | | silty sand trace clay fine grained dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 48/60 | | | | damp | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | Terminated at 10' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLFS4-DPB2-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | | | | Brown to Lt. Brown | | | | | | | |
| | | | 4@/60 | | Loose | | silty sand trace clay fine grained dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | 4@/60 | | | | damp | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | Terminated at 10' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLFS4-DPB3-S1D
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Brown to Lt. Brown | | | | | | | |
| | | NR | 46/60 | | loose | | silty sand trace clay | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | fine grained. dry | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | |
| | | | 48/60 | | | | damp | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page 1 of 1

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: ~~DPT~~ Hand Auger

BORING No.: OLF54-DPB4-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | Loose | Brown to lt. Brown | Silty Sand fine grained dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |
| | | | | | | | Terminated at 10' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Hyd Hammer

BORING No.: OLF54-DPB5-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Brown to Lt. Brown | | | | | | | |
| | | NA | 100% | | Loose | | Silty sand w/ trace clay fine grained | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | dry | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Hand Auger

BORING No.: OLFS4-DPB6-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | Loose | | Brown to Lt Brown silty sand w/ trace clay Fine grained dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT Hand Auger

BORING No.: OLFSA-DPB7-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | NA | 100% | | Loose | | Brown to Lt. Brown silty sand w/ trace clay fine grained | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | dry | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |
| | | | | | | | Terminated at 10' | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: ~~DPT~~ HSA Hand Auger

BORING No.: DLFSA-DPB8-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | loose | Brown to Lt. Brown | Silty Sand w/ trace clay fine grained | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | dry | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLFS4-DPB9-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | Loose | Brown to Lt Brown | silty sand w/ trace clay fine grained dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT GMD Hand Auger

BORING No.: OLF34-DPB10-S10
DATE: 9-12-06
GEOLOGIST: Gary J. Davis
DRILLER: David Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NA | 100% | | Loose | Brown to Lt. Brown | silty sand w/ trace clay fine grained dry | SM | | 0 | 0 | 0 | 0 |
| | 5 | | | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 0 | 0 | 0 | 0 |
| | 10 | | | | | | damp | | | 0 | 0 | 0 | 0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ____ No ✓ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME:
PROJECT NUMBER:
DRILLING COMPANY:
DRILLING RIG:

BORING NUMBER: OLFS 4 - 16 DP
DATE: 9-6-06
GEOLOGIST: C. Odom
DRILLER: Dave

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample Jar Headspace | Sample Jar Headspace BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | | grey silty sand | | | 0.0 | | | |
| | | | | | | | ~~lt brn silty sand~~ | | | | | | |
| | 6"-2' | | | | | | lt brn silty sand | SM | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 2'-4' | | | | | | lt brn-red silty sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 4'-6' | | | | | | red silty sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 6'-8' | | | | | | red sandy clay | | | | | | |
| | | | | | | | | | | | | | |
| | 8'-10' | | | | | | red sandy clay | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 13'-15' | | | | | | red sandy clay | | | | | | |
| | | | | | | | | | | | | | |
| | 17'-20' | | | | | | red/white silty sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks:

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI site 4
PROJECT NUMBER:
DRILLING COMPANY: mtw
DRILLING RIG:

BORING NUMBER: OLF54-DP17
DATE: 9-6-06
GEOLOGIST: Dolan
DRILLER: Dave

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | | gry silty sand | | | 0.0 | | | |
| | 6"-2' | | | | | | ltbrn silty sand | | | 0.0 | | | |
| | 2'-4' | | | | | | dk brn silty sand | | | 0.0 | | | |
| | 4-8 | | | | | | red silty sand | | 4-6 | 0.0 | | | |
| | | | | | | | | | 6-8 | 0.0 | | | |
| | 8-12 | | | sand @ 10' | | | red silty sand / red sandy clay | | 8-10 | 0.0 | | | |
| | | | | | | | | | 10-12 | 0.0 | | | |
| | 12-16 | | | | | | red sandy clay | | 12-14 | 0.0 | | | |
| | | | | | | | | | 14-16 | 0.0 | | | |
| | 16-20 | | | | | | red sandy clay / red silty sand | | 16-18 | 0.0 | | | |
| | | | | | | | | | 18-20 | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

DP

PROJECT NAME: site 4 RI Sawtelle
PROJECT NUMBER:
DRILLING COMPANY: M&W
DRILLING RIG:

BORING NUMBER: OLFS4-18-S6
DATE: 9-6-06
GEOLOGIST: J. Dan
DRILLER: Dave

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ** | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | | lt brn silty sand | | | 0.0 | | | |
| | 6"-2' | | | | | | lt brn silty sand | | | 0.0 | | | |
| | 2'-4' | | | | | | brn silty sand | | | | | | |
| | 4'-8' | | | | | | brn-red silty sand | | 1300 ppm 4'-6' | 130 | 0.0 | | |
| | | | | | | | | | 6'-8' | 0.0 | | | |
| | 8'-12' | | | sand clay gravel | | | red silty sand / red sandy clay | | 8'-10' | 0.0 | | | |
| | | | | | | | | | 10-12' | 0.0 | | | |
| | 12-16 | | | | | | red silty sand | | 12-14 | 0.0 | | | |
| | | | | | | | | | 14-16 | 0.0 | | | |
| | 16-20 | | | | | | | | 16-18 | 0.0 | | | |
| | | | | | | | red silty sand | | 18-20 | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___ DP

PROJECT NAME: Site 4 RI Safety
PROJECT NUMBER:
DRILLING COMPANY: M+W
DRILLING RIG:

BORING NUMBER: OLFS4-19
DATE: 9-6-05
GEOLOGIST: C. Dale
DRILLER: Dave

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/FL) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | | lt brn s:lty sand | | | 0.0 | | | |
| | 6'-2' | | | | | | lt brn s:lty sand | | | 0.0 | | | |
| | 2-4' | | | | | | brn s:lty sand | | | 0.0 | | | |
| | 4'-6' | | | | | | brn s:lty sand | | | 0.0 | | | |
| | 6'-8' | | | | | | brn s:lty sand | | | 0.0 | | | |
| | 8'-10' | | | | | | brn s:lty sand | | | 0.0 | | | |
| | 10'-12' | | | | | | brn s:lty sand | | | 0.0 | | | |
| | 12'-14' | | | more clay @ 12' | | | red s:lty sand | | minor clay | 0.0 | | | |
| | 14'-16' | | | | | | red s:lty sand | | minor clay | 0.0 | | | |
| | 16'-18' | | | | | | red s:lty sand | | minor clay | 0.0 | | | |
| | 18'-20' | | | | | | red s:lty sand | | minor clay | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI site 4 Sawhey
PROJECT NUMBER:
DRILLING COMPANY: MTW
DRILLING RIG:

BORING NUMBER: OLFS4-DPT-20 DP
DATE: 9-7-06
GEOLOGIST: C. Dorr
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/FL) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6' | | | | | | lt brn silty sand | | | 0.0 | | | |
| | 6"-2' | | | | | | brn silty sand | | | 0.0 | | | |
| | 2'-4' | | | | | | brn silty sand | | | 0.0 | | 0.0 | 0.0 |
| | 4-6 | | | | | | red brn silty sand | | | 0.0 | | | |
| | 6-8 | | | | | | reddish brn silty sand | | | 0.0 | | | |
| | 8'-10' | | | | | | red silty sand | | | 0.0 | | | |
| | 10'-12' | | | | | | red [illegible] sand | | | 0.0 | | | |
| | 12-14 | | | | | | red clayey sand | | | 0.0 | | | |
| | 14-16 | | | | | | red clayey (coarse) sand | | | 0.0 | | | |
| | 16-18 | | | | | | red clayey (coarse) sand | | | 0.0 | | | |
| | 18-20 | | | | | | red/white fine sand | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: site 4 RI Saufley
PROJECT NUMBER:
DRILLING COMPANY: M+W
DRILLING RIG:

BORING NUMBER: OLFS4-DP21
DATE: 9-7-06
GEOLOGIST: C. Ortt
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 4'-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 14'-16' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 18'-20' | | | | | red | silty fine sand | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: _____ BORING NUMBER: OLF4-DP22
PROJECT NUMBER: _____ DATE: _____
DRILLING COMPANY: _____ GEOLOGIST: C. Odom
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | clayey silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | red | silty fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 4-6 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 6-8 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8-10 | | | | | red | silty fine sand | | | 3.5 | | | |
| | 10-12 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 12-14 | | | | | red | silty fine sand | | | 2.0 | | | |
| | 14-16 | | | | | red | silty fine sand | | ON 12K | | | | silt 2.5 |
| | 16-18 | | | | | red | silty fine sand | | ON 55.5 | | | | silt 18.5 |
| | 18-20 | | | | | red | silty fine sand | | ON 12.9 | | | | silt 5.1 |
| | 20-22 | | | | | pink | fine sand | | | 0.0 | | | |
| | 22-24 | | | | | white | fine sand | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: SFY 1R 4
PROJECT NUMBER: CTO370
DRILLING COMPANY: MPW
DRILLING RIG: 6610 Geoprobe
BORING NUMBER: NLFS4-DP23
DATE: 4-7-06
GEOLOGIST: L. DOSEN
DRILLER: D Duncan

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS* | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | | brn FS w/Fine Grave | | | 0.0 | | | 0.0 |
| | 6"-2' | | | | | | brn Silty Sand | | | 0.0 | | | |
| | 2-4' | | | | | | red brn Silty Sand | | | 0.0 | | | 0.0 |
| | 4-6 | | | | | | rd brn Silty FS | | | 0.0 | | | 0.0 |
| | 6-8 | | | | | | ↓ | | | 0.0 | | | 0.0 |
| | 8-10 | | | | | | rd brown Silty FS w/clay | | | 0.0 | | | |
| | 10-12 | | | | | | Same | | | 0.0 | | | |
| | 12-14 | | | | | | Same | | | 0.0 | | | |
| | 14-16 | | | | | | Red FS w/Silt (no clay) | | | 0.0 | | | 0.0 |
| | 16-18 | | | | | | RD FS / offwhite FS | | | 0.0 | | | |
| | 18-20 | | | | | | OFFwhite/orange FS | | | 0.0 | | | 0.0 |

F.I.H

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: site 4 RI Saltley
PROJECT NUMBER:
DRILLING COMPANY: NUS
DRILLING RIG:

BORING NUMBER: OLFS4-DP24
DATE: 9-7-06
GEOLOGIST: Cooper
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | | |
| | 4'-6' | | | | | brn | silty fine sand | | | 25.5 | | | | Filt 0.0 150 PPM odor |
| | 6'-8' | | | | | red | silty clayey fine sand | | | 33.7 | | | | 0.0 |
| | 8'-10' | | | | | red | silty clayey fine sand | | | 0.0 | | | | |
| | 10'-12' | | | | | red | silty clayey fine sand | | | 22 | | | | |
| | 12'-14' | | | | | red | silty clayey fine sand | | | 20 | | | | Filt 0.0 |
| | 14'-16' | | | | | red | silty clayey fine sand | | | 0.0 | | | | |
| | 16'-18' | | | | | red | silty fine sand | | | 44.0 | | | | filt 0.0 |
| | 18-20 | | | | | pink | silty fine sand | | | 0.0 | | | | |
| | 20-22 | | | | | pink | silty fine sand | | | | | | | |
| | 22-24 | | | | | pink | silty fine sand | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: site 4 RI Saufley
PROJECT NUMBER:
DRILLING COMPANY: mtw
DRILLING RIG:

BORING NUMBER: DLFS4-DP25-
DATE: 9-8-05
GEOLOGIST: Cadon
DRILLER: Joe Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 4'-6' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 14'-16' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | red | silty clayey fine sand | | | | | | |
| | 18'-20' | | | | | white | fine sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI @ Site 4 Seattle
PROJECT NUMBER:
DRILLING COMPANY: NEW
DRILLING RIG:
BORING NUMBER: OLFS4-DP26-
DATE: 9-8-06
GEOLOGIST: Codr
DRILLER: Dave Dunca

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | |
| | | | | | | | | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 4'-6' | | | | | brn | silty fine sand | | | 13.9 | | | |
| | | | | | | | | | | | | | |
| | 6'-8' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 8'-10' | | | | | red | silty fine sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 10'-12' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| | 12-14 | | | | | red | silty clayey fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | 14-16 | | | | | red | silty clayey fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | 16-18 | | | | | red | silty clayey fine sand | | | | | | |
| | | | | | | | | | | | | | |
| | 18-20 | | | | | red | silty fine sand | | | | | | |

FILL 0.0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI @ site 4 sa-flg
PROJECT NUMBER:
DRILLING COMPANY: M+W
DRILLING RIG:

BORING NUMBER: SA-FS4-VP27
DATE: 9-8-06
GEOLOGIST: C. Oxley
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | loamy fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | loamy silty fine sand w/rock & (gravel) | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty clayey fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 4-6 | | | | | brn | silty clayey fine sand | | | 0.0 | | | |
| | 6-8 | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 8-10 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 10-12 | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 12-14 | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 14-16 | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 16-18 | | | | | red | clayey fine sand | | | 0.0 | | | |
| | (18-20) | | | | | red | silty clayey fine sand | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes ____ No ____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Chesty Sawfley
PROJECT NUMBER:
DRILLING COMPANY: NEW
DRILLING RIG:

BORING NUMBER: NLFBSY-0028
DATE: 9-8-06
GEOLOGIST: C. Cater
DRILLER: Dave Dunca

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | red | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 4'-6' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | clayey fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 14'-16' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 18'-20' | | | | | pink | silty fine sand | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI @ Site 4 Saltley
PROJECT NUMBER:
DRILLING COMPANY: NTW
DRILLING RIG:

BORING NUMBER: DLFS4-DP29
DATE: 9-9-06
GEOLOGIST: C. Dolan
DRILLER: Dave Dyer

| Sample No. and Type or RQD | Depth (FL) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | MATERIAL DESCRIPTION: Color | MATERIAL DESCRIPTION: Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6 | | | | | red | silty fine sand | | | 10.6 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 5.3 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 3.0 | | | |
| | 4'-6 | | | | | brn | silty clayey fine sand | | | 4.5 | | | |
| | 6'-8' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 8-10 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 10'-12 | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | silty, clayey fine sand | | | 0.0 | | | |
| | 14'-16' | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 18-20 | | | | | pink | silty fine sand | | | 0.0 | | | |

FILL
0.0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI @ site 4 Saftey
PROJECT NUMBER:
DRILLING COMPANY: M+W
DRILLING RIG:

BORING NUMBER: SLFS4-DP30
DATE: 4-8-06
GEOLOGIST: C. Odon
DRILLER: Dave Durosa

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | loamy silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | pink | fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | fine sandy silt | | | 0.0 | | | |
| | 4'-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | brn | clayey silty fine sand | | | | | | |
| | 8'-10' | | | | | red | clayey silty fine sand | | | | | | |
| | 10'-12' | | | | | red | clayey silty fine sand | | | | | | |
| | 12'-14' | | | | | red | clayey fine sand | | | | | | |
| | 14'-16' | | | | | red | clayey fine sand | | | | | | |
| | 16'-18' | | | | | red | silty fine sand | | | | | | |
| | 18'-20' | | | | | red | silty fine sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ☐

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI site 4 Saufley
PROJECT NUMBER: 00389
DRILLING COMPANY: M+W
DRILLING RIG:

BORING NUMBER: DPW13
DATE: 9-9-06
GEOLOGIST: C. Dun
DRILLER: Dan Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-6 | 11 | | | | | lt | Brn FS, some c-f sand | | | 0.0 | | | |
| | | | | | | | | | | | | | |
| 6"-2' | | | | | | | Brn FS w/silt dep | | | 0.0 | | | |
| 2'-4' | | | | | | Brn | sandy clay | | 1352 | | | | |
| 4'-6' | | | | | | Brn | silty fine sand | | | 0.0 | | | |
| 6'-8' | | | | | | red | silty fine sand | | | 0.0 | | | |
| 8'-10' | | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| 10'-12' | | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| 12-14 | | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| 16-18 | | | | | | Pink | silty fine sand | | | 0.0 | | | |
| 20-22 | | | | | | pink | silty fine sand | | | 0.0 | | | |
| 24-26 | | | | | | white | fine sand/gravel, moist | | slight petro odor | 0.0 | | | |
| 28-30 | | | | | | white | fine sand | | | | | | |
| 32-34 | | | | | | pink | silty clayey fine sand | | [redacted] | | | | |
| 36-38 | | | | | | pink | silty fine sand | | saturated | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 2-4

Converted to Well: Yes ____ No ____ Well I.D. #: ____

f.lt 1508

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: RI SB 4 Sentry
PROJECT NUMBER: 000382
DRILLING COMPANY: MTW
DRILLING RIG:

BORING NUMBER: DLFS4-DPW-14
DATE: 9-9-05
GEOLOGIST: Codr
DRILLER: Mac Dixon

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6' | | | | | brn | sandy clay | | | 0.0 | | | | |
| | 2'-2' | | | | | brn | sandy clay | | | 0.0 | | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | | |
| 4-6 | 4-6 | | | | | brn | silty fine sand | | | 536 | | | | f:H 0.0 |
| 6-8 | 6-8 | | | | | | no recovery | | | | | | | |
| | 8-10 | | | | | red | silty clayey fine sand | | | 498 | | | | f:H 0.0 |
| | 10-12 | | | | | red | silty clayey fine sand | | | 15.3 | | | | 0.0 |
| | 14-16 | | | | | red | silty clayey fine sand | | | 50.2 | | | | 0.0 |
| | 18-20 | | | | | red | silty fine sand | | | 25.6 | | | | 6.3 |
| | 22-24 | | | | | red | silty fine sand | | | 16.3 | | | | 0.0 |
| | 24-26 | | | | | pale | fine sand | | moist @ 26' | | | | | |

* When rock coring, enter rock brokeness.

** Includes monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Sample 4-6

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLFS4-DPW15
DATE: 9-9-06
GEOLOGIST: ~~Gary J. Davis~~ C. Odell
DRILLER: Dave Auer

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | | | | |
| | 6"-2' | | | | | brn | silty clayey fine sand | | petrol odor | | | | |
| | 2'-4 | | | | | brn | silty clayey fine sand | | petrol odor | 744 | | | |
| | 4-6 | | | | | brn | silty fine sand | | 52% | | | | |
| | 6-8 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8-10 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 10-12 | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 14-16 | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 18-20 | | | | | pink | fine sand | | | 0.0 | | | |
| | 22-24 | | | | | red | silty, clayey fine sand | | | | | | |
| ~~26-28~~ | | | | | | | | | | | | | |
| | 24-26 | | | | | white | fine sand | | moist @ 26 | | | | |
| | 28-30 | | | | | white | fine sand | | sat | | | | |
| | 30-32 | | | | | pink | silty fine sand | | sat | | | | |
| | 32-34 | | | | | pink | silty fine sand | | sat | | | | |
| | 34-36 | | | | | pink | silty fine sand | | sat | | | | |
| | 36-38 | | | | | pink | silty fine sand | | sat | | | | |
| | 38-40 | | | | | pink | silty fine sand | | sat | | | | |
| | 40-42 | | | | | pink | silty fine sand | | sat | | | | |
| | 42-44 | | | | | pink | silty fine sand | | sat | | | | |

f.H26 0-0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 2-4

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: DLFS4-DPW16
DATE:
GEOLOGIST: ~~Gary J. Davis~~ C. Olson
DRILLER:

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | petroleodor | 16.3 | | | f.1400 |
| | 4-6 | | | | | brn | silty fine sand | | petroleodor | 16.8 | | | f.1400 |
| | 6-8 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8-10 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 10-12 | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 12-14 | | | | | red | silty clayey fine sand | | | | | | |
| | 14-16 | | | | | red | silty clayey fine sand | | | 0.0 | | | |
| | 16-18 | | | | | brn | silty fine sand | | | | | | |
| | 18-20 | | | | | pink | fine sand | | | 0.0 | | | |
| | 20-22 | | | | | white | fine sand | | | | | | |
| | 22-24 | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 24-26 | | | | | pink | fine sand | | | 0.0 | | | |
| | 26-28 | | | | | white | fine sand | | saturated | | | 0.0 | 0.0 |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 2-4

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: DLFS4-DPW17
DATE: 9-10-06
GEOLOGIST: ~~Gary J. Davis~~ C. Zalon
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 4'-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey silty fine sand | | | | | | |
| | 14'-16' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | pink | silty fine sand | | | | | | |
| | 18'-20' | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 20'-22' | | | | | pink | silty fine sand | | | | | | |
| | 22'-24' | | | | | pink | silty clayey fine sand | | | 0.0 | | | |
| | 24'-26' | | | | | wht | fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 26'-28' | | | | | wht | fine sand | | ~~wet~~ sat | | | | |
| | 28'-30' | | | | | wht | fine sand | | sat | | | | |
| | 30'-32' | | | | | pink | silty fine sand | | sat | | | | |
| | 32'-34' | | | | | pink | silty fine sand | | sat | | | | |
| | 34'-36' | | | | | pink | silty fine sand | | sat | | | | |
| | 36'-37' | | | | | wht | silty fine sand | | sat | | | | |
| | 38'-40' | | | | | red | silty fine sand | | sat | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 8-12

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLF54-DPW18
DATE: 9-9-06
GEOLOGIST: ~~Gary J. Davis~~ C. Alonso
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | clayey fine sand | | | 0.0 | | | |
| | 6'-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 4'-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey silty fine sand | | | | | | |
| | 14'-16' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | red | clayey silty fine sand | | | | | | |
| | 18'-20' | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 20'-22' | | | | | red | silty fine sand | | | | | | |
| | 22'-24' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 24'-26' | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 26'-28' | | | | | white | silty fine sand | | | 0.0 | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 8-12

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: DLFS4-DPW19
DATE: 5-10-06
GEOLOGIST: ~~Gary J. Davis~~ G. Odom
DRILLER: Dan Dixon

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 4'-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | brn | silty fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 8'-10' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey silty fine sand | | | | | | |
| | 14'-16' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | pink | silty fine sand | | | | | | |
| | 18'-20' | | | | | pink | fine sand | | | 0.0 | | | |
| | 20'-22' | | | | | pink | fine sand | | | | | | |
| | 22'-24' | | | | | pink | fine sand | | | 0.0 | | | |
| | 24'-26' | | | | | pink | fine sand | | | 0.0 | | | |
| | 26'-28' | | | | | white | fine sand | | sat | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Sample 8-12

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLF54-DPW20
DATE: 9-10-06
GEOLOGIST: ~~Gary J. Davis~~ C. Odom
DRILLER: Dave Dorca

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | brn | clayey silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | clayey silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | clayey silty fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 4'-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey silty fine sand | | | | | | |
| | 14'-16' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | red | silty fine sand | | | | | | |
| | 18'-20' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 20'-22' | | | | | brn | silty fine sand | | | | | | |
| | 22'-24' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 24'-26' | | | | | white | fine sand | | wet | 0.0 | | | |
| | 26'-28' | | | | | white | fine sand | | sat | | | | |
| | 28'-30' | | | | | white | fine sand | | | | | | |
| | 30'-32' | | | | | white | fine sand | | | | | | |
| | 32-34 | | | | | | | | | | | | |
| | 34-36 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 8-12

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: OLFS4-DPW21
DATE: 9-10-06
GEOLOGIST: ~~Gary J. Davis~~ C. Odom
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6" | | | | | Br | silty fs, trace cly | | | 0.0 | | | |
| | 6"-2 | | | | | | Same | | | 0.0 | | | |
| | 2-4 | | | | | | Same | | | 0.0 | | | |
| | 4-6 | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6-8 | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 8-10 | | | | | red | silty sand | | | 0.0 | | | |
| | 10-12 | | | | | red | clayey silty sand | | | 0.0 | | | |
| | 12-14 | | | | | red | clayey silty sand | | | | | | |
| | 14-16 | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 16-18 | | | | | red | silty fine sand | | | | | | |
| | 18-20 | | | | | gry | fine sand | | | 0.0 | | | |
| | 20-22 | | | | | red | silty fine sand | | | | | | |
| | 22-24 | | | | | white | fine sand | | | 0.0 | | | |
| | 24-26 | | | | | pink | fine sand | | | | | | |
| | 26-28 | | | | | white | fine sand | | | 0.0 | | | |
| | 28-30 | | | | | wht | fine sand | | | | | | |
| | 30-32 | | | | | wht | fine sand | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Sample 8-12

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: DLFS4-DPW22
DATE: 9-10-06
GEOLOGIST: ~~Gary J. Davis~~ C. Odom
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6' | | | | | red | silty fine sand | | | 1.0 | | | |
| | 6"-2' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 4'-6' | | | | | brn | clayey silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey silty fine sand | | | | | | |
| | 14'-16' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | red | silty fine sand | | | | | | |
| | 18'-20' | | | | | brown | silty fine sand | | | 0.0 | | | |
| | 20'-22' | | | | | white | fine sand | | | | | | |
| | 22'-24' | | | | | pink | silty fine sand | | | 0.0 | | | |
| | 24'-26' | | | | | red | silty fine sand | | | | | | |
| | 26'-28' | | | | | white | fine sand | | | 0.0 | | | |
| | 28-30 | | | | | white | fine sand | | sat | | | | |
| | 30-32 | | | | | white | fine sand | | sat Petroleum odor | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: Sample 26-28

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: SLFS4-DPW23
DATE: 9-11-06
GEOLOGIST: ~~Gary J. Davis~~ C. Odom
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-2' | | | | | red | red silty fine sand | | | 0.0 | | | |
| | 2-4' | | | | | brn | clayey silty fine sand | | | 0.0 | | | |
| | 4-6 | | | | | brn | clayey silty fine sand | | | 0.0 | | 0.0 | 0.0 |
| | 6-8 | | | | | | no recovery | | | | | | |
| | 8-10 | | | | | | no recovery | | | | | | |
| | 10-12 | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 12-14 | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 14-16 | | | | | red | clayey silty fine sand | | | | | | |
| | 16-18 | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 18-20 | | | | | red | clayey silty fine sand | | | | | | |
| | 20-22 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 22-24 | | | | | red | silty fine sand | | | | | | |
| | 24-26 | | | | | red | silty fine sand | | | 0.0 | | | |
| | 26-28 | | | | | white | fine sand | | | | | | |
| | 28-30 | | | | | white | fine sand | | sat petroleum odor | | | | |
| | 30-32 | | | | | white | fine sand | | sat petroleum odor | | | | |
| | 32-34 | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: water @ 28 ft bls in silty fine sand 26-28

Drilling Area Background (ppm): ____

Converted to Well: Yes ____ No ____ Well I.D. #: ____

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DP1-S20
Sample Location: DP1
Sampled By: Gary J. Davis
C.O.C. No.: 2805

- [ ] Surface Soil
- [x] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date | Time | Method | Monitor Reading (ppm) | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|---|---|
| 9-6-06 | 1220 | Grab | 0 | 18-20 | Dark Reddish Brown | silty sand (SM) ~5% clay |

**COMPOSITE SAMPLE DATA:**

| Date | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-6-06 | 1220 | 18-20 | DK. Red Brown | silty sand (SM) 5% clay dense |

Method: DPT Composite

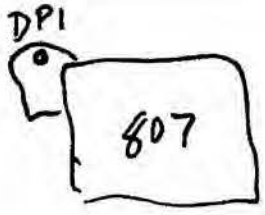
Monitor Readings (Range in ppm): 0.0

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 VOAs + 1-2oz | ✓ | |
| PAHs | 1 4oz | ✓ | |
| TRPH | 1 4oz | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: ~~OLF34~~ ~~OLF4~~ DP2-S20
Sample Location: DP2
Sampled By: Harry J. Davis
C.O.C. No.: 2805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: 9-6-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Composite | 1315 | 18-20 | DK Reddish Brown | Silty sand w/ 25% clay damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 VOAs 1-2oz P | ✓ | |
| PAHs | 1 > 4oz G | ✓ | |
| TRPH | 1-4oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

DP-2

807

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Harry J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DP3-S20
Sample Location: DP-3
Sampled By: Amy J. Davis
C.O.C. No.: 2805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-6-06 | 1530 | 18-20 | DK. Reddish Brown | Silty sand ~5% clay damp |
| Method: DPT Comp. | | | | |
| | | | | |
| Monitor Readings (Range in ppm): 0,0 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 10As + 1-2oz P | ✓ | |
| PAHs | 1-4oz G | ✓ | |
| TRPH | 1-4oz G | ✓ | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

807

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Amy J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 06FS4-DP4-S20
Sample Location: DP4
Sampled By: Gary J. Dann
C.O.C. No.: 12805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

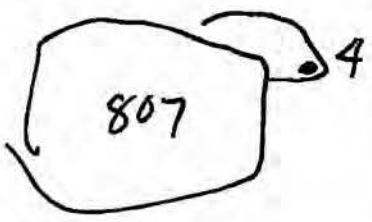
| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-6-06 | 1620 | 18-20 | DK Reddish Brown | silty sand w/ ~5% clay, damp |
| Method: DPT Comp. | | | | |
| | | | | |
| Monitor Readings (Range in ppm): 0 to 0 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 VOAs + 1-2oz P | ✓ | |
| PAHs | 1-4oz Gl | ✓ | |
| TRPH | 1-4oz Gl | ✓ | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Dann

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DLFS4-DP5-S20
Sample Location: DP5
Sampled By: Gary J. Davis
C.O.C. No.: JP 2805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-6-06 | 1730 | 18-20 | DK Reddish Brown | Silty sand w/5% clay damp |
| Method: DPT. Comp. | | | | |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3-Vocs + 1-2oz P | ✓ | |
| PAHs | 1-4oz | ✓ | |
| TRPH | 1-4oz | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DP6-S20
Sample Location: DP6
Sampled By: Gary J. Davis
C.O.C. No.: 2805

- [ ] Surface Soil
- [X] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

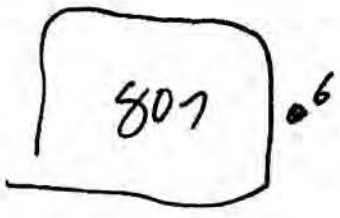
| Date: 9-7-06 AD 8-6-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Comp. | 0845 | 18-20 | DK Reddish Brown | Silty Sand ~5% clay, damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3-Voas, 1-2oz P | ✓ | |
| PAHs | 1-4oz G | ✓ | |
| TRPH | 1-4oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLF54-DPT-S20
Sample Location: DPT
Sampled By: Gary J Davis
C.O.C. No.: 1805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-7-06 | 0930 | 18-20 | DK. Reddish Brown | Silty Sand w/~5% clay, damp |
| Method: DPT comp. | | | | |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 vom + 1-2oz P | ✓ | |
| TRPH | 1-4oz G | ✓ | |
| PAHs | 1-4oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DP8-S20
Sample Location: DP8
Sampled By: Gary J. Davis
C.O.C. No.: 2805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

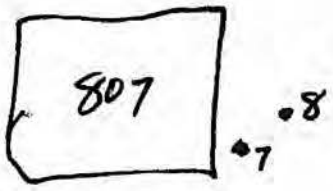
| Date: 9-7-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT comp. | 1025 | 18-20 | DK. Reddish Brown | Silty sand w/ ~5% clay, damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PPL VOHs, BTEX + MTBE | 3 VOAs + 1-2oz P | ✓ | |
| PAHs | 1-4oz G | ✓ | |
| TRPH | " | ✓ | |
| PCBs | " | ✓ | |
| Total Metals | " | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DP9-S20
Sample Location: DP9
Sampled By: Gary J. Davis
C.O.C. No.: 2805

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-7-06 | 1140 | 18-20 | DK. Reddish Brown | Silty Sand w/ ~5% clay |
| Method: DPT Comp | | | | damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PPL VOHs, BTEX + MTBE | 3 VOAs + 1-2oz P | ✓ | |
| PAHs | 1-4oz | ✓ | |
| PCBs, TRPH, Total Metals | 1-16oz | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DP10-S20
Sample Location: DP10
Sampled By: Harry J. Davis JJ
C.O.C. No.: 2805

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: 9-7-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT comp. | 1535 | 18-20 | DK Reddish Brown | Silty sand w/ ~5% clay damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PPL VOHs, BTEX + MTBE | 3 VOAs + 1-2oz P | ✓ | |
| PAHs | 1-4oz Gl | ✓ | |
| PCBs, TRPH, Total Metals | 1-16oz Gl | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Harry J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DP11-S20
Sample Location: DP11
Sampled By: Gary J. Davis
C.O.C. No.: 2805

- [ ] Surface Soil
- [X] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: 9-7-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | 1615 | 18-20 | DK. Reddish Brown | silty sand w/ ~5% clay |
| Method: DPT comp. | | | | damp |
| Monitor Readings (Range in ppm): D.O | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 VOAs + 1-2oz P | ✓ | |
| PAHs | 1-4 oz G | ✓ | |
| TRPH | 1-4 oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLF54-DP12-S20
Sample Location: DP12
Sampled By: Gary J. Davis
C.O.C. No.: 2805

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

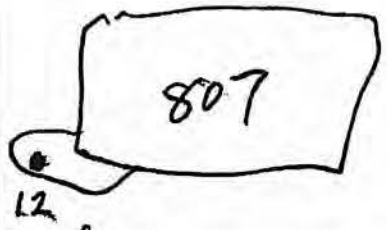
| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-7-06 | 1650 | 18-20 | DK Reddish Brown | Silty Sand w/ 25% Clay |
| Method: DPT comp. | | | | damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PPL VOHs, BTEX+MTBE | 3 voas + 1-2oz P | ✓ | |
| PAHs | 1-4oz G | ✓ | |
| PCBs, TRPH, Total Metals | 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DP13-S20
Sample Location: DP13
Sampled By: Gary J. Davis
C.O.C. No.: 2807

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: / Time: / Method: / Monitor Reading (ppm): | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-8-06 | 0900 | 18-20 | Dk. Reddish Brown | silty sand w/ ~35% clay |
| Method: DPT comp. | | | | damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 VOAs + 1-2oz P | ✓ | |
| PAHs | 1-4oz Gl | ✓ | |
| TRPH | 1-4oz Gl | ✓ | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

13 • 807

Circle if Applicable:
MS/MSD

Duplicate ID No.:

Signature(s):
Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DP14-S20
Sample Location: DP14
Sampled By: Harry J. Davis
C.O.C. No.: 2807

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

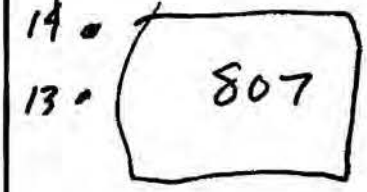
| Date: 9-8-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | 1015 | 18-20 | DK Reddish Brown | Silty Sand w/ 5% clay |
| Method: | | | | damp |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PPL VOHs, BTEX+MTBE | 3 vocs + 1-20oz P | ✓ | |
| PAHs | 1-4oz Gr. | ✓ | |
| PCBs, TRPH, Total Metals | 1-16oz Gr | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):** Harry J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLF34-DP15-S20
Sample Location: DP15
Sampled By: Amy J. Davis
C.O.C. No.: 12807

- [ ] Surface Soil
- [X] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-8-06 | 1120 | 18-20 | DK. Reddish Brown | Silty sand w/ 5% clay damp |
| Method: DPT composite | | | | |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 VOAs & 1-2oz P | ✓ | |
| PAHs | 1-4oz Gl | ✓ | |
| TRPH | 1-4oz Gl | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): Amy J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPW1-S45
Sample Location: DPW1
Sampled By: Tony J. Davis
C.O.C. No.: 2807

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

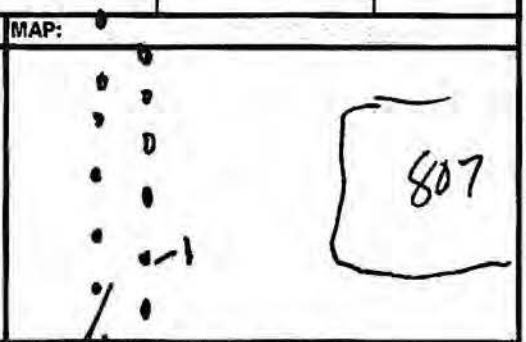
| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-8-06 | 1430 | 40-45 | Tan to Brn/White | Silty sand w/ trace clay |
| Method: DPT Composite | | | | damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & Appendix IX | 3 voas & 1-2oz P | ✓ | |
| TCL SVOCs & App IX PCBs, TRPH, TAL Metals | 1-4oz Gl | ✓ | |
| | 1-4 oz Gl | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Tony J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPW2-S10
Sample Location: DPW 2
Sampled By: Gary J. Davis
C.O.C. No.: 07 2812

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

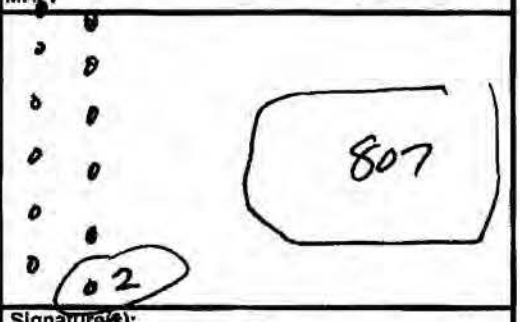
| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-12-06 | 0615 | 5-10 | Reddish Brown | silty sand w/ ~5% clay damp |
| Method: DPT composite | | | | |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & App IX | 3-40ml VOAs & 1-20oz P | ✓ | |
| TCL SVOCs & App IX PCBs, TRPH, TAL Metals | 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle If Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFSA-DPW3-S10
Sample Location: DPW3
Sampled By: Gary J. Davis
C.O.C. No.: 2812

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

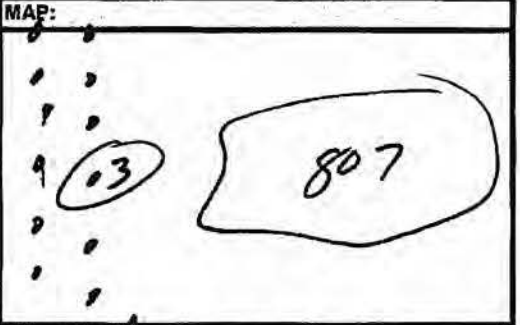
| Date: 9-12-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Composite | 0830 | 5-10 | Reddish Brown | Silty Sand w/ ~5% clay |
| Monitor Readings (Range in ppm): 0.0 | | | | damp |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & App IX | 3 VOAs & 1-2oz P | ✓ | |
| TCL SVOCs & App IX, PCBs, TRPH, TAL Metals | 3 1-16oz | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLF34-DPW4-S10
Sample Location: DPW4
Sampled By: Gary J. Davis
C.O.C. No.: 2812

- [ ] Surface Soil
- [X] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

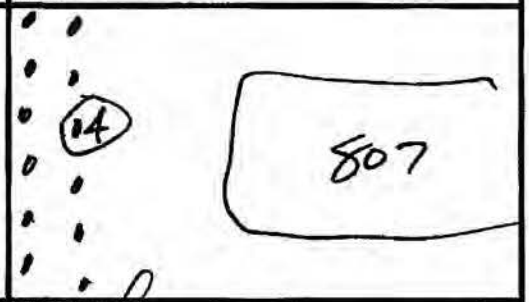
| Date: 9-12-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Composite | 0900 | 5-10 | Reddish Brown | silty sand w/ ~5% clay damp |
| Monitor Readings (Range in ppm): | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & App IX | 3 voas + 1-2oz P | ✓ | |
| TCL SVOCs & App IX PCBs, TRPH, TAL Metals | 3 - 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPW5-S10
Sample Location: DPW5
Sampled By: Gary J. Davis
C.O.C. No.: 2812

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

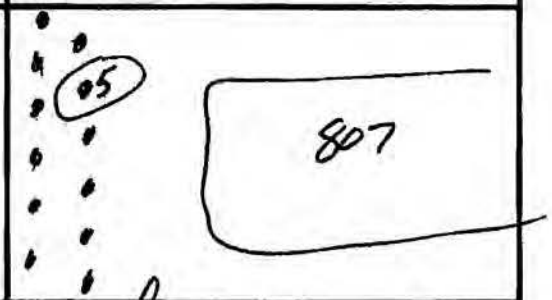
| Date: 9-12-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT - Composite | 0920 | 5-10 | Reddish Brown | Silty sand w/ ~5% clay damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 3 VOAs @ 1-2oz P | ✓ | |
| TCL SVOCs + App IX, PCBs, TRPH, TAL Metals | 3 1-16oz GJ | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: GLFS4-DPW6-S10
Sample Location: DPW6
Sampled By: Gary J. Davis
C.O.C. No.: 2817

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

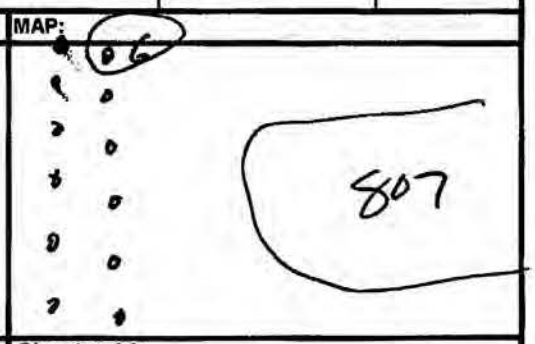
| Date: 9-12-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT composite | 1015 | 5-10 | Reddish Brown | Silty sand w/ ~5% clay damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & App IX | 3 voas & bag P | ✓ | |
| TCL SVOCs & App IX, PCBs, TRPH, TAL Metals | 3-1-16oz GJ | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS-DPW7-545
Sample Location: DPW7
Sampled By: Gary J. Davis
C.O.C. No.: 2404

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

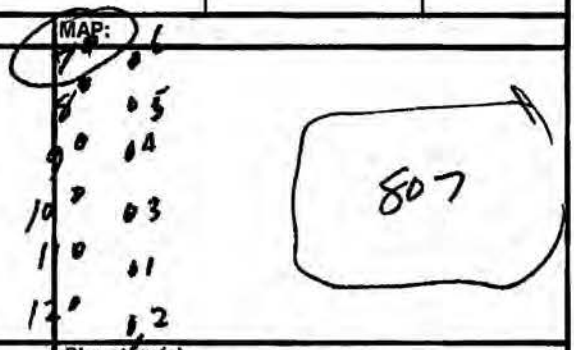
| Date: 9-11-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Composite | 1410 | 40-45 | Buff White to Tan | silty Sand w/ trace clay |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & App IX | 3 voas & 1-2oz P | ✓ | |
| TCL SVOCs & App IX PCBs, TRPH, TAL Metals | 3 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

MAP:




Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFSA-DPW8-S10
Sample Location: DPW8
Sampled By: ~~Gary~~ / Davis
C.O.C. No.: 2812

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date 9-12-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Composite | 1030 | 5-10 | Reddish Brown | Silty sand w/ ~5% clay damp |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 3 vials 9 1-2oz P | ✓ | |
| TCL SVOCs + App IX, PCBs, TRPH, TAL Metals | 3 - 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPW9-S10
Sample Location: DPW9
Sampled By: Gary J. Davis
C.O.C. No.: 2812

- [ ] Surface Soil
- [X] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

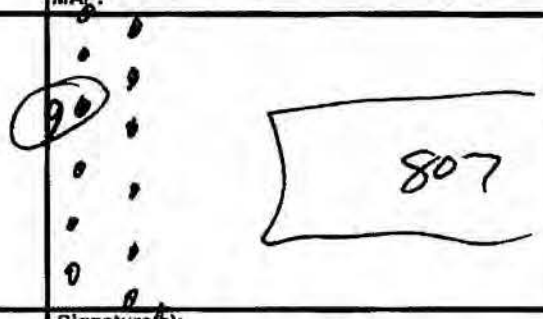
| Date: 9-12-06 | Time: 1055 | Depth Interval: 5-10 | Color: Reddish Brown | Description (Sand, Silt, Clay, Moisture, etc.): silty sand w/ ~5% clay damp |
|---|---|---|---|---|
| Method: DPT Composite | | | | |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 3 vials w/ 1-2oz P | ✓ | |
| TCL SVOCs + App IX, PCBs, TRPH, TAL Metals | 3 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLF54-DPW10-545
Sample Location: DPW10
Sampled By: Harry J. Davis
C.O.C. No.: 2808

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| 9-11-06 | 0830 | 40-45 | Tan to Buff White | Silty sand w/ trace clay |
| Method: DPT Composite | | | | clumps |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 3 VOAs 1-2oz P | ✓ | |
| TCL SVOCs + App IX PCBs, TRPH, TAL Metals | 3 — 1-16oz G | ✓ | |

**OBSERVATIONS / NOTES:**

MAP:

8 • 0.5
9 • 0.4
10 • 0.3
11 • 0.1
12 • 0.2

807

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): Harry J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Sample ID No.: OLFSA-DPW11-545
Sample Location: DPW11
Sampled By: Harry J. Davis
C.O.C. No.: 2808

Type of Sample:
[X] Low Concentration
[ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: 9-11-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | 1000 | 40-45 | Buff/White to Tan | Silty Sand w/ trace clay Sample |
| Method: DPT composite | | | | |
| Monitor Readings (Range in ppm): 4.1 corrected | | | | |

**SAMPLE COLLECTION INFORMATION:**

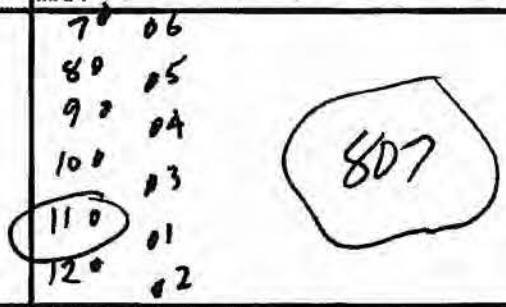
| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| ~~TCL VOCs~~ TCL VOCs + App IX | 3 VOAs & 1-2oz P | ✓ | ✓ |
| TCL SVOCs + App IX, PCB, TRPH, TAL Metals | 3 1-16oz G | ✓ | ✓ |
| | | | SPLP |

SP

**OBSERVATIONS / NOTES:**

Took extra set for SPLP.
SPLP Hold pending analysis

**MAP:**




**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Harry J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: 02FS4-DPW12-545
Sample Location: DPW 12
Sampled By: Gary J. Davis
C.O.C. No.: 2808

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

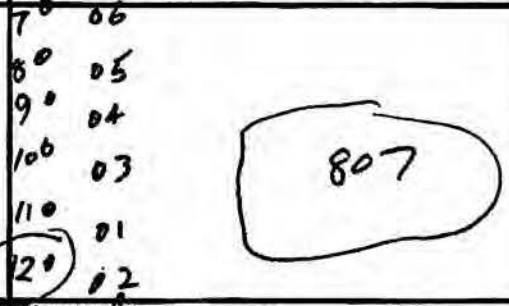
| Date: 9-11-06 | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: DPT Composite | 1635 | A0-45 | Buff white to Tan | Silty sand w/ trace clay Gary J. |
| Monitor Readings (Range in ppm): 0.0 | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs & App IX | 3 VOAs & 1-2oz P | ✓ | |
| TCL SVOCs & App IX, PCPs, TRPH, TAL Metals | 3 1-160z G | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**




Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPB1-SL0
Sample Location: OLFS4-DPB1
Sampled By: C.Dan
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1328 | 5-10 | brn | f silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): - | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX, BTEX + MTBE | 1x100mL plastic<br>3x40mL glass vial | Y<br>Y | |
| TCL SVOCs, App IX, Pest, PCBs, herb, tal metals | 1x16oz jar | Y | |
| SPLP TCL VOCs + App IX | 1x4oz jar | Y | |
| SPLP TCL SVOCs, App IX, Pest, PCBs, herb, tal metals | 1x16oz jar | Y | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPB2-S10
Sample Location: OLFS4-DPB2
Sampled By: C. Ocon
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1358 | 5-10 | Brn | Silty, fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 1 x 100 mL plastic | Y | |
| BTEX + MTBE | 3 x 40 mL glass w/ HCl | Y | |
| TCL SVOCs, App IX, Pest, PCBs, herb, tal metals | 1 x 16 oz glass jar | Y | |
| SPLP TCL VOCs + App IX | 1 x 4 oz clear jar | Y | |
| SPLP TCL VOCs, App IX, Pest+PCB, herb, tal metals | 1 x 16 oz glass jar | Y | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: DLFS4-OPB3-S10
Sample Location: DLFS4-OPB3
Sampled By: C. Odom
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1425 | 5-10 | Brown | Silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 1 x 100 mL plastic | Y | |
| BTEX + MTBE | 3 x 40 mL glass vials | Y | |
| TCL SVOCs, App IX, Pest, PCBs, herb, tal metals | 1 x 16 oz glass jar | Y | |
| SPLP TCL VOCs + App IX | 1 x 4 oz glass jar | Y | |
| SPLP TCL VOCs, App IX, Pest, PCBs, herb, tal metals | 1 x 16 oz glass jar | Y | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD

Duplicate ID No.:

**Signature(s):**

C. Odom

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPB4-S10
Sample Location: OLFS4-DPB4
Sampled By: C.O.C.
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1500 | 5-10 | brown | silty fine sand |
| Method: hand auger | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 1x40mL glass | Y | |
| BTEX + MTBE | 3x40mL glass vial | Y | |
| TCL SVOCs, App IX, Pest, PCBs, herb, total metals | 1x16oz glass jar | Y | |
| SPLP TCL VOCs + App IX | 1x40z glass jar | Y | |
| SPLP TCL VOCs, App IX, Pest, PCBs, herb, total metals | 1x16oz glass jar | Y | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | OLFS4-DPB4-S10-D |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPBS-510
Sample Location: OLFS4-DPBS
Sampled By: C. Dan
C.O.C. No.:

- [ ] Surface Soil
- [x] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-02 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1540 | 510 | brn | fine silty sand |
| Method: hand auger | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 1x 100ml plastic | X | |
| BTEX + MTBE | 3x 40ml glass vial | X | |
| TCL SVOCs, App IX, Pest, PCBs, herb, total lipids | 1x 16oz glass jar | X | |
| SPLP TCL VOCs + App IX | 1x 4oz glass jar | X | |
| SPLP TCL VOCs, App IX, Pest, PCBs, herb + total lipids | 1x 16oz glass jar | X | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPB6-S10
Sample Location: OLFS4-DPB6
Sampled By: C. Dahn
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1600 | | | |
| Method: hand auger | 5-10 | tan | fine sand |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 1x 40ml plastic | Y | |
| BTEX + MTBE | 3x 40ml glass vial | Y | |
| TCL SVOCs, App IX, Pest, PCBs, herb, total metals | 1x 16oz glass jar | Y | |
| SPLP TCL VOCs + App IX | 1x 4oz glass jar | Y | |
| SPLP TCL VOCs, App IX, Pest, herb, metals | 1x 16oz glass jar | Y | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: SLFSY-DPB7-S10
Sample Location: SLFSY-DPB7
Sampled By: CJ
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1614 | 5-10 | Brn | silty fine sand |
| Method: Auger | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLF54-DPB8-S10
Sample Location: OLF54-DPB8
Sampled By: C. Dan
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1635 | 5-10 | Brown | silty fine sand |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPB9-S10
Sample Location: OLFS4-DPB9
Sampled By: C. Dan
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1650 | 5-10' | Brown | silty fine sand |
| Method: hand auger | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

C. Dan

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPB10-SW
Sample Location: OLFS4-DPB10
Sampled By: C. Dan
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-05 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1700 | SW | Brown | silty fine sand |
| Method: hand auger | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: RI site 4
Project No.:

Sample ID No.: OLF54-DP16-S6
Sample Location: Swampy field
Sampled By:
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-6-05 / Time: 1340 / Method: DPT / Monitor Reading (ppm): 0.0 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| | 4-6 | red | silty sand |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40 mL vial | Yes | |
| BTEX + MTBE | 1 x 2oz plastic | Yes | |
| FL-PRO | 1 x 4oz jar | Yes | |
| PAH | 1 x 4oz jar | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

Project Site Name: [redacted] RI site 4
Project No.:

Sample ID No.: OLFS4-DP17-S10
Sample Location: OLFS4
Sampled By: C.Dam
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-6-06 / Time: 1535 / Method: DPT / Monitor Reading (ppm): 0.0 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| | 8-10' | red | silty sand |

**COMPOSITE SAMPLE DATA:**

| Date: / Method: / Monitor Readings (Range in ppm): | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40 mL glass | Yes | |
| BTEX + MTBE | 1 x 100 mL plastic | Yes | |
| PAH | 1 x 4oz glass jar | Yes | |
| FL-PRO | 1 x 4oz glass jar | Yes | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

C Dam

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: site 4 RI OLFSatley
Project No.:

Sample ID No.: OLFS4-18-S6
Sample Location: DP 18
Sampled By: Coda
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-6-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1645 | 4'-6' | brn | silty sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 1300 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PAH | 1-4oz jar | Yes | |
| FL-PRO | 1-4oz jar | Yes | |
| TPL VOC / BTEX MTBE | 1 x 100 mL Plastic | Yes | |
| BTEX + MTBE | 1 x 40 mL glass vial | Yes | |
| BTEX + MTBE | 1 x 40 mL glass vial | Yes | |
| BTEX + MTBE | 1 x 40 mL glass vial | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

DP19

Project Site Name: Site 4 RI Sanfley
Project No.:

Sample ID No.: OLFS4-19-312
Sample Location: OLFS4-19
Sampled By: C. Dell
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-6-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1755 | 10'-12' | lt brn | silty sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 1 X 40 mL glass | Yes | |
| BTEX + MTBE | 1 X 40 mL glass | Yes | |
| BTEX + MTBE | 1 X 40 mL glass | Yes | |
| EL-PRO | 1 X 4 oz jar | Yes | |
| PAH | 1 X 4 oz jar | Yes | |
| BTEX + MTBE | 1 X 100 mL Amber | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: site 4 RI Saufley
Project No.:

Sample ID No.: DLFS4-DP20-S10
Sample Location: DLFS4-DP20
Sampled By: CJdn
C.O.C. No.:

- [ ] Surface Soil
- [x] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-7-06 / Time: 1000 / Method: DPT / Monitor Reading (ppm): 0.0 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| | 8-10' | red | fine silty sand |

**COMPOSITE SAMPLE DATA:**

| Date: / Method: / Monitor Readings (Range in ppm): | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PAH | 1 x 4oz Jar | | |
| FL-PRO | 1 x 4oz glass jar | | |
| BTEX + MTBE | 1 x 40 mL glass vial | | |
| BTEX + MTBE | 1 x 40 mL glass vial | | |
| BTEX + MTBE | 1 x 40 mL glass vial | | |
| BTEX + MTBE | 1 x 100 mL plastic | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: site 4 RI saufley
Project No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-OP21-510
Sample Location: OLFS4-OP21
Sampled By: C.Dell
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-7-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1105 | 8-10' | red | silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 1 x 40 mL glass | Yes | |
| BTEX + MTBE | 1 x 40 mL glass | Yes | |
| BTEX + MTBE | 1 x 40 mL glass | Yes | |
| BTEX + MTBE | 1 x 100 mL plastic | Yes | |
| PAH | 1 x 4 oz glass jar | Yes | |
| EL-PRO | 1 x 4 oz glass jar | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: site 4 RI Saufley
Project No.:

Sample ID No.: DLFS4-DP22-S18
Sample Location: DLFS4-DP22
Sampled By: Code
C.O.C. No.:

- [] Surface Soil
- [X] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [X] Low Concentration
- [] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-7-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1210 | 16'-18' | red | fine silty sand |
| Method: DPT | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| ~~PAH + FL-PRO~~ | ~~1 x 4oz jar~~ | ~~No~~ | |
| PAH + FL-PRO | 1 x 16 oz jar | Yes | |
| As, Cd, Cr, Pb | 1 x 4 oz jar | Yes | |
| ~~pp~~ VOC BTEX | 1 x 100 mL plastic | Yes | |
| BTEX + MTBE | 3 x 40 mL glass vial | Yes | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

Project Site Name: site 4 RI saftey
Project No.:

Sample ID No.: OLFS4-DP23-S8
Sample Location: OLFS4-DP23
Sampled By: C.Odar
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-7-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1530 | 6-8 | | |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 X 40 mL dessicated | Yes | |
| BTEX + MTBE | 1 X 100 mL plastic | | |
| PAH | 1 X 4oz glass jar | | |
| EL-PRO | 1 X 4oz glass jar | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: site 4 RI Saftey
Project No.:

Sample ID No.: OLFS4-DP24-58
Sample Location: OLFS4-DP24
Sampled By: C.Odell
C.O.C. No.:

- [] Surface Soil
- [x] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-7-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: DPT | 6'-8' | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| MTBE + MTBE | 3x40mL vials | | |
| PP(VOH + BTEX | 1x100mL plastic | | |
| PP As, Cd, Cr, Pb | 1x4oz glass jar | | |
| PCBs, PAH + PP-PRO | 1x16oz glass jar | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: RI@Site 4 Saufley
Project No.:

- [] Surface Soil
- [X] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Sample ID No.: 04FS4-DP25-S10
Sample Location: 04FS4-DP25
Sampled By: C.Ode
C.O.C. No.:

Type of Sample:
- [X] Low Concentration
- [] High Concentration

**GRAB SAMPLE DATA:**

| | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Date: 9-8-06<br>Time: 0925<br>Method: DPT<br>Monitor Reading (ppm): | 8'-10 | red | silty fine sand |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX+MTBE | 3+40mL glass vial | ✓ | |
| BTEX+MTBE | 1x100mL plastic | ✓ | |
| PAH | 1x4oz glass jar | ✓ | |
| FL-PRO | 1x4oz glass jar | ✓ | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD

Duplicate ID No.:

**Signature(s):** [signature]

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



56

Project Site Name: RI @ Site 4 Sawfly
Project No.:

Sample ID No.: OLFS4-DP26-
Sample Location: OLFS4-DP26
Sampled By:
C.O.C. No.:

[] Surface Soil
[X] ~~Subsurface Soil~~
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] ~~Low~~ Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-5-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1045 | 4'-6' | Brown | silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 13.5 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40mL glass vials | Yes | |
| BTEX + MTBE | 1 x 500mL plastic | Yes | |
| PAH | 1 x 4oz glass jar | Yes | |
| EL-PRO | 1 x 4oz glass jar | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: RIC site 4 (south)
Project No.:

Sample ID No.: OLFS4-DP27 -S4
Sample Location: OLFS4-DP27
Sampled By: Cadon
C.O.C. No.:

[] Surface Soil
[x] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[x] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-5-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1135 | 2'-4' | brown | silty clayey fine sand |
| Method: Hand auger | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PP VOA's + ~~BTEX~~ BTEX | 1 x 100mL plastic | Yes | DUP |
| PCB, PAH + FL-PRO | 1 x 16 oz glass jar | Yes | DUP |
| BTEX + MTBE | 3 x 40mL vials | Yes | DUP |
| As, Cd, Cr, Pb | 1 x 4oz glass jar | Yes | DUP |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

Project Site Name: RIQ Site 4 Sauth
Project No.:

Sample ID No.: [redacted]DLFS4-DP28-5&
Sample Location: DLFS4-DP28
Sampled By: C. Ellis
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-8-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | 6'-8' | | |
| Method: | | | |
| Monitor Reading (ppm): | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40mL glass vial | | |
| BTEX + MTBE | 1 x 100mL plastic | | |
| PAH | 1 x 4oz glass jar | | |
| TL-PRO | 1 x 4oz glass jar | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: RI Site 4 Saufley
Project No.:

Sample ID No.: OLFS4-DP29-S4
Sample Location: OLFS4-DP29
Sampled By: Codon
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-8-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | 2'-4' | | |
| Method: Hand auger | | | |
| Monitor Reading (ppm): 3.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| Method: | | | | |
| Monitor Readings (Range in ppm): | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3x40mL glass vial | Yes | |
| BTEX + MTBE | 1x100mL plastic | Yes | |
| PAH | 1x4oz glass jar | Yes | |
| FL-PRO | 1x4oz glass jar | Yes | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD

Duplicate ID No.: OLFS4-DUP025

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: RI @ site 4 Saufley
Project No.:

Sample ID No.: OLFS4-DP30- S 8
Sample Location: OLFS4-DP30
Sampled By: C. Dolan
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-8-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: | | | |
| Method: DPT | 6-8 | brn | @ silty fine sand |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40mL glass vial | Yes | |
| PCB, PAH, FL-PRO | 1 x 8oz glass jar | Yes | |
| PA/VOHs + BTEX + MTBE | 1 x 100 mL vial | Yes | |
| As, Cd, Cr, Pb | 1 x 4oz glass jar | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

Project Site Name: Site 4 RI Surface
Project No.:

Sample ID No.: OLF54-DPW13-S4
Sample Location: OLF54-DPW13
Sampled By: C. Odom
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-11-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1542 | 2-4 | BRN | Silty fine sand |
| Method: Hand auger | | | |
| Monitor Reading (ppm): 1352 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + Appendix IX | 1 x 100 ml plastic vial | Yes | |
| | | | |
| TCL SVOCs + Appendix IX; PCBs; | 1 x 16 oz glass jar | Yes | |
| TRPH, TAL metals | | | |
| BTEX + MTBE | 2 x 40 ml glass vials | Yes | |
| | | | |
| + SPLP | | | |
| | | | |
| 10 Samples total | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

C. Odom

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Site 4 RI Sawfly
Project No.:

Sample ID No.: OLF54-DP014-SG
Sample Location:
Sampled By:
C.O.C. No.:

- [] Surface Soil
- [] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [] Low Concentration
- [] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-11-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1615 | 4-6 | brn | clayey silty fine sand |
| Method: hand auger | | | |
| Monitor Reading (ppm): 536 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings | | | | |
| (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX | 1 X 100 mL plastic | Yes | |
| DTEP + MTBE | 3 X 40 mL glass vials | Yes | |
| TCL VOCs, App IX, PCBs, TRPH, metals | 1 X 1602 jar | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLFS4-DPWS-S4
Sample Location: OLFS4-DPW15
Sampled By: LDL
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-11-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1640 | 2-4 | Brn | clayey silty fine soil |
| Method: hand auger | | | |
| Monitor Reading (ppm): 744 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40 mL vials | | |
| TCL VOCs + Appendix IX | 1 x 100 mL plastic vial | | |
| TCL SVOCs + Appendix IX, PCBs, TRPH + TAL metals | 1 x 16 oz glass jar | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DLFS4-OPW16-S4
Sample Location: DLFS4-OPW16
Sampled By: C.Oder
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-11-06 / Time: 1655 / Method: Hand auger / Monitor Reading (ppm): 716 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| | 2-4 | Brown | clayey, silty fine sand |

**COMPOSITE SAMPLE DATA:**

| Date: / Method: / Monitor Readings (Range in ppm): | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + Appendix IX | 1x 40mL plastic vial | Y | |
| TCL SVOCs, Appendix IX, PCBs, TRPH, + TAL metals | 1x 16oz glass jar | Y | |
| BTEX + MTBE | 3x 40mL glass vial | Y | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD

Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: SLFS4-DPW17-S-12
Sample Location: SLFS4-DPW17
Sampled By: C. Sodano
C.O.C. No.:

[] Surface Soil
[] ~~Subsurface Soil~~
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] ~~Low~~ Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-11-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1710 | 10-12 | Red | silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40mL glass vial | Y-1 | |
| TCL VOCs + Appendix IX | 1 x 100mL Plastic | | |
| TCL SVOCs + Appendix IX, Pest. | | | |
| TRPH, & TAL Metals | 1 x 1602 glass jar | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPW18-S12
Sample Location: OLFS4-DPW18
Sampled By: C.Dan
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 0757 | 10-12 | red | clayey silt, little sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40ml glass vial | | |
| TCL VOCs + Appendix IX | 1 x 100ml plastic/glass | | |
| TCL SVOCs, Appendix IX, PCBs, | | | |
| TRPH, + Total metals | 1 x 16 oz jar | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD

Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: DLFS4-DPW19-512
Sample Location: DLFS4-DPW19
Sampled By: Coclon
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 0819 | 10-12 | red | clayey, silty, fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40 mL glass vial | | |
| TCL VOCs + Appendix IX | 1 x 100 mL plastic | | |
| | | | |
| TCL SVOCs, Appendix IX, PCBs | 1 x 16oz glass jar | | |
| TRPH + TAL metals | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: OLF54-DPW20-512
Sample Location: OLF54-DPW20
Sampled By: Cook
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 0843 | 10-12 | Red | Clayey, Silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| DTEX + MTBE | 3x 40mL glass vials | | |
| TCL VOCs + Appendix IX | 1x 100 mL plastic | | |
| TCL SVOCs, Appendix IX PCBs, TRPH & TAL metals | 1x 16 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: DLFS4-DPW21-SB
Sample Location: DLFS4-DPW21
Sampled By: C. Odom
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 0915 | 10-12 | Red | silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| BTEX + MTBE | 3 x 40 mL glass vial | 4 | |
| TCL VOCs + Appendix IX | 1 x 100 mL plastic | 4 | |
| | | | |
| TCL SVOCs Appendix IX, PCBs, TRPH & TAL metals | 1 x 16 oz glass jar | 4 | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD

Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: RI Site 4 Safety
Project No.:

Sample ID No.: OLFS4-DPW22-526
Sample Location: DPW22
Sampled By: C. Odom
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-11-06 | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 0945 | 22-24 | Brn | fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + App IX, ~~TAL Metals~~ Perchlorate | 1 x 100mL plastic | Yes | |
| TCL SVOCs + Appendix IX, PCBs, TRPH, + TAL metals | 1 x 16oz glass jar | Yes | |
| BTEX + MTBE | 3 x 40 mL glass vial | Yes | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-DPW24-S 26
Sample Location: OLFS4-DPW24
Sampled By: C. Ode
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date: 9-12-06 | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Time: 1043 | 24-26 | red | silty fine sand |
| Method: DPT | | | |
| Monitor Reading (ppm): 0.0 | | | |

**COMPOSITE SAMPLE DATA:**

| Date: | Time | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|---|
| | | | | |
| Method: | | | | |
| | | | | |
| Monitor Readings (Range in ppm): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| TCL VOCs + Appendix IX | 1 x 100 mL plastic | Y | |
| BTEX + MTBE | 3 x 40 mL glass | Y | |
| | | | |
| TCL SVOCs, Appendix IX, PCBs, TRPH + TAL metals | 1 x 16 oz glass | Y | |
| | | | |
| SPLP TCL VOCs + Appendix IX | 1 x 100 mL plastic | Y | |
| SPLP BTEX + MTBE | 3 x 40 mL glass | Y | |
| | | | |
| SPLP SVOCs, Appendix IX, PCB, TRPH + TAL metals | 1 x 16 oz glass | Y | |
| | | | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

**Signature(s):**

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DP01 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | Damp @ 14' | |
| | 16-20 ft | 0.0 | | OLFS4-DP01-S20 |
| OLFS4-DP02 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP02-S20 |
| OLFS4-DP03 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP03-S20 |
| OLFS4-DP04 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP04-S20 |
| OLFS4-DP05 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP05-S20 |
| OLFS4-DP06 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP06-S20 |
| OLFS4-DP07 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | Damp @ 11' | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP07-S20 |

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DP08 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP08-S20 |
| OLFS4-DP09 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP09-S20 |
| OLFS4-DP10 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | Damp @ 9' | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP10-S20 |
| OLFS4-DP11 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | Damp @ 16' | |
| | 16-20 ft | 0.0 | | OLFS4-DP11-S20 |
| OLFS4-DP12 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | Damp @ 9' | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP12-S20 |
| OLFS4-DP13 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | Damp @ 13' | |
| | 16-20 ft | 0.0 | | OLFS4-DP13-S20 |
| OLFS4-DP14 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | Damp @ 10' | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | OLFS4-DP14-S20 |
| OLFS4-DP15 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 6-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | Damp @ 15' | |
| | 16-20 ft | 0.0 | | OLFS4-DP15-S20 |

**NOTES:**
ft = feet
ppm = parts per million
NA = not analyzed

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DPW01 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-15 ft | 0.0 | Damp @ 14' | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | OLFS4-DPW01-S45 |
| | 45-50 ft | 0.0 | Saturated @ 46' | |
| | 50-55 ft | 0.0 | | OLFS4-DPW01-G53-55 |
| OLFS4-DPW02 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW02-S10 |
| | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 45-50 ft | 0.0 | | |
| OLFS4-DPW03 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW03-S10 |
| | 10-15 ft | 0.0 | Damp @13' | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 45-50 ft | 22,558 | Saturated @ 49' | |
| | 50-55 ft | 0.0 | | OLFS4-DPW03-G53-55 |
| OLFS4-DPW04 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW04-S10 |
| | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW05-S10 |
| OLFS4-DPW05 | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 45-50 ft | 0.0 | Saturated @ 47' | |
| | 50-55 ft | 0.0 | | OLFS4-DPW05-G53-55 |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| OLFS4-DPW06 | 8-10 ft | 0.0 | | OLFS4-DPW06-S10 |
| | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW07-S10 |
| | 10-15 ft | 0.0 | | |
| OLFS4-DPW07 | 15-20 ft | 0.0 | Damp @ 16' | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 45-50 ft | 0.0 | | |
| | 50-55 ft | 0.0 | | OLFS4-DPW07-G53-55 |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW08-S10 |
| | 10-15 ft | 0.0 | Damp @ 13' | |
| OLFS4-DPW08 | 15-20 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DPW09-S10 |
| OLFS4-DPW09 | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | |
| | 45-50 ft | 0.0 | | |
| | 50-55 ft | 0.0 | | OLFS4-DPW09-G53-55 |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| OLFS4-DPW10 | 8-10 ft | 0.0 | | |
| | 10-15 ft | 0.0 | Damp @ 15' | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 0.0 | | |
| | 40-45 ft | 0.0 | | OLFS4-DPW10-S45 |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| OLFS4-DPW11 | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 7.6 | | |
| | 40-45 ft | 8.0 | | OLFS4-DPW11-S45 |
| | 45-50 ft | 3.0 | | |
| | 50-55 ft | 7.1 | | OLFS4-DPW11-G53-55 |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| OLFS4-DPW12 | 10-15 ft | 0.0 | | |
| | 15-20 ft | 0.0 | | |
| | 20-25 ft | 0.0 | | |
| | 25-30 ft | 0.0 | | |
| | 35-40 ft | 5.9 | | |
| | 40-45 ft | 0.0 | Damp @ 10' | |
| | 45-50 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 807**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 50-55 ft | 0.0 | | OLFS4-DPW12-S45 |

**NOTES:**
ft = feet
ppm = parts per million
NA = not analyzed

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DP16 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | OLFS4-DP16-S6 |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 13-15 ft | 0.0 | | |
| | 17-21 ft | 0.0 | | |
| OLFS4-DP17 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-8 ft | 0.0 | | |
| | 8-12 ft | 0.0 | | OLFS4-DP17-S10 |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | |
| OLFS4-DP18 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-8 ft | 1300 | suspect reading | OLFS4-DP18-S6 |
| | 8-12 ft | 0.0 | | |
| | 12-16 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | |
| OLFS4-DP19 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | OLFS4-DP19-S12 |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | |
| OLFS4-DP20 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DP20-S10 |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 16-20 ft | 0.0 | | |
| OLFS4-DP21 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DP21-S10 |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DP22 | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 2.5 | | |
| | 16-18 ft | 18.0 | | OLFS4-DP22-S18 |
| | 18-20 ft | 5.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| OLFS4-DP23 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | OLFS4-DP23-S8 |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | OLFS4-DP24-S8 |
| OLFS4-DP24 | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| OLFS4-DP25 | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | OLFS4-DP25-S10 |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | OLFS4-DP26-S6 |
| | 6-8 ft | 0.0 | | |
| OLFS4-DP26 | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | OLFS4-DP27-S4 |
| | 4-6 ft | 0.0 | | |
| OLFS4-DP27 | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | OLFS4-DP28-S8 |
| OLFS4-DP28 | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**PERIMETER OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| OLFS4-DP29 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | OLFS4-DP29-S4 |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| OLFS4-DP30 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | OLFS4-DP30-S8 |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |

**NOTES:**
ft = feet
ppm = parts per million

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DPW13 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 1508 | | OLFS4-DPW13-S4 |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 24-26 ft | 0.0 | Damp @ 25' | |
| | 28-30 ft | 0.0 | Saturated @ 28' | |
| | 32-34 ft | 0.0 | | |
| | 36-38 ft | 0.0 | | OLFS4-DPW13-G34-36 |
| OLFS4-DPW14 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | OLFS4-DPW14-S6 |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 18-20 ft | 8.3 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | Damp @ 26' | |
| OLFS4-DPW15 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | OLFS4-DPW15-S4 |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 2.6 | | |
| | 10-12 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | Saturated @ 26' | |
| | 28-30 ft | 0.0 | | |
| | 30-32 ft | 0.0 | | |
| | 32-34 ft | 0.0 | | |
| | 34-36 ft | 0.0 | | OLFS4-DPW15-G36-38 |
| | 36-38 ft | 0.0 | | |
| | 38-40 ft | 0.0 | | |
| | 40-42 ft | 0.0 | | |
| | 42-44 ft | 0.0 | | |
| OLFS4-DPW16 | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | OLFS4-DPW16-S4 |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 24-26 ft | 0.0 | Saturated @ 26' | |
| | 26-28 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | OLFS4-DPW17-S12 |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| OLFS4-DPW17 | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | Saturated @ 26' | |
| | 26-28 ft | 0.0 | | |
| | 28-30 ft | 0.0 | | |
| | 32-34 ft | 0.0 | | |
| | 34-36 ft | 0.0 | | OLFS4-DPW17-G34-36 |
| | 36-38 ft | 0.0 | | |
| | 36-40 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| OLFS4-DPW18 | 10-12 ft | 0.0 | | OLFS4-DPW18-S12 |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | | |
| | 26-28 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | OLFS4-DPW19-S12 |
| OLFS4-DPW19 | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | Saturated @ 26' | |
| | 26-28 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DPW20 | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | OLFS4-DPW20-S12 |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| | 24-26 ft | 0.0 | Saturated @ 26' | |
| | 26-28 ft | 0.0 | | |
| | 28-30 ft | 0.0 | | |
| | 30-32 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | OLFS4-DPW21-S12 |
| | 12-14 ft | 0.0 | | |
| OLFS4-DPW21 | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | | |
| | 26-28 ft | 0.0 | | |
| | 28-30 ft | 0.0 | | |
| | 30-32 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| OLFS4-DPW22 | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | | |
| | 26-28 ft | 0.0 | Saturated @ 28' | |
| | 28-30 ft | 0.0 | | |
| | 30-32 ft | 0.0 | | OLFS4-DPW22-G32-34 |
| | 0-0.5 ft | 0.0 | | |
| | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| OLFS4-DPW23 | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | | |
| | 26-28 ft | 0.0 | Saturated @ 28' | OLFS4-DPW23-S28 |
| | 28-30 ft | 0.0 | | |
| | 30-32 ft | 0.0 | | OLFS4-DPW23-G30-32 |
| | 32-34 ft | 0.0 | | |
| | 0-0.5 ft | 0.0 | | |

**FIELD HEADSPACE SCREENING RESULTS**
**WASHRACK OF BLDG 810**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DPW24 | 0.5-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | | |
| | 4-6 ft | 0.0 | | |
| | 6-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | | |
| | 10-12 ft | 0.0 | | |
| | 12-14 ft | 0.0 | | |
| | 14-16 ft | 0.0 | | |
| | 16-18 ft | 0.0 | | |
| | 18-20 ft | 0.0 | | |
| | 20-22 ft | 0.0 | | |
| | 22-24 ft | 0.0 | | |
| | 24-26 ft | 0.0 | | OLFS4-DPW24-S26 |
| | 26-28 ft | 0.0 | Saturated @ 28' | |
| | 28-30 ft | 0.0 | | |
| | 30-32 ft | 0.0 | | |
| | 32-34 ft | 0.0 | | |
| | 34-36 ft | 0.0 | | |

**NOTES:**
ft = feet
ppm = parts per million

**FIELD HEADSPACE SCREENING RESULTS**
**BACKGROUND SAMPLES**
**SITE 4 REMEDIAL INVESTIGATION REPORT**
**OLF SAUFLEY**
**PENSACOLA, FL**

| SOIL BORING | SAMPLE DEPTH | HEADSPACE RESPONSE (ppm) | COMMENTS | LAB SAMPLES |
|---|---|---|---|---|
| OLFS4-DPB01 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to 4' | |
| | 4-8 ft | 0.0 | DPT to total depth | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB01-S10 |
| OLFS4-DPB02 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to 4' | |
| | 4-8 ft | 0.0 | DPT to total depth | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB02-S10 |
| OLFS4-DPB03 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to 4' | |
| | 4-8 ft | 0.0 | DPT to total depth | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB03-S10 |
| OLFS4-DPB04 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB04-S10 |
| OLFS4-DPB05 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB05-S10 |
| OLFS4-DPB06 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB06-S10 |
| OLFS4-DPB07 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB07-S10 |
| OLFS4-DPB08 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB08-S10 |
| OLFS4-DPB09 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB09-S10 |
| OLFS4-DPB10 | 0-2 ft | 0.0 | | |
| | 2-4 ft | 0.0 | hand auger to total depth | |
| | 4-8 ft | 0.0 | | |
| | 8-10 ft | 0.0 | Damp @ 10' | OLFS4-DPB10-S10 |

**NOTES:**
ft = feet
ppm = parts per million
NA = not analyzed

# APPENDIX B

# WELL CONSTRUCTION DEVELOPMENT SHEETS, GROUNDWATER LOGS, AND WELL TESTS

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: _____ BORING NUMBER: MW46
PROJECT NUMBER: _____ DATE: 6-7-05
DRILLING COMPANY: _____ GEOLOGIST: _____
DRILLING RIG: _____ DRILLER: _____

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | | | | | | | |
| 51 | | | | | | | silty fine sand | | | OD | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | |
| 56 | | | 10/10 | | | | silty fine sand | | | 0.0 | | 0.0 | |
| | | | | | | | TD @ 56 | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of ___

Well: OLSF4-MW-39
Site: Saufley Site 4
Date Installed: _____
Date Developed: _____
Dev. Method: _____
Pump Type: ~~Submersible~~ flow rate Monsoon

Depth to Bottom (ft.): 54.89
Static Water Level Before (ft.): 46.54
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

sample time: 1635

| Time | ~~Estimated~~ Sediment ~~Thickness~~ (Ft.) | Cumulative Water Volume ~~(Gal.)~~ L | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ~~mS/cm~~) | Turbidity (NTU) | Remarks ~~(color, etc.)~~ Dissolved Oxygen ~~(color, (mg/L)~~ | ~~ORP~~ ORP |
|---|---|---|---|---|---|---|---|---|---|
| 1540 | 0.25 L/min | ~~0.25 L/min~~ | | | | | | | |
| 1545 | " | 1.25 L | | 28.21 | 6.04 | 0.115 | 850 | ~~2.55~~ 2.55 | 102.6 |
| 1600 | " | 4.00 L | | 27.93 | 6.10 | 0.115 | 160 | 2.70 | 90.9 |
| 1615 | " | 6.75 L | | 28.07 | 6.05 | 0.111 | 30 | 2.66 | 95.9 |
| 1630 | " | 11.50 L | | 28.15 | 5.99 | 0.110 | 20 | 2.82 | 106.2 |
| ~~1645~~ | " | | | | | | | | |

46.54

11
2.75
1.25
2.75

2.5
1.25
2.75

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of ___

6-12-07

Well: ___ OLSF4-MW-40
Site: ___ Saufley Site 4
Date Installed: ___
Date Developed: ___
Dev. Method: ___
Pump Type: ___ flow rate

Depth to Bottom (ft.): ___
Static Water Level Before (ft.): 48.64
Static Water Level After (ft.): ___
Screen Length (ft.): ___
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): __ 2-inch

Responsible Personnel: ___ Gary Davis
Drilling Co.: ___ ProSonic
Project Name: ___ Saufley Site 4
Project Number: ___ 112G00389

Sample Time 1100

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) L | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ms/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) | ORP |
|---|---|---|---|---|---|---|---|---|---|
| 1003 | 200mL | | | | | | | | |
| 1033 | 200ml/min | 6.0L | — | 27.87 | 5.85 | .038 | 68.3 | | 80.9 |
| 1043 | 200 | 8.0L | — | 28.10 | 5.78 | .036 | 24.9 | | 83.5 |
| 1048 | 200 | 9.0 | — | 28.25 | 5.73 | .034 | 20.3 | | 85.4 |
| 1053 | 200 | 10.0 | — | 28.48 | 5.71 | .034 | 18.7 | | 86.7 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of ___

Well: ___ OLSF4-MW-37
Site: ___ Saufley Site 4
Date Installed: ___
Date Developed: ___
Dev. Method: ___
Pump Type: ___ flow rate

Depth to Bottom (ft.): ___
Static Water Level Before (ft.): ___
Static Water Level After (ft.): ___
Screen Length (ft.): ___
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): __ 2-inch

Responsible Personnel: ___ Gary Davis
Drilling Co.: ___ ProSonic
Project Name: ___ Saufley Site 4
Project Number: ___ 112G00389

sample time 1600

| Time | ~~Estimated Sediment Thickness (Ft.)~~ | ~~Cumulative Water~~ Volume (Gal.) | ~~Water Level~~ Readings (~~Ft. below TOC~~) DO mg/L | Temperature (Degrees C) | pH | Specific Conductance (Units ____) mS/cm | Turbidity (NTU) | ORP Remarks | (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|---|
| 1545 | 200 mL/m | ~~2.5~~ | 6.75 | 26.66 | 5.49 | 0.079 | off scale | 59.7 | |
| 1550 | " | 2.5L | 6.95 | 26.23 | 5.45 | 0.082 | 50.2 | 57.5 | |
| 1455 | " | 5.0 | 7.00 | 25.60 | 5.40 | 0.080 | 19.2 | 65.7 | |
| 1600 | " | 7.5 | 6.63 | 25.47 | 5.41 | 0.080 | 11.3 | 58.3 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Saufley field site 4
Project No.: 112662389

Sample ID No.: OLFS4-MW46-0607
Sample Location: MW46
Sampled By: C. Dolan
C.O.C. No.:

☐ Domestic Well Data
☐ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

Type of Sample:
☐ Low Concentration
☐ High Concentration

| Date: 6-13-07<br>Time: 1430<br>Method: low flow | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | ORP (mV) | ~~Other~~ Time |
|---|---|---|---|---|---|---|---|---|
| Date: 6-13-07 | Volume | pH | S.C. | Temp. | Turbidity | DO | ORP | ~~Other~~ |
| Method: low flow | 3.0 | 6.94 | 0.832 | 25.59 | 261 | 0.74 | 50.5 | 1345 |
| Monitor Reading (comp) | 6.0 | 7.21 | 0.706 | 25.94 | 59.4 | 0.41 | -35.9 | 1355 |
| Well Casing Diameter & Material | 7.5 | 7.16 | 0.716 | 25.71 | 39.6 | 0.34 | -37.9 | 1400 |
| Type: 2.0" PVC | 9.0 | 7.11 | 0.731 | 26.23 | 30.6 | 0.34 | -45.0 | 1405 |
| Total Well Depth (TD): | 10.5 | 7.03 | 0.747 | 25.89 | 24.5 | 0.31 | -52.0 | 1410 |
| Static Water Level (WL): 3.95 | 12.0 | 7.01 | 0.749 | 25.87 | 20.8 | 0.29 | -53.6 | 1415 |
| One Casing Volume(gal/L): | 13.5 | 6.98 | 0.751 | 25.85 | 16.8 | 0.29 | -53.6 | 1420 |
| Start Purge (hrs): 1335 | | | | | | | | |
| End Purge (hrs): 1420 | | | | | | | | |
| Total Purge Time (min): 45 | | | | | | | | |
| Total Vol. Purged (gal): 13.5 | | | | | | | | |

| Analysis | Preservative | Container Requirements | Delivered |
|---|---|---|---|
| VOA | HCl | 3 x 40 mL glass vial | Y |
| EDB | $Na_2S_2O_3$ | 2 x 40 mL glass vial | Y |
| TRPH | HCl | 2 x 1L Amber | Y |
| SVOAs | — | 2 x 1L Amber | Y |
| PAHs | — | 2 x 1L Amber | Y |
| PCBs | — | 2 x 1L Amber | Y |
| metals | $HNO_3$ | 1 x 500mL poly | Y |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

flow rate = 300 mL/min

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-01-D2 (4P)
Site: Saufley Site 4 (29)
Date Installed: 11-28-06
Date Developed: 12-2-06
Dev. Method: Submers. pump
Pump Type: Grundfos

Depth to Bottom (ft.): 130
Static Water Level Before (ft.): 49.55
Static Water Level After (ft.):
Screen Length (ft.): 5'
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) Not cut Down Yet | Temperature (Degrees C) | pH | Specific Conductance (Units ____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 0830 | .1 | — | 49.55 | | | | | Problem w/ Grundfos |
| 12-05-06 1600 | | 50Gal | | | | | 84 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

TOC Not at final cut



Well: OLSF4-MW-02D
Site: Saufley Site 4
Date Installed: 11-29-06
Date Developed: 12-2-06
Dev. Method: Pump & Surge
Pump Type: Monsoon

Depth to Bottom (ft.): 78.0
Static Water Level Before (ft.): 32.52
Static Water Level After (ft.): _____
Screen Length (ft.): 5'
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis, Ryan Parker
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1020 | 2 | — | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: MW-2D OLSF4-MW-
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-5-06
Dev. Method: Sub
Pump Type: Sub

Depth to Bottom (ft.): 80'
Static Water Level Before (ft.): 48.7
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 10:30 | | | | 25.7 | 5.85 | 11 | -5 Er. | Muddy Brown water |
| 10:40 | | | | 25.1 | 6.88 | 8 | -5 Er | " " |
| 10:55 | | | | ~~25.9~~ | ~~4.88~~ | 5 | -5 Er | Pump off well Dry |
| 12:30 | | 32.0 | | 25.9 | 4.88 | 6 | -5 Er | |
| 4:45 | | 50.0 | | 25.2 | 4.75 | 4 | 980 | Pump Failure. |
| | | | | | | | | |
| 0700 | | | | | | | | using Contractor Pump (Prosonic) |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

47.5

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page 1 of 1

TOC Not final cut

Well: ____ OLSF4-MW- 03S
Site: ____ Saufley Site 4
Date Installed: 11-13-30-06
Date Developed: 12-2-06
Dev. Method: Pump & Surge
Pump Type: Mon 500

Depth to Bottom (ft.): 59.65
Static Water Level Before (ft.): 44.85
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis, Ryan Barka
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1025 | 0.4 | — | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: OLSF4-MW-03S
Site: Saufley Site 4
Date Installed: 11/30/06
Date Developed: 12-5-06
Dev. Method: "
Pump Type: Submersible

Depth to Bottom (ft.): 60
Static Water Level Before (ft.): 46.23
Static Water Level After (ft.): 47.44
Screen Length (ft.): 20'
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/m) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1100 | | | | | | | | Start flowrate=.5gal/min |
| 1110 | | 5 | N/A | 25.3 | 5.92 | 15 | off scale | probe wouldn't reach water/still producing |
| 1118 | | 9 | | | | | | Well dry/shut pump down |
| 1135 | | | | | | | | resume pumping |
| 1140 | | 11.5 | | 24.8 | 5.64 | 14 | 320 | |
| 1150 | | 16.5 | | 25.6 | 5.59 | 15 | 150 | less than 1 foot water in well/shutting off |
| 1200 | | | | | | | | resume pumping |
| 1210 | | 21.5 | | 25.5 | 5.50 | 15 | 190 | |
| 1215 | | 24.0 | | | | | 85 | Stop |
| 1300 | | | | | | | | |
| | | | | | | | | SWL = 47.44 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Not Final cut



Well: OLSF4-MW-04D
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-3-06
Dev. Method: Pump + Surge
Pump Type: Monsoon

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1630 | | 125gal | | | | | | clear the whole time. |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Not Final cut



Well: OLSF4-MW-5S
Site: Saufley Site 4
Date Installed: 11-30-06
Date Developed: 12-2-06
Dev. Method: Pump & Surge
Pump Type: Monsoon

Depth to Bottom (ft.): 55.1
Static Water Level Before (ft.): 43.6
Static Water Level After (ft.):
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO | Sal | TDS | ORP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1430 | | ~15 | 50.21 | 25.14 | 7.23 | 0.113 | 528 | 3.48 | 0 | .07 | -92 |
| 1330 | | ~20 | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

12706

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-065
Site: Saufley Site 4
Date Installed: 11/30/06
Date Developed: 12/05/06
Dev. Method: _____
Pump Type: Sunbelt

Depth to Bottom (ft.): 55
Static Water Level Before (ft.): 45.63
Static Water Level After (ft.): 49.94
Screen Length (ft.): 40-55 (15)
1 Well Volume: 1.6 gals (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/m) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1125 | | | | | | | | start |
| 1430 | | 3 | | | | | | dry/shut pump off |
| 1441 | | | | | | | | restart pump |
| 1442 | | | | | | | | dry/shut pump off |
| 1457 | | | | 23.9 | 6.39 | 13 | 80 | restart pump @ 2gal/9min |
| 1504 | | | | 24.0 | 6.15 | 12 | 120 | |
| 1510 | | 5 | | | | | | dry shut pump off |
| 1525 | | | | | | | | restart pump @ 2gal/9min |
| 1530 | | 6 | | 23.6 | 6.20 | 12 | 15 | stop pumping |
| 1541 | | | | | | | | SWL 49.94 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

TOC Not Final Cut

Page 1 of ____

Well: ____ OLSF4-MW- 07S
Site: ____ Saufley Site 4
Date Installed: 12-1-06
Date Developed: 12-2-06
Dev. Method: Pump & Surge
Pump Type: Mon Soon
Bail 12-3

Depth to Bottom (ft.): 55
Static Water Level Before (ft.): 47.5
Static Water Level After (ft.): ____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO SAL TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1030 | | — | 47.5 | | | | | |
| 1035 | | ~5 | | 22.85 | 6.99 | 0.205 | 999 | 7.57 0 0.13 -206 |
| 1105 | | ~5.5 | 50.1 | 23.09 | 7.39 | 0.198 | 999 | 2.94 0 0.13 -196 |
| 1400 | | ~15 | | 23.11 | 7.32 | 0.164 | 842 | 8.56 0 0.11 -31 |
| 1250 | .1 | ~17 | 52.46 | 23.80 | 7.17 | 0.155 | 933 | 7.94 0 0.10 -94 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

12-3-06

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Not Final Cut



Well: ____ OLSF4-MW- 85
Site: ____ Saufley Site 4
Date Installed: ____
Date Developed: 12-3-06
Dev. Method: Bail
Pump Type: ____

Depth to Bottom (ft.): ____
Static Water Level Before (ft.): 47
Static Water Level After (ft.): ____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO | sal | TDS | ORP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1400 | 1 | ~5 | | 25.11 | 7.42 | 0.228 | 990 | 8.12 | 0 | 0.15 | -71 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Not Final Cut



Well: ____ OLSF4-MW-95
Site: ____ Saufley Site 4
Date Installed: ____
Date Developed: 12-2-06
Dev. Method: ____
Pump Type: ____

Depth to Bottom (ft.): ____
Static Water Level Before (ft.): 48.41
Static Water Level After (ft.): ____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO Sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1440 | .1 | ~3 | 48.41 | 25.02 | 7.86 | 0.083 | 999 | 3.99 0 .05 -166 |
| 1520 | | ~10 | | 25.41 | 8.09 | 0.084 | 999 | 2.80 0 .05 -187 |
| 12-3-06 1125 | .1 | ~11 | | 22.81 | 7.67 | 0.102 | 999 | 3.11 0 .07 -159 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: OLSF4-MW- 115
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-10-06
Dev. Method: _____
Pump Type: Submersible

Depth to Bottom (ft.): 40
Static Water Level Before (ft.): 31.88
Static Water Level After (ft.): 32.10
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume ~~(Gal.)~~ L | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ~~mS/m~~) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 0722 | | | | 23.95 | 4.80 | 18 | off scale | start flow rate: 1L/min |
| 0732 | | 10 | 39+ | 24.69 | 6.90 | 21 | off scale | flow rate = 1.5L/min |
| 0742 | | 25 | " | 24.84 | 6.65 | 20 | off scale | flow rate: 750 mL/min |
| 0752 | | 32.5 | " | 24.69 | 6.49 | 20 | 430 | flow rate = 1L/min |
| 0802 | | 42.5 | " | 24.85 | 6.41 | 19 | 620 | flow rate = 1.5L/min |
| 0812 | | 57.5 | " | 24.82 | 6.27 | 18 | 140 | flow rate = 1.0L/min |
| 0822 | | 67.5 | " | 24.86 | 6.23 | 18 | 150 | " |
| 0832 | | 77.5 | " | 24.91 | 6.17 | 18 | 63 | flow rate = 2.0L/min |
| 0842 | | 99.5 | " | 25.71 | 6.16 | 18 | 0 | stop |
| 0927 | | | 32.10 | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ____ OLSF4-MW- 135
Site: _____ Saufley Site 4
Date Installed: _____
Date Developed: 12-10-06
Dev. Method: _____
Pump Type: Submersible

Depth to Bottom (ft.): 45
Static Water Level Before (ft.): 33.93
Static Water Level After (ft.): _____
Screen Length (ft.): 20
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): __ 2-inch

Responsible Personnel: __ Gary Davis
Drilling Co.: _____ ProSonic
Project Name: _____ Saufley Site 4
Project Number: _____ 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (~~Gal~~) L | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 0940 | | | pump @ bottom | 25.25 | 6.72 | 28 | Scale | start flow rate = 5mL/min |
| 0945 | | 10 | " | 25.47 | 7.18 | 34 | " | flow rate = 0.5L/min |
| 0950 | | ~~12.5~~ 11.0 | " | 25.63 | 7.57 | 31 | " | flow rate = 0.350L/min |
| 1000 | | 13.0 | " | 25.75 | 7.35 | 30 | " | flow rate = 300mL/min |
| 1010 | | 16.0 | " | 26.10 | 7.27 | 29 | 340 | " |
| 1020 | | 18.0 | " | 26.24 | 7.19 | 27 | 5 | flow rate = 250mL/min |
| 1030 | | 20.5 | " | 27.01 | 7.13 | ~~25~~ | ~~340~~ | " |
| 1040 | | 23.0 | " | 29.69 | 7.05 | 23 | 140 | " |
| 1050 | | 25.5 | " | 24.35 | 7.06 | 24 | 98 | " |
| 1100 | | 28.0 | " | 23.30 | 7.08 | 27 | 76 | stop |
| 1140 | | | 36.95 | | | | | P |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ____ OLSF4-MW-
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-06-06
Dev. Method: Bail/Sub/Low Flow
Pump Type: Sub

Depth to Bottom (ft.): 55.8
Static Water Level Before (ft.): 37.08
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): __ 2-inch

Responsible Personnel: ___ Gary Davis
Drilling Co.: _____ ProSonic
Project Name: _____ Saufley Site 4
Project Number: _____ 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1300 | | 15 Bailers | | | | | | Bailer to Remove |
| 1400 | | 15 Bailers | | | | | | Sediment |
| 1502 | | | | 26.5 | 7.52 | 26 | -5 Er | |
| 1520 | | | 53.9 | 26.6 | 9.31 | 51 | -5 Er | |
| 1705 | Pump Failure. | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: ____ OLSF4-MW-155
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-10-06
Dev. Method: _____
Pump Type: Submersible

Depth to Bottom (ft.): 55
Static Water Level Before (ft.): 48.11
Static Water Level After (ft.): _____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (~~Gal.~~) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1141 | | | pump started | 25.57 | 7.84 | 48 | off scale | start flow rate = 0.5L/min |
| 1151 | | 5 | " | 25.36 | 8.06 | 56 | " | flow rate = 0.5L/min |
| 1201 | | 10 | " | 25.16 | 7.98 | 52 | " | flow rate = 0.4L/min |
| 1211 | | 14 | " | 25.09 | 8.01 | 53 | " | flow rate = 0.4L/min |
| 1221 | | 16 ~~15~~ | " | 25.93 | 8.16 | 73 | " | flow rate = 20mL/min |
| 1228 | | | | | | | | pump stopped/will not start clog |
| 1249 | | | | | | | | pump from site/will bail by hand |
| 1314 | | 19 | | | | | | bailed 3L will attempt to restart pump |
| 1315 | | | | | | | | restart unsuccessful |
| 1354 | | | 53.47 | 24.96 | 7.91 | 49 | off scale | attempt restart |
| 1355 | | | | | | | | pump stopped will hand bail |
| | | | | | | | | dropped hand bailer down well |
| 1424 | | | | | | | | retrieved hand bailer |
| | | | | | | | | retrieved hand bailer will continue |
| 1450 | | | | | | | | bailed less than 1 liter-stop |
| 1600 | | | 53.08 | | | | | |
| 1211 0810 | | | 48.31 | 26.73 | 6.40 | 23 | off scale | restart pump flow rate 1L/min |
| 0846 ~~0856~~ | | 25 | | | | | " | well dry stopped flow |
| 0851 | | | | | | | " | reestablished flow @ ~~0.5~~ 0.54 L/min |
| 0853 | | | | 27.56 | 6.57 | 17 | " | flow ~~stopped~~ slowed to 100mL/min |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-16S
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-6-06
Dev. Method: Low flow/Sub/bailer
Pump Type: Bailer/Sub

Depth to Bottom (ft.): 55.2
Static Water Level Before (ft.): 48.82
Static Water Level After (ft.): _____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 0945 | | 16 Bail. | | | | | | ≈1 ft debris in well used |
| | | | | | | | | Bailer to clear |
| 1004 | | after. | | | | | | well Dry after 16 Bails |
| | | | | | | | | |
| 1015 | | 6 1/4 Bails | | | | | | Slow Recharge 5" in Bailer. |
| 1115 | | 4 1/4 Bails | | ~~23.8~~ | ~~6.32~~ | | | " " |
| 12:30 | | <2 Gal | | 23.8 | 6.32 | 14 | 400 | Start w/Pump. |
| 13:30 | | | | 24.0 | 6.28 | 14 | 62 | Slow Rate/Not Constant Surging |
| | | | | 23.8 | 6.21 | 12 | 59. | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: OLSF4-MW-19S
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-6-06
Dev. Method: Sub/Bailer
Pump Type: Sub.

Depth to Bottom (ft.): 54
Static Water Level Before (ft.): 48.5
Static Water Level After (ft.): _____
Screen Length (ft.): 15ft
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/m) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 800 | — | — | — | — | — | — | — | WLI Has Clayey. |
| 0830 | — | 26 Bails | — | — | — | — | — | Drill Log Has 56ft Depth |
| | | | | | | | | Used Bailer to clear debris. |
| 0900 | | | | 25.7 | 5.65 | 12 | ~5 Er | Start using Pump |
| 0915 | | | 54.4 | 25.9 | 5.95 | 10 | ~5 Er. | |
| 0922 | | | 55.3 | ~~26.5~~ | ~~5.92~~ | ~~10~~ | ~~710~~ | RAN Dry Letting Recharge. |
| 0930 | | | | 26.5 | 5.92 | 10 | 710 | |
| 0932 | | | — | — | — | — | — | Ran Dry Letting Recharge. |
| 1021 | | | | 26.0 | 5.58 | 9 | 560 | } |
| 1031 | | | | 26.1 | 5.57 | 9 | 470 | } .35 L/m Very low flow |
| 11:05 | | | | 25.8 | 5.57 | 9 | 290 | } |
| 11:12 | | | | 28.3 | 5.66 | 9 | 130 | } |
| 1120 | | | | 27.3 | 5.47 | 9 | 44 | } |
| 1130 | | | | 27.3 | 5.46 | 9 | 35 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-20S
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-20-00
Dev. Method: _____
Pump Type: Submersible

Depth to Bottom (ft.): 45
Static Water Level Before (ft.): 39.60
Static Water Level After (ft.): _____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume ~~(Gal.)~~ | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ~~mS/cm~~) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1523 | | | pump blocked | 25.59 | 8.74 | 20 | 960 | start flow rate = 3 L/min |
| 1533 | | 2 | " | 24.85 | 8.84 | 20 | off scale | flow rate = 2 L/min |
| 1534 | | | | | | | | pump stopped to hand bail |
| 1557 | | 2.5 | | | | | | bailed 5 L clear - dry |
| ~~1650~~ | | | | | | | | wait 30 min & tag w |
| 1630 | | | 42.70 | | | | | restart bailer |
| 1644 | | | | | | | | restart flow |
| 1709 | | | pump blocked | 24.40 | 7.97 | 20 | off scale | restart flow rate = 100 mL/min |
| 1719 | | 3.5 | " | 25.54 | 7.70 | 19 | off scale | flow rate = 100 mL/min |
| 1729 | | 4.5 | " | 26.53 | 7.43 | 18 | 740 | " |
| 1739 | | 5.5 | " | 29.70 | 7.31 | 17 | 580 | " |
| 1747 | | | | | | | | stop |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ___ OLSF4-MW- 215
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-11-06
Dev. Method: _____
Pump Type: Submers.

Depth to Bottom (ft.): 45
Static Water Level Before (ft.): 40.27
Static Water Level After (ft.): _____
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume ~~(Gal.)~~ | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ~~m3/m~~) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1231 | | | | 25.56 | 6.41 | 15 | off scale | sta. flow rate = 1.5L/min |
| 1238 | | 3 | | | | | | flow stopped |
| 1320 | | 4 | 43.60 | 26.96 | 6.72 | 13 | 1. | restart |
| ~~1342~~ 1442 | | 5 | 43.11 | 25.82 | 6.74 | 13 | 0.0 | restart |
| 1500 | | 6 | 44.85 | 26.41 | 6.83 | 12 | off scale | restart |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: ____ OLSF4-MW- 24S
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-9-06
Dev. Method: bailer/submersible
Pump Type: submersible

Depth to Bottom (ft.): 55
Static Water Level Before (ft.): 49.15
Static Water Level After (ft.): 51.91
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 0802 | | | 49.15 | | | | | start hand bailing |
| 0827 | | 4 | 55.76 | | | | | drop stuff / pump down |
| ~~0855~~ | | | ~~54.07~~ | | | | | retrieve bailer / pump down |
| 0907 | | | 53.36 | | | | | retrieve bailer / pump down |
| 0926 | | | 52.51 | 23.41 | 6.38 | 13 | off scale | restart submersible |
| 0952 | | | almost dry | 21.17 | 6.38 | 10 | off scale | slow trickle |
| 1010 | | | | 21.76 | 6.18 | 9 | off scale | slow trickle |
| 1022 | | | | 23.04 | 6.25 | 9 | 580 | stop pump |
| 1108 | | 6.5 | 52.65 | 25.75 | 6.04 | 9 | 620 | start pump |
| 1110 | | | | | | | | stop! |
| 1200 | | | 51.91 | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of _____

Well: ____ OLSF4-MW- 25S
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-9-05
Dev. Method: _____
Pump Type: submersible

Depth to Bottom (ft.): 55
Static Water Level Before (ft.): 48.62
Static Water Level After (ft.): 49.01
Screen Length (ft.): 15
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1208 | | | | | | | | start |
| 1215 | | | probe submerged | 25.14 | 6.43 | 13 | off scale | flow rate = 1.25 l/min |
| 1226 | | 4 | " | 27.36 | 6.35 | 12 | off scale | 500mL/min |
| 1233 | | 5 | " | 27.04 | 6.25 | 12 | off scale | |
| 1239 | | 5.5 | " | 24.44 | 6.11 | 11 | 180 | |
| 1250 | | ~~5~~ 20 | " | 27.87 | 6.00 | 12 | 850 | |
| 1300 | | 8.25 | " | 27.64 | 5.98 | 12 | 28 | stop |
| 1340 | | | 49.01 | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of ____

Well: OLSF4-MW-27S
Site: Saufley Site 4
Date Installed:
Date Developed:
Dev. Method:
Pump Type:

Depth to Bottom (ft.):
Static Water Level Before (ft.): 47.14
Static Water Level After (ft.):
Screen Length (ft.):
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) |
|---|---|---|---|---|---|---|---|---|
| 1420 | | | | | 6.38 | 14 | off scale | start |
| 1422 | | | | | | | | pump went out/control box |
| 1437 | | | | | | | | restart unsuccessful/bad motor |
| 1450 | | | | | | | | hand bail |
| 1511 | | 4 | | | | | | hand bail 4 gallons |
| 1519 | | | | | | | | restart/pumped for 30 sec... then quit |
| 1534 | | | | | | | | restart/ 800 mL/min pump quit after 2 min |
| 1549 | | | | | | | | restart failed/will hand bail |
| 1607 | | 7 | | | | | | |
| 1425 | | 10 | | | | | | stop hand bailing try pump again |
| 1725 | | | | | | | | restart pump 1L/min |
| 1735 | | 13 | | 25.68 | 6.31 | 12 | 520 | |
| 1743 | | 15 | | 27.05 | 5.88 | 12 | off scale | |
| 1823 | | 25 | | 26.31 | 5.64 | 10 | 88 | stop |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ____ OLSF4-MW- 26D
Site: ____ Saufley Site 4
Date Installed: 12-7-06
Date Developed: 12-15-06
Dev. Method: Monsoon
Pump Type: Pump & Surge

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis, Mark & Tony
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

~Subtract ~50 µS/cm since calib. is high.

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units µS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO SAL TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1025 | | 125 | | 23.95 | 6.24 | 0.219 | 139 | 1.83 0.10 0.14 -121 |
| 1055 | | ~150 | | 24.12 | 6.20 | 0.203 | 199 | 3.09 0. 0.13 -50 |
| 1100 | | ~155 | | 24.17 | 6.18 | 0.197 | 34.6 | 3.62 0 0.13 -54 |
| | | | | | | | | |
| | | | | | | | | Cleared nicely after surging. |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | Done | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW- 28S
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-15-06
Dev. Method: Pump & Surge
Pump Type: Waterra

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): 15'
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) Do Sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1030 | | ~15 | | 24.12 | 6.78 | 0.206 | 202 | 3.26 0.0 0.13 -87 |
| 1045 | | ~20 | | 23.82 | 6.74 | 0.205 | 192 | 4.11 0.0 0.13 -87 |
| 1100 | | ~25 | | 24.41 | 6.64 | 0.212 | 208 | 3.84 0 0.14 -96 |
| 1120 | | ~30 | | 24.65 | 6.80 | 0.215 | 184 | 3.43 0 0.14 -93 |
| 1140 | | ~35 | | 25.14 | 6.74 | 0.215 | 37.5 | 2.76 0 0.14 -97 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | Done | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Changed to Monsoon

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ____ OLSF4-MW- 29D
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-16-06
Dev. Method: _____
Pump Type: Waterra (Hand)

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

Waterra

12-17-06 Monsoon

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO | Sal | TDS | ORP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1530 | | | | 24.38 | 8.12 | 0.213 | 999 | 3.89 | 0 | 0.14 | -155 |
| 1600 | | ~18gal | | 22.98 | 7.93 | 0.148 | 999 | 4.63 | 0 | 0.10 | -217 |
| 0915 | ~0. | ~50gal | | 23.09 | 6.19 | 0.102 | 0 | 4.00 | 0 | 0.07 | -81 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | Done | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ____ OLSF4-MW- 305
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-17-06
Dev. Method: Pumping Surge
Pump Type: Waterra (Hand)

Depth to Bottom (ft.): 39.4
Static Water Level Before (ft.): ~~34.7~~ 31.7
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ____) | Turbidity (NTU) | Remarks (odor, color, etc.) DO Sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 0950 | ~.5 | ~4 | 27.5 | 23.59 | 6.56 | 0.081 | 490 | 5.87 0 0.05 −102 |
| 1007 | ~0 | ~15 | — | 24.13 | 6.65 | 0.085 | 265 | 4.01 0 0.06 −116 |
| ~~1010~~ | | | | | | | | |
| 12-17-06 Monsoon-Monsoon 1145 | ~0 | ~17 | 31.7 | 24.87 | 6.76 | 0.082 | 156 | 4.15 0 0.05 −62 |
| 1155 | 0 | ~19 | | 24.72 | 6.76 | 0.090 | 999 | 3.4 0 0.06 −119 |
| 1200 | ~0 | ~20 | flow slowed - stopped | to recover | | starting to clear | | |
| 1210 | 0 | | | 25.00 | 6.50 | 0.092 | 43.7 | 5.01 0 0.06 −100 |
| 1212 | — | ~22 | flow slowed | 25.03 | 6.51 | 0.089 | 463 | 5.03 0 0.06 −94 |
| | | | | 24.99 | 6.40 | 0.089 | 0 | 4.41 0 0.06 −90 |
| | | | Done | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW- 31S
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-16-06
Dev. Method: _____
Pump Type: Waterra (Hand)

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO ~~Temp~~ sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1530 | | ~10 | | | | | | Bailed Dry twice |
| 12-17-06 Waterra w/ Elec. 0920 | | | | 23.69 | 6.54 | 0.103 | 999 | 2.56 23.6 0.07 -110 |
| 0945 | | ~18 | went dry. | | | | | |
| 1010 | | ~20 | went dry | 24.96 | 6.15 | 0.108 | 999 | 3.84 0 0.07 -72 |
| | | ~25 | went dry numerous times. | | | | | |
| 1500 | | ~25 | | 24.32 | 6.31 | 0.108 | 131 | 6.79 0 0.07 -52 |
| | | | Will have to let sampling team continue. | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW- 325
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-16-06
Dev. Method: Pump + Surge
Pump Type: Waterra

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) DO Sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1605 | | ~5 | | 22.62 | 7.42 | 0.078 | 828 | 3.76 0 0.05 -153 |
| 1630 | | ~10 | | | | | | |
| 12-17-06 0900 | 0 | ~20 | | 21.53 | 6.16 | 0.093 | 414 | 6.37 0 0.06 -67 |
| | | | | Done | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-33S
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-17-06
Dev. Method: _____
Pump Type: Waterra (Hand & Elec)

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) DO Sol TPS ORP |
|---|---|---|---|---|---|---|---|---|
| 1215 | 0 | ~31 | | 24.47 | 6.34 | 0.074 | 0 | 5.57 0 0.05 -14 |
| | | | Done | | | | | |

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: ____ OLSF4-MW- 34S
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: 12-11-06
Dev. Method: Pumping Surge
Pump Type: Waterra (Electric)

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): __ 2-inch

Responsible Personnel: __ Gary Davis
Drilling Co.: _____ ProSonic
Project Name: _____ Saufley Site 4
Project Number: _____ 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) DO Sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1110 | ~.5 | ~15 | | 24.82 | 6.23 | 0.079 | 999 | 4.83 0 .05 -23 |
| 1115 | | ~17 | | 24.93 | 6.30 | 0.087 | 845 | 6.54 0 .06 -36 |
| 1125 | ~0~ | ~20 | | 24.60 | 6.27 | 0.081 | 429 | 7.09 0 0.05 -20 |
| 1130 | ~0~ | ~22 | | 25.28 | 6.22 | 0.085 | 59.6 | 6.31 0 0.05 -12 |
| 1135 | 0 | | | 25.54 | 6.16 | 0.083 | ~0~ | 6.16 0 0.05 -12 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | Done | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Switch to Monsoon

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-355
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-17-06
Dev. Method: _____
Pump Type: _____

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units _____) | Turbidity (NTU) | Remarks (odor, color, etc.) DO Sal TDS ORP |
|---|---|---|---|---|---|---|---|---|
| | 5' sand | Forest | Baited down to 39' & tried water out | | | | | sand |
| | came | back in to 38' must be breach in bottom. will try pumping | | | | | | |
| | to clear for sampling & check if more sand comes in. | | | | | | | Sand at 38' |
| 1345 | 2' | ~15gal | pumped dry - includes what Forest baited. | | | | | Recovering |
| 1420 | | ~20gal | | 25.40 | 6.3 | 0.086 | 0 | Clear & |
| 1440 | | ~25 | | 25.43 | 6.26 | 0.083 | 198 | 7.36 0 0.06 8 |
| 1445 | | ~26 | | 25.63 | 6.28 | 0.084 | 0 | 7.53 0 0.05 -13 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | sustains low flow & clears | | |
| | | | | | | | | |
| | | | Done | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

starting to sustain flow

1.5

.1
.150
x8

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD

Page ___ of ____

Well: ____ OLSF4-MW-41
Site: ____ Saufley Site 4
Date Installed: _____
Date Developed: _____
Dev. Method: _____
Pump Type: submersible Monsoon flow rate

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): __ 2-inch

Responsible Personnel: ___ Gary Davis
Drilling Co.: _____ ProSonic
Project Name: _____ Saufley Site 4
Project Number: _____ 112G00389

| Time | ~~Estimated Sediment Thickness (Ft.)~~ | Cumulative Water Volume ~~(Gal.)~~ L | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units ~~ms/cm~~) | Turbidity (NTU) | Remarks ~~(odor, color, etc.)~~ Dissolved Oxygen (mg/L) | ORP |
|---|---|---|---|---|---|---|---|---|---|
| 0919 | 0.150L/min | 0 | | | | | | | |
| 0937 | " | 1.2 L | | 27.69 | 6.25 | 0.141 | 450 | 1.16 | 11.9 |
| 0947 | " | 4.2 L | | 27.80 | 6.17 | 0.119 | 250 | 1.03 | -1.2 |
| 1017 | " | 8.7 L | | 27.52 | 5.94 | 0.088 | 130 | 0.68 | -54.3 |
| 1047 | " | 13.2 L | | 27.31 | 5.75 | 0.071 | 95 | 0.61 | -67.9 |
| 1117 | " | 17.7 L | | 27.75 | 5.70 | 0.059 | 55 | 0.79 | -5.0 |
| 1147 | " | 22.2 L | | 27.64 | 5.70 | 0.057 | 55 | 0.59 | -38.7 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Saufley Field site 4
Project No.: 112G00389

Sample ID No.: DLSF4-MW-37
Sample Location:
Sampled By: C.O.
C.O.C. No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

| Date: 6/12/07 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/L) | ORP (mV) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1600 | | | | | | | | |
| Method: | | 5.41 | 0.080 | 25.47 | 11.3 | 6.63 | -58.3 | |

| Date: 6/12/07 | Volume(L) | pH | S.C. | Temp. | Turbidity | DO | ORP | Other time |
|---|---|---|---|---|---|---|---|---|
| Method: Submersible Monsoon | | 5.49 | 0.079 | 26.66 | off scale | 6.75 | 59.7 | 1545 |
| Stabilization Criteria (+/-): | 2.5L | 5.45 | 0.082 | 26.23 | 50.2 | 6.95 | 57.5 | 1550 |
| Well Casing Diameter & Material | 5.0L | 5.40 | 0.080 | 25.60 | 19.2 | 7.00 | 65.7 | 1555 |
| Type: 2" PVC | 7.5L | 5.41 | 0.080 | 25.47 | 11.3 | 6.63 | 58.3 | 1600 |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1545 | | | | | | | | |
| End Purge (hrs): 1600 | | | | | | | | |
| Total Purge Time (min): 15 | | | | | | | | |
| Total Vol. Purged (gal/L): 7.5L | | | | | | | | |

| Analysis | Preservative | Container Description | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Signature(s):

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page of

Project Site Name: S.B 4 Softey
Project No.: 42600389

Sample ID No.: OL854-MW38-0607
Sample Location: MW38
Sampled By: C. Odom
C.O.C. No.:

☐ Domestic Well Data
☐ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

Type of Sample:
☐ Low Concentration
☐ High Concentration

| Date: 6-13-07 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/L) | ORP (mV) | Time 24 hr |
|---|---|---|---|---|---|---|---|---|
| Time: 1009 | | | | | | | | |
| Method: low flow | | | | | | | | |

| Date: 6-12-07 | Gun Volume | pH | S.C. | Temp. | Turbidity | DO | ORP | Time 24 hr |
|---|---|---|---|---|---|---|---|---|
| Method: low-flow | 2.0L | 6.38 | 0.168 | 26.19 | Stable | 0.59 | 21.1 | 0855 |
| Monitor Reading (ppm): | 4.0L | 6.26 | 0.162 | 26.13 | " | 1.04 | -21.0 | 0905 |
| Well Casing Diameter & Material | 6.0L | 6.16 | 0.160 | 26.50 | 255 | 1.49 | -48.6 | 0915 |
| Type: 2.0" PVC | 10.0L | 6.06 | 0.159 | 26.71 | 47.8 | 1.81 | -74.6 | 0935 |
| Total Well Depth (TD): | 18.0L | 6.04 | 0.158 | 26.62 | 25.0 | 1.79 | -85.8 | 0940 |
| Static Water Level (WL): | 12.0L | 5.96 | 0.151 | 26.44 | 23.5 | 2.08 | -82.6 | 0945 |
| One Casing Volume(gal/L): | 17.0L | 5.95 | 0.154 | 26.43 | 16.3 | 2.06 | -83.2 | 0950 |
| Start Purge (hrs): 0845 | 14.0L | 5.95 | 0.155 | 26.46 | 9.19 | 2.09 | -80.1 | 0955 |
| End Purge (hrs): 0955 | | | | | | | | |
| Total Purge Time (min): 70 | | | | | | | | |
| Total Vol. Purged (gal/L): 14.0L | | | | | | | | |

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOA | HCl | 3 x 40 mL glass vial | Y |
| EDB | Sodium Thio | 2 x 40 mL glass vial | Y |
| SVOA | — | 2 x 1 Liter Amber | Y |
| RCS | — | 2 x 1 Liter Amber | Y |
| PAH | — | 2 x 1 Liter Amber | Y |
| TRPH | HCl | 2 x 1 Liter Amber | Y |
| metals | HNO3 | 1 x 500 mL poly | Y |

flow rate = 200 mL/min

MS/MSD | Duplicate ID No.:

Signature:

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page of

Project Site Name: Saufley Field site 4
Project No.: 112G00389

Sample ID No.: OLSF4-MW-39
Sample Location:
Sampled By: J.H.
C.O.C. No.:

- ☐ Domestic Well Data
- ☒ Monitoring Well Data
- ☐ Other Well Type:
- ☐ QA Sample Type:

Type of Sample:
- ☐ Low Concentration
- ☐ High Concentration

| Date: 6/12/07 | Color | pH | S.C. | Temp. | Turbidity | DO | ORP | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1635 | (Visual) | (S.U.) | (mS/cm) | (°C) | (NTU) | (mg/l) | (mV) | |
| Method | | 5.99 | 0.110 | 28.15 | 20 | 2.82 | 106.2 | |

| Date: 6/12/07 | Volume | pH | S.C. | Temp. | Turbidity | DO | ORP | Other (time) |
|---|---|---|---|---|---|---|---|---|
| Method: Submersible Monsoon | | | | | | | | 1540 |
| Monitor Reading (ppm): | 1.25L | 6.04 | 0.115 | 28.21 | 850 | 2.55 | 102.6 | 1545 |
| Well Casing Diameter & Material | 4.00L | 6.10 | 0.115 | 27.93 | 160 | 2.70 | 90.9 | 1600 |
| Type: 2" PVC | 7.75L | 6.05 | 0.111 | 28.07 | 30 | 2.66 | 95.9 | 1615 |
| Total Well Depth (TD): | 11.50L | 5.99 | 0.110 | 28.15 | 20 | 2.82 | 106.2 | 1630 |
| Static Water Level (WL): 46.54 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1540 | | | | | | | | |
| End Purge (hrs): 1630 | | | | | | | | |
| Total Purge Time (min): 50 | | | | | | | | |
| Total Vol. Purged (gal/L): 11.5L | | | | | | | | |

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

MS/MSD | Duplicate ID No.: | Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Saufley Field site 4
Project No.: 112G00389

Sample ID No.: OLSF4-MW-40
Sample Location:
Sampled By: C. O.
C.O.C. No.:

☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

Type of Sample:
☐ Low Concentration
☐ High Concentration

| | Color (Visual) | pH (S.U.) | Conductivity (mS/cm) | Temp (°C) | Turbidity (NTU) | DO (mg/L) | ORP (mV) | Other time |
|---|---|---|---|---|---|---|---|---|
| Date: 6/12/07 Time: 1100 Method: | | 5.71 | 0.034 | 28.48 | 18.3 | | 86.7 | 1100 |

| Date: 6/12/07 | Color | pH | S.C. | Temp | Turbidity | DO | ORP | Other |
|---|---|---|---|---|---|---|---|---|
| Method: Submersible Mon Well | | | | | | | | 1003 |
| Static Standing (ppm): | 6.0L | 5.85 | 0.038 | 27.87 | 68.3 | | 80.9 | 1033 |
| Well Casing Diameter & Material Type: 2" PVC | 8.0L | 5.78 | 0.036 | 29.10 | 24.9 | | 83.5 | 1043 |
| | 9.0L | 5.73 | 0.034 | 28.25 | 20.3 | | 85.4 | 1048 |
| Total Well Depth (TD): | 10.0L | 5.71 | 0.034 | 28.48 | 18.3 | | 86.7 | 1053 |
| Static Water Level (WL): 48.64 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1003 | | | | | | | | |
| End Purge (hrs): 1053 | | | | | | | | |
| Total Purge Time (min): 50 | | | | | | | | |
| Total Vol. Purged (gal/L): 10.0L | | | | | | | | |

| Analysis | Preservative | Container Number/Volume | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Field site 4
Project No.: 112G00389

Sample ID No.: OLSF4-MW-41-0607
Sample Location:
Sampled By: JHH
C.O.C. No.:
Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

- [ ] Domestic Well Data
- [x] Monitoring Well Data
- [ ] Other Well Type:
- [ ] QA Sample Type:

| Date: 6/13/07 | Volume | pH | Conductivity | Temperature | Turbidity | DO | ORP | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1055 | (Visual) | (S.U.) | (mS/cm) | (°C) | (NTU) | (mg/l) | (mV) | |
| Method: | | 5.78 | 0.058 | 27.53 | 16 | 0.63 | -29.3 | |

| Date: 6/13/07 | Volume | pH | Conductivity | Temperature | Turbidity | DO | ORP | Other time |
|---|---|---|---|---|---|---|---|---|
| Method: submersible Monsoon | 6.12 | 0.108 | 27.39 | 280 | 0.85 | 7.4 | 0830 | |
| Monitor Reading from): | 2.0L | 6.09 | 0.106 | 27.51 | 230 | 0.79 | 5.2 | 0840 |
| Well Casing Diameter & Material | 6.0L | 5.97 | 0.082 | 27.47 | 80 | 0.56 | -10.6 | 0900 |
| Type: 2" PVC | 9.0L | 5.92 | 0.074 | 27.46 | 95 | 0.61 | -23.6 | 0915 |
| Total Well Depth (TD): | 12.0L | 5.85 | 0.064 | 27.66 | 36 | 0.46 | -10.1 | 0930 |
| Static Water Level (WL): 42.89 | 13.0L | 5.82 | 0.061 | 27.50 | 33 | 0.51 | -26.3 | 0940 |
| One Casing Volume(gal/L): | 16.0L | 5.83 | 0.062 | 27.88 | 45 | 0.47 | -30.6 | 0955 |
| Start Purge (hrs): 0830 | 22.0L | 5.81 | 0.058 | 28.05 | 29 | 0.43 | -45.0 | 1025 |
| End Purge (hrs): 1054 | 26.0L | 5.79 | 0.056 | 27.91 | 19 | 0.42 | -37.2 | 1045 |
| Total Purge Time (min): 2hr 24min | | 5.78 | 0.058 | 27.53 | 16 | 0.63 | -29.3 | 1054 |
| Total Vol. Purged (gal/L): 26.0L | | | | | | | | |

| Analysis | Preservative | Container Size/Type | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

200mL/min = flow rate
0.2L/min = " "

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | |

200 mL/min

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page of

Project Site Name: Scufley Field site 4
Project No.: 112600389

Sample ID No.: OLF54-MW-42-0607
Sample Location:
Sampled By: JHH
C.O.C. No.:
Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

- [ ] Domestic Well Data
- [x] Monitoring Well Data
- [ ] Other Well Type:
- [ ] QA Sample Type:

| Date: 6/14/07<br>Time: 1025<br>Method: | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/L) | ORP (mV) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 6/14/07<br>Method: submersible Monsoon | | 6.20 | 0.125 | 24.29 | 47 | 5.66 | 228.1 | 1000 |
| Purge Rate (gpm): | 3.0L | 6.00 | 0.101 | 24.24 | 19 | 5.35 | 227.3 | 1010 |
| Well Casing Diameter & Material | 4.5L | 5.99 | 0.101 | 24.26 | 18 | 5.20 | 221.9 | 1015 |
| Type: 2" PVC | 6.0L | 5.98 | 0.100 | 24.08 | 12 | 5.43 | 220.9 | 1020 |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1000 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

Other = Time

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

0.150 mL/30 sec
0.3 L/min

MS/MSD | Duplicate ID No.: | Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page of

Project Site Name: Sauffley Field 4
Project No.: 112G06389

Sample ID No.: DGFS4-MW-43-060707
Sample Location: MW-43
Sampled By: C. Oden
C.O.C. No.:

- [ ] Domestic Well Data
- [x] Monitoring Well Data
- [ ] Other Well Type:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

| Date: 6-14-07 | Color | pH | Sp. Cond. | Temp. | Turbidity | DO | ORP | Other |
|---|---|---|---|---|---|---|---|---|
| Time: | (Visual) | (S.U.) | (mS/cm) | (°C) | (NTU) | (mg/L) | (mV) | Flow rate |
| Method: In-Flow | | | | | | | | |

| Date: 6-14-07 | Volume | pH | E.C. | Temp. | Turbidity | DO | ORP | Other |
|---|---|---|---|---|---|---|---|---|
| Method: In-Flow | 1.5 | 6.25 | 0.345 | 24.65 | 28.0 | 0.23 | -94.0 | 1005 |
| Static Depth to Water (ft bmp): | 3.5 | 6.22 | 0.373 | 24.79 | 9.14 | 0.18 | -121 | 1010 |
| Well Casing Diameter & Material | 4.5 | 6.21 | 0.378 | 24.71 | 8.27 | 0.19 | -122.2 | 1015 |
| Type: 2.0" PVC | 6.0 | 6.21 | 0.378 | 24.76 | 6.52 | 0.16 | -122.9 | 1020 |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1000 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

| Analysis | Preservative | Containers/Instruments | Collected |
|---|---|---|---|
| VOAs | HCl | 3x 40 mL vials | ✓ |
| SVOAs | — | 2x 1L Amber | ✓ |
| 5-DH | $Na_2S_2O_3$ | 2x 40mL vials | ✓ |
| TRPH | HCl | 2x 1L Ambers | ✓ |
| Metals | $HNO_3$ | 1x 500mL Poly | ✓ |
| PAHs | — | 2x 1L Ambers | ✓ |
| PCBs | — | 2x 1L Ambers | ✓ |

flow rate = 300 mL/min

MS/MSD | Duplicate ID No.:

Signature(s): C. Oden

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Sarfley Field Site 4 RI
Project No.: 112660389

Sample ID No.: OLF54-MW44-0607
Sample Location: MW44
Sampled By: C. Oder
C.O.C. No.:

- [ ] Domestic Well Data
- [ ] Monitoring Well Data
- [ ] Other Well Type:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

Date: 6-7-07
Time: 1720
Method: low flow

| Date | Volume | pH | S.C. | Temp. | Turbidity | DO | ORP | Other |
|---|---|---|---|---|---|---|---|---|
| method low flow | 3.0L | 6.32 | 0.349 | 25.89 | 105 | 0.21 | -20.5 | 1650 |
| Monitor Reading (ppm): | 6.0L | 6.32 | 0.330 | 25.09 | 28.5 | 0.19 | -50.6 | 1700 |
| Well Casing Diameter & Material | 7.5 | 6.30 | 0.339 | 24.76 | 8.45 | 0.13 | -74.4 | 1705 |
| 2.0" PVC | 9.0L | 6.29 | 0.338 | 24.72 | 6.17 | 0.13 | -79.6 | 1710 |
| Total Well Depth (TD): | 10.5 | 6.30 | 0.378 | 24.78 | 5.33 | 0.14 | -77.7 | 1715 |
| Static Water Level (WL): 32.26 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1640 | | | | | | | | |
| End Purge (hrs): 1715 | | | | | | | | |
| Total Purge Time (min): 35 | | | | | | | | |
| Total Vol. Purged (gal/L): 10.5L | | | | | | | | |

| Analysis | Preservative | Container Requirement | Quantities |
|---|---|---|---|
| VOAs | HCl | 3x40 mL vial | 4 |
| TRPH | HCl | 2x1L Amber | 4 |
| EDB | $N_2S_2O_3$ | 2x40 mL vial | 4 |
| SVOAs | — | 2x1L Amber | 4 |
| PCBs | — | 2x1L Amber | 4 |
| PAHs | — | 2x1L Amber | 4 |
| metals | $HNO_3$ | 1x500mL poly | 4 |

flow rate = 300mL/min

| MS/MSD | Duplicate ID No.: | Signature: |
|---|---|---|
| | | |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Saufley Field site 4
Project No.: 112G00389

Sample ID No.: OLSF4-MW-45-0607
Sample Location:
Sampled By: J HH
C.O.C. No.:

☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

Type of Sample:
☐ Low Concentration
☐ High Concentration

| Date: 6/13/07 Time: 1445 Method: | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp (°C) | Turbidity (NTU) | DO (mg/l) | ORP (mV) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Date: 6/13/07 | Volume | pH | S.C. | Temp | Turbidity | DO | ORP | Other Time |
|---|---|---|---|---|---|---|---|---|
| Method: Submersible Monsoon | | 6.49 | 0.739 | 26.50 | 450 | 0.46 | 93.9 | 1350 |
| Meter Reading (from): | 3.0 L | 6.51 | 0.643 | 26.03 | 500 | 0.40 | 78.2 | 1405 |
| Well Casing Diameter & Material Type: 2" PVC | 6.0 L | 6.50 | 0.669 | 26.25 | 60 | 0.44 | 93.2 | 1420 |
| | 8.0 L | 6.46 | 0.678 | 26.21 | 21 | 0.44 | 75.5 | 1430 |
| Total Well Depth (TD): | 9.0 L | 6.41 | 0.689 | 26.13 | 15 | 0.42 | 87.0 | 1435 |
| Static Water Level (WL): 34.12' | 10.0 L | 6.47 | 0.705 | 26.62 | 11 | 0.39 | 86.3 | 1440 |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1350 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

| Analysis | Preservative | Container Requirements | Comments |
|---|---|---|---|
| | | | |

100 mL/30 sec
200 mL/min
0.2 L/min
} Flow rate

Signature(s):

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Tetra Tech NUS, Inc.

# BORING LOG

Page ___ of ___

PROJECT NAME: Saufley Site 4
PROJECT NUMBER: 112G00389
DRILLING COMPANY: M&W Drilling
DRILLING RIG: DPT

BORING No.: DLFS4-DPW24
DATE: 9-11-06
GEOLOGIST: ~~Gary J. Davis~~ C. Odom
DRILLER: Dave Duncan

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-6' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 6"-2' | | | | | brn | clayey silty fine sand w/clay pebbles | | | 0.0 | | | |
| | 2'-4' | | | | | brn | silty fine sand | | | 0.0 | | | |
| | 4'-6' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 6'-8' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 8'-10' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 10'-12' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 12'-14' | | | | | red | clayey silty fine sand | | | | | | |
| | 14'-16' | | | | | red | clayey silty fine sand | | | 0.0 | | | |
| | 16'-18' | | | | | red | silty fine sand | | | | | | |
| | 18'-20' | | | | | pur | silty fine sand | | | 0.0 | | | |
| | 20'-22' | | | | | pur | silty fine sand | | | | | | |
| | 22-24 | | | | | pur | silty fine sand | | | 0.0 | | | |
| | 24'-26' | | | | | red | silty fine sand | | | 0.0 | | | |
| | 26'-28' | | | | | white | fine sand | | sat | | | | |
| | 28'-30' | | | | | white | fine sand | | sat petrol smell | | | | |
| | 30'-32' | | | | | pur | silty fine sand | | sat petrol smell | | | | |
| | 32-34 | | | | | white | fine sand | | sat petro (smell | | | | |
| | 34-36 | | | | | white | fine sand | | sat petro (smell | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): ____

Remarks: Soil Sample 24-26

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanford St & RI
Project No.: 112G00389

Sample ID No.: OLF54-MW075-001
Sample Location: MW075
Sampled By: C.O.C.
C.O.C. No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-8-06 / Time: 1600 / Method: submersible | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: 12-8-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | ~~TBD~~ | ~~TBD~~ |
|---|---|---|---|---|---|---|---|---|
| Method: submersible | 4.0 | 6.57 | 29 | 23.4 | 140 | 0.88 | 1042 | Started - 50+ |
| Monitor Reading (ppm): 0.0 | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | ~~25.0~~ | 6.76 | 29 | 15.8 | 160 | 0.91 | 1052 | " |
| Type: 2.0" PVC | ~~10.0~~ | 6.82 | 30 | 22.2 | off scale | 1.01 | 1112 | " dropped tubing |
| Total Well Depth (TD): 55 | 11.0 | 6.74 | ~~30.9~~ | 21.8 | 560 | 0.70 | 1132 | " |
| Static Water Level (WL): 47.07 | 15.0 | 6.74 | 30 | 21.6 | 210 | 0.52 | 1152 | " |
| One Casing Volume(gal.): 4.02 | 19.0 | 6.74 | 32 | 19.2 | 140 | 0.40 | 1212 | " |
| Start Purge (hrs): 1032 | 23.0 | 6.61 | 33 | 26.5 | 320 | 1.23 | 1232 | " |
| End Purge (hrs): 1528 | ~~27.3~~ 29.6 | well dry | | | | | ~~1240~~ 1252 | |
| Total Purge Time (min): 59 | 29.6 | 6.29 | 26 | ~~23.8~~ | 12 | 0.21 | 1519 | " |
| Total Vol. Purged (gal.): 30.5 | 30.0 | 6.31 | 26 | 23.7 | 9 | 0.23 | 1523 | " |
| **SAMPLE COLLECTION INFORMATION:** | 30.5 | 6.32 | 28 | 23.8 | 9 | 0.22 | 1528 | " |

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 Low Conc. | 4°C | 2 x 1L Amber | Y |
| 8270 SVOC | 4°C | 2 x 1L Amber | Y |
| 8082 PCB | 4°C | 1 x 1L Amber | Y |
| FL-PRO | 4°C | 2 x 1L Amber | Y |
| 6010/7470 TAL metals | HNO3 | 1 x 250 mL Plastic | Y |
| 9012 Cyanide | NaOH | 1 x 250 mL Plastic | " |
| 8011 1,2 EE | HCl | 3 x 40 mL vial | Y |
| 8260 BVOCs | HCl | 3 x 40 mL vial | Y |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

purge rate = 400 mL/min ~~5L~~ for 5 then 100 mL/min to 1112, then 200 mL/min restart @ 1429 @ 100 mL/min
@ 1112 lowered tubing to ~21 ft bottom
turned off pump @ 1230 to move for dump truck well went dry during sampling

Circle if Applicable:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLF54-MW11S-001
Sample Location: OLF54-MW11S
Sampled By: C. Dale
C.O.C. No.: 40994
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-12-06 / Time: 0855 / Method: | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| | Volume(L) | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 12-12-06 | | | | | | | | |
| Method: | 1.25 | 5.90 | 21 | 23.74 | 87 | 3.80 | 0810 | 32.76 |
| Monitor Reading (ppm): | 2.50 | 6.31 | 22 | 25.83 | 39 | 2.65 | 0820 | 32.76 |
| Well Casing Diameter & Material | 3.75 | 6.32 | 21 | 25.95 | 18 | 2.59 | 0830 | 32.97 |
| Type: 2.0" PVC | | 6.25 | 21 | 26.05 | 14 | 2.58 | 0835 | 32.77 |
| Total Well Depth (TD): 40.0 | | 6.27 | 21 | 26.07 | C | 2.59 | 0840 | 32.77 |
| Static Water Level (WL): 32.07 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 0805 | | | | | | | | |
| End Purge (hrs): 0840 | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 Low Conc | 4°C | 2 x 1L Amber | |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| FL PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | HNO3 | 1 x 250mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250mL plastic | |
| 8011 EDB | HCl | 3 x 40mL glass vial | |
| 8260B VOC | HCl | 3 x 40mL glass vial | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

flow rate = 250mL/min

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanford Site 4 RI
Project No.: 112G00389

Sample ID No.: OLFS4-MW055-001
Sample Location: MW055
Sampled By: C. Dorn
C.O.C. No.: 2814

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-7-05 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Submersible pump | | | | | | | | |

**PURGE DATA:**

| Date: 12-7-05 | Cum. Volume | pH | S.C. | Temp. (C) | Turbidity | DO | ~~TBD~~ | ~~TBD~~ Sulfide |
|---|---|---|---|---|---|---|---|---|
| Method: submersible pump | 3.5L | 6.45 | 24 | 25.2 | 170 | 0.70 | 1620 | Probe Essential +49 |
| Monitor Reading (ppm): 0.0 | **See Low Flow Purge Data Sheet** | | | | | | | |
| Well Casing Diameter & Material | 7.0L | 6.58 | 21 | 25.4 | 140 | 0.51 | 1630 | " |
| Type: 2.0" PVC | 10.5L | 6.63 | 20 | 25.7 | 98 | 0.38 | 1640 | " |
| Total Well Depth (TD): 55 | 14.0L | 6.62 | 20 | 25.9 | 49 | 0.38 | 1650 | " |
| Static Water Level (WL): 47.33 | 17.5 | 6.50 | 20 | 26.3 | 17 | 0.45 | 1700 | " |
| One Casing Volume(gal): 4.66 | 19.25 | 6.51 | 20 | 26.2 | 13 | 0.43 | 1705 | " |
| Start Purge (hrs): 1610 | 21.0L | 6.51 | 20 | 26.1 | 8 | 0.42 | 1710 | " |
| End Purge (hrs): 1715 | 22.75L | 6.52 | 20 | 26.2 | 7 | 0.43 | 1715 | " |
| Total Purge Time (min): 55 | | | | | | | | |
| Total Vol. Purged (gal): 22.75 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 Low Con. | 4°C | 2 x 1L Amber | Y |
| 8270 SVOC | 4°C | 2 x 1L Amber | Y |
| 8082 PCB | 4°C | 2 x 1L Amber | Y |
| FL-PRO | 4°C | 2 x 1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250 mL Plastic | Y |
| 9012 Cyanide | NaOH | 1 x 250 mL Plastic | Y |
| 8011 MEE | HCl | 3 x 40 mL vial | Y |
| 8260B VOCs | HCl | 3 x 40 mL vial | Y |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).
purge rate = 350 mL/min

Circle if Applicable:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4 RI
Project No.: 112G03389

Sample ID No.: OLFS4-MW065-001
Sample Location: MW-065
Sampled By: C. Odom
C.O.C. No.: 2813

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12/6/06 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: submersible | clear | 5.99 | 13 | 26.4 | 15 | 0.97 | | |

**PURGE DATA:**

| Date: 12/6/06 | Vol. Volume | pH | S.C. | Temp. (C) | Turbidity | DO | ~~TBD~~ | ~~TBD~~ SW |
|---|---|---|---|---|---|---|---|---|
| Method: submersible | 2.0 | 5.87 | 14 | 22.1 | 250 | 1.85 | 1158 | 46.85 |
| Monitor Reading (ppm): 0.0 | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 6.0 | 5.82 | 13 | 25.1 | 130 | 1.37 | 1208 | 47.26 |
| Type: 2.0" PVC | 10.0 | 5.95 | 13 | 25.4 | 83 | 1.15 | 1218 | 47.59 |
| Total Well Depth (TD): 55 | 14.0 | 5.96 | 13 | 26.0 | 46 | 0.99 | 1228 | 47.99 |
| Static Water Level (WL): 44.88 | 18.0 | 6.13 | 14 | 25.6 | 21 | 0.85 | 1238 | 48.95 |
| One Casing Volume(gal) (L) 6.5 | 20.0 | 6.18 | 14 | 24.6 | 36 | 3.61 | 1243 | 48.25 |
| Start Purge (hrs): 1153 | 22.0 | 6.16 | 14 | 25.3 | 25 | 2.01 | 1248 | 48.50 |
| End Purge (hrs): 1253 | 24.0 | 5.99 | 13 | 26.4 | 15 | 0.97 | 1253 | 48.95 |
| Total Purge Time (min): 60 | | | | | | | | |
| Total Vol. Purged (gal): 24.0 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 Low Conc | 4°C | 2 x 1L | Y |
| SVOC 8270 | 4°C | 2 x 1L | Y |
| PCB 8082 | 4°C | 1 x 1L | Y |
| FL-PRO | 4°C | 2 x 1L | Y |
| TAL metals 6010/7470 | $HNO_3$ | 1 x 250mL Plastic | Y |
| Cyanide 9012 | $NaOH$ | 1 x 250mL Plastic | Y |
| VOA 8011 | HCl | 3 x 40mL vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

flow rate = 400mL/min
Lowest possible

Circle if Applicable:

Signature(s): C. Odom

472+297

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Savfty Sit 4 RI
Project No.: 112G00389

Sample ID No.: OLF54-MW085-001
Sample Location: MW085
Sampled By: C. Dan
C.O.C. No.: 25141

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-7-06 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1200 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: submersible | clear | 6.28 | 17 | 24.1 | 0 | 2.18 | | |

**PURGE DATA:**

| Date: 12-7-06 | ~~Sum.~~ Volume | pH | S.C. | Temp. (C) | Turbidity | DO | ~~TBD~~ | ~~TBD~~ |
|---|---|---|---|---|---|---|---|---|
| Method: submersible | 9.0L | 6.27 | 18 | 23.4 | 8 | 2.14 | 1045 | 51.51 |
| Monitor Reading (ppm): 0.0 | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 3.985 | 6.34 | 18 | 24.7 | 54 | 3.34 | 1049 | 50.74 |
| Type: 2.0" PVC | | | | | | | N23 | |
| Total Well Depth (TD): 55 | 12.0 | 6.28 | 18 | 23.4 | 19 | 2.8 | 1124 | 50.70 |
| Static Water Level (WL): 49.53 | 13.5 | 6.26 | 18 | 24.0 | 11 | 2.24 | 1133 | 50.93 |
| One Casing Volume(gal/L): 3.93 | 15.0 | 6.28 | 17 | 24.1 | 0 | 2.18 | 1138 | 51.21 |
| Start Purge (hrs): 1015 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

stop pump, restart pump

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 Low Conc | 4°C | 2x1L amber | Y |
| 8270 SVOC | 4°C | 2x1L amber | Y |
| 8082 PCB | 4°C | 1x1L amber | Y |
| FL-PRO | 4°C | 2x1L amber | Y |
| 6010/7470 TAL metals | HNO3 | 1x250mL Plastic | Y |
| 9012 Cyanide | NaOH | 1x250mL Plastic | Y |
| 8011 ~~EDB~~ MEE | HCl | 3x40mL vial | Y |
| 8260B VOCs | HCl | 3x40mL vial | Y |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

purge rate = 300 mL/min

well went dry @ 1050

Circle if Applicable: Duplicate

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4 RI
Project No.: 112G00385

Sample ID No.: OLFS4-MW035-001
Sample Location: MW035
Sampled By: C. Dan
C.O.C. No.: 2813

- [] Domestic Well Data
- [] Monitoring Well Data
- [] Other Well Type:
- [] QA Sample Type:

Type of Sample:
- [] Low Concentration
- [] High Concentration

**SAMPLING DATA:**

| Date: 12-6-06 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1709 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: submersible | | | | | | | | |

**PURGE DATA:**

| Date: 12-6-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | ~~TBD~~ | ~~TBD~~ |
|---|---|---|---|---|---|---|---|---|
| Method: submersible | 2.0 | 5.48 | 13 | 24.2 | 140 | 2.99 | 1224 | 48.13 |
| Monitor Reading (ppm): 0.0 | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 6.0 | 5.61 | 13 | 25.2 | 72 | 2.54 | 1434 | 48.55 |
| Type: 2.0" PVC | 10.0 | 5.67 | 13 | 25.2 | 52 | 2.41 | 1444 | 48.62 |
| Total Well Depth (TD): 60 | 14.0 | 5.72 | 13 | 25.3 | 49 | 2.21 | 1454 | 48.48 |
| Static Water Level (WL): 46.56 | 18.0 | 5.71 | 13 | 24.8 | 48 | 2.23 | 1504 | 48.08 |
| One Casing Volume(gal/L): | 22.0 | 5.58 | 13 | 26.5 | 47 | 2.07 | 1514 | 48.63 |
| Start Purge (hrs): ~~1419~~ | 34.0 | 5.53 | 14 | 25.4 | 66 | 2.10 | 1544 | 51.24 |
| End Purge (hrs): 1647 | 58.0 | 5.18 | 13 | 25.4 | 19 | 3.12 | 1644 | Pump removed 1655 |
| Total Purge Time (min): ~~750~~ | ~~59.0~~ | ~~5.18~~ | ~~13~~ | 25.3 | 19 | 3.14 | 1649 | " |
| Total Vol. Purged (gal/L): 60 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 Low Conc | 4°C | 2 x 1L | Y |
| SVOC 8270 | 4°C | 2 x 1L | Y |
| PCB 8082 | 4°C | 1 x 1L | Y |
| FL-PRO | 4°C | 2 x 1L | Y |
| TAL metals 6010/7470 | $HNO_3$ | 1 x 250mL Plastic | Y |
| Cyanide 9012 | NaOH | 1 x 250mL Plastic | Y |
| ~~VOA~~ 8011 MEE | HCl | 3 x 40mL vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).
flow rate = 400 mL/min
Lowest possible

Circle if Applicable: MS / MSD

Signature(s): C. Dan

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanflex CTO 29
Project No.: 112G00389

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: OLSF4-MW-01D2-001
Sample Location: OLSF4-MW-01D2
Sampled By: J. D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: / Time: 1040 | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: | Clear | 5.52 | 0.045 | 25.61 | 8.6 | 4.93 | | |

**PURGE DATA:**

| Date: 1-6-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | 2L/m | 5.90 | .1070 | 23.89 | 880 | 5.87 | 0930 | 50.12 ft |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 2L/m | 5.63 | .052 | 24.85 | -5 Err | 5.72 | 0940 | 50.12 ft |
| Type: 2"/PVC | 500ml/m | 5.51 | .047 | 26.07 | 42.6 | 4.58 | 0950 | 48.97 ft |
| Total Well Depth (TD): 129.81 | 500ml/m | 5.56 | .046 | 25.19 | 16.1 | 4.86 | | |
| Static Water Level (WL): 48.61 | 500ml/m | 5.52 | .045 | 25.61 | 8.6 | 4.93 | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 0930 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 0454-MW02D-00(
Sample Location: MW02D
Sampled By: C. Dar
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-6-06 | Color | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1115 | (Visual) | (S.U.) | (mS/cm) | (°C) | (NTU) | (mg/l) | (%) | |
| Method: Low flow | | | | | | | | |

**PURGE DATA:**

| Date: 1-6-06 | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Method: Low flow | 2.5 | 5.57 | .039 | 25.51 | 49.2 | 2.37 | 0933 | 51.0 |
| Monitor Reading (ppm): 0.0 | 4.5 | 6.29 | .088 | 25.47 | 163 | 0.86 | 0943 | 49.77 |
| Well Casing Diameter & Material | 6.5 | 6.05 | .069 | 26.08 | 99.5 | 1.53 | 0953 | 49.75 |
| Type: 2.0" PVC | 10.5 | 5.61 | .038 | 25.51 | 32.1 | 2.41 | 1013 | 49.31 |
| Total Well Depth (TD): 80 | 14.5 | 5.66 | .027 | 25.19 | 12.0 | 3.13 | 1033 | 48.91 |
| Static Water Level (WL): 47.81 | 18.5 | 5.57 | .027 | 25.26 | 11.8 | 2.78 | 1053 | 48.90 |
| One Casing Volume(gal): 20.64 | 19.5 | 5.61 | .027 | 25.33 | 9.3 | 2.06 | 1058 | 48.89 |
| Start Purge (hrs): 0924 | 20.5 | 5.64 | .026 | 25.39 | 8.7 | 1.12 | 1103 | 48.89 |
| End Purge (hrs): 1108 | 21.5 | 5.65 | .027 | 25.42 | 8.1 | 0.98 | 1108 | 48.90 |
| Total Purge Time (min): 100 | | | | | | | | |
| Total Vol. Purged (gal): 21.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | ✓ |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| FL-PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | HNO3 | 1 x 250 mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250 mL plastic | |
| 8011 EDB | HCl | 3 x 40 mL glass | |
| 8260B VOC | HCl | 3 x 40 mL glass | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate = 500 mL/min
@0933 purge rate = 200 mL/min

33
2.1L
19.8
22.2
5.28 20.064
3.0
47.24
15.36

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[ ] Domestic Well Data
[✓] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: DLFS4-MW04D-001
Sample Location: MW04D
Sampled By: C.Dunn
C.O.C. No.:
Type of Sample:
[ ] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: 1-4-06 / Time: 0945 / Method: low flow | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | clear | 5.03 | .011 | 26.33 | 2.2 | 7.75 | | |

**PURGE DATA:**

| | ~~Color~~ Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ SOL |
|---|---|---|---|---|---|---|---|---|
| Date: 1-4-06 | | | | | | | | |
| Method: low flow | 3.0L | 5.13 | .025 | 24.70 | 17 | 7.71 | 1018 | 49.39 |
| Monitor Reading (ppm): 0.0 | 6.0L | 5.14 | 0.020 | 25.71 | 10 | 7.56 | 1023 | 49.41 |
| Well Casing Diameter & Material Type: 2.0" PVC | 9.0 | 5.09 | .015 | 25.29 | 2.4 | 7.70 | 1028 | 49.41 |
| | 12.0L | 5.06 | .012 | 26.21 | 3.1 | 7.73 | 1033 | 49.40 |
| Total Well Depth (TD): FL | 15.0L | 5.03 | .011 | 26.33 | 2.2 | 7.75 | 1038 | 49.40 |
| Static Water Level (WL): 9.82' | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1013 | | | | | | | | |
| End Purge (hrs): 1038 | | | | | | | | |
| Total Purge Time (min): 25 | | | | | | | | |
| Total Vol. Purged (gal/L): 15.0L | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 TAH | 4°C | 2 x 1L Amber | Y |
| 8270 SVOC | 4°C | 2 x 1L Amber | Y |
| 8082 PCB | 4°C | 1 x 1L Amber | Y |
| FL-PRO | 4°C | 2 x 1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250mL plastic | Y |
| 9012 Cyanide | NaOH | 1 x 250 mL plastic | Y |
| 8011 EDB | HCl | 3 x 40 mL glass vial | Y |
| 8260B VOCs | HCl | 3 x 40 mL glass vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

Purge rate = 600 mL/min
trip blank - 4312
temp raises water temp
DO?

Circle if Applicable: MS/MSD
Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sawsley CTO 29
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-09S-001
Sample Location: OLSF4-MW-09S
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-6-07 / Time: 1430 | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | Clear | 6.66 | 0.100 | 31.76 | 8.7 | 0.88 | | |

**PURGE DATA:**

| Date: 1-6-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | 100 ml/m | 6.62 | 093 | 925.43 | 89.3 | 12.63 | 1345 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | | 6.55 | 0.098 | 28.27 | 62.0 | 1.70 | 1400 | |
| Type: 2"/PVC | 100 ml/m | 6.68 | 0.103 | 30.90 | 10.8 | 0.99 | 1415 | |
| Total Well Depth (TD): 5189 | 100 ml/m | 6.66 | 0.100 | 31.76 | 8.7 | 0.88 | 1430 | |
| Static Water Level (WL): 47.89 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1345 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Low Conc. PAH 8270 | Cool 4°C | 2 x 1L Amber glass | |
| SVOC 8270 | Cool 4°C | 2 x 1L Amber glass | |
| PCB 8082 | Cool 4°C | 1 x 1L Amber glass | |
| FL PRO | Cool 4°C | 2 x 1L Amber glass | |
| TAL Metals 6010/7470 or As Cd | ——— | ——— | |
| Cr Pb Only by 6010 | $HNO_3$ Cool 4°C | 250mL plastic. | |
| Cyanide 9012 | NaOH Cool 4°C | 250mL plastic. | |
| VOA 8011 for EDB - Sub to PEL. | HCl Cool 4°C | 3 x 40mL Clear glass | |
| VOC 8260 | HCl Cool 4°C | 3 x 40mL Clear glass. | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:** | **Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley
Project No.: 112600389

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: OLSF4-MW10D-001
Sample Location: OLSF4-MW10D
Sampled By: S.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: 12-20-06 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 0915 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Sub / Low Flow | Clear | 5.12 | .098 | 25.71 | 9.2 | 2.87 | - | |

**PURGE DATA:**

| Date: 12-20-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Low Flow Sub | 250mL/m | 5.26 | .099 | 22.78 | 529.0 | 3.89 | 0835 | |
| Monitor Reading (ppm): | — | See Low Flow Purge Data Sheet | | | | | ~~0850~~ | |
| Well Casing Diameter & Material | 250mL/m | 5.13 | .135 | 25.45 | 25.9 | 3.11 | 0850 | 44.55 BLS |
| Type: 2" / PVC | 250mL/m | 5.14 | .099 | 25.68 | 13.6 | 2.84 | 0910 | 44.51 BLS |
| Total Well Depth (TD): 84.97 | 250mL/m | 5.12 | .098 | 25.71 | 9.2 | 2.87 | 0915 | 44.52 BLS |
| Static Water Level (WL): 44.3 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Low Conc. PAH 8270 | Cool 4°C | 2 x 1L Amber Glass | |
| SVOC 8270 | Cool 4°C | 2 x 1L Amber Glass | |
| PCB 8082 | Cool 4°C | 1 x 1L Amber Glass | |
| FLPRO | Cool 4°C | 1 x 1 Amber Glass | |
| TAL Metals 6010/7470 | $HNO_3$ | 1 x 250 mL Plastic | |
| Ag Cd Cr Pb Only by 6010 | Cool 4°C | — | |
| Cyanide 9012 | NaOH Cool 4°C | 1 x 250 mL Plastic | |
| VOA 8011 Sor EDB - Subtotal | HCL Cool 4°C | 3 x 40 mL Clear Glass | |
| VOC 8260 | HCL Cool 4°C | 3 x 40 mL Clear Glass | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanflex
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW11S-001
Sample Location: OLSF4-MW11S
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-20-06<br>Time: 1115 | Color<br>Visual | pH<br>Standard | S.C.<br>mS/cm | Temp.<br>°C | Turbidity<br>NTU | DO<br>mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | Clear | 6.61 | .139 | 27.09 | 2.90 | 4.82 | + | 34.93 |

**PURGE DATA:**

| Date: 12-20-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | 200ml/m | 6.49 | .371 | 23.71 | 124.0 | 3.10 | 10:25 | 32.49 BLS |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 250ml/m | 7.11 | .360 | 29.60 | 56.4 | 1.84 | 10:45 | 32.78 BLS |
| Type: 2"/PVC | 400ml/m | 6.82 | .208 | 26.33 | 53.8 | 2.90 | 11:00 | 34.90 |
| Total Well Depth (TD): 40 | 400ml/m | 6.66 | .139 | 27.13 | 4.70 | 4.78 | 11:10 | 34.92 |
| Static Water Level (WL): 32.2 | 400ml/m | 6.61 | .139 | 27.09 | 2.90 | 4.82 | 11:15 | 34.92 |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Low Conc PAH 8270 | Cool 4°C | 2x1L Amber Glass | |
| SVOC 8270 | Cool 4°C | 2x1L Amber Glass | |
| PCB 8082 | Cool 4°C | 1x1L Amber Glass | |
| FL Pro | Cool 4°C | 1x1L Amber Glass | |
| TAL Metals 6010/7470 | Cool 4°C | 1x250mL Clear Plastic | |
| As Cd Cr Pb Only by 6010 | ~~NaOH~~ $HNO_3$ | ——— | |
| Cyanide 9012 | NaOH | 1x250mL Plastic | |
| VOA @ 8011 for EDB Sub to Pel | HCL | 3x40mL Clear Glass | |
| VOC 8260 | HCl | 3x40mL Clear Glass | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanford
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW12S-001
Sample Location: OLSF4-MW12S
Sampled By: S.D.Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-19-06 / Time: 1650 | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | Clear | 10.92 | .168 | 51.3 | 8.07 | .51 | | |

**PURGE DATA:**

| Date: 12-19-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | .54/m | 10.19 | .166 | 30.4 | 154.0 | 2.36 | 1605 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | .254/m | 10.83 | .172 | 28.0 | 159.0 | .65 | 1615 | |
| Type: 2" / PVC | .254/m | 10.93 | .171 | 27.7 | 14.5 | 3.68 | 1635 | |
| Total Well Depth (TD): 4 | .254/m | 10.92 | .168 | 31.3 | 8.07 | .51 | 1645 | |
| Static Water Level (WL): 34.83 | | 10.92 | .168 | 31.2 | 8.04 | .50 | 1650 | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1550 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sea Isle / Field.
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-19S-001
Sample Location: OLSF4-MW-19S.
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-07-06 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: ~~10:15~~ 12:00 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Low flow Sub. | Clear | 5.69 | 8 | 18.2 | 18 | 5.47. | 12:00 | |

**PURGE DATA:** Time

| Date: 12-7-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Low flow Sub | | 5.63 | 9 | 21.1 | 250 | 5.81 | 10:15 | |
| Monitor Reading (ppm): | | ~~See Low Flow Purge Data Sheet~~ | | | | | | |
| Well Casing Diameter & Material | | 5.72 | 9 | 21.8 | 190 | 5.46 | 10:30 | |
| Type: 2" PVC | | 5.83 | 9 | 23.2 | 180 | 5.47 | 10:45 | |
| Total Well Depth (TD): 56.7 | | 5.99 | 9 | 20.7 | 69 | 5.45 | 10:50 | |
| Static Water Level (WL): 48.73 | | 5.87 | 9 | 25.2 | 32 | 4.93 | 11:00 | |
| One Casing Volume(gal/L): | | 5.90 | 9 | 23.6 | 26 | 5.05 | 11:15 | |
| Start Purge (hrs): 10.15 | | 5.69 | 8. | 21.8 | 27 | 4.83 | 11:30 | |
| End Purge (hrs): 12:00 | | 5.69 | 8 | 18.2 | 18 | 5.47 | 12:00 | |
| Total Purge Time (min): ~~1 hr 45 min~~ | | | | | | | | |
| Total Vol. Purged (gal/L): .134/m | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| LowConc. PAH 8270 | Cool 4° C. | 2 1L Amber Glass | |
| SVOC 8270 | Cool 4°C. | 2 1L Amber Glass | |
| PCB 8082 | Cool 4°C | 1, 1L Amber Glass | |
| FL Pro | Cool 4°C | 1, 1L Amber Glass | |
| TAL Metals 6010/7470 or | $HNO_3$ | 1 250mL plastic | |
| Ag Cd Cr Pb only by 6010 | Cool 4°C | | |
| Cyanide. 9012 | NaOH/Cool 4° | 1 250 mL Plastic | |
| VOA 8011 for EDB - Sub To PEL | HCl, Cool 4°C | 3 40mL clear Glass | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLFS4-MW(35-001
Sample Location: MW35
Sampled By: C. Dolan
C.O.C. No.: 40972
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-15-00 / Time: 1090 / Method: low flow | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: 12-15-00 / Method: low flow | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| | 2.0L | 6.97 | .230 | 26.39 | 48.7 | 1.74 | 1555 | 34.97 |
| Monitor Reading (ppm): 0.0 | 4.0L | 6.93 | .245 | 27.25 | 40.5 | 1.46 | 1605 | 35.09 |
| Well Casing Diameter & Material | 6.0L | 7.02 | .267 | 26.89 | 39.3 | 1.27 | 1615 | 35.10 |
| Type: 2.0" PVC | 8.0L | 7.05 | .248 | 25.97 | 37.0 | 1.31 | 1625 | 35.10 |
| Total Well Depth (TD): 45.00 | 10.0L | 7.11 | .243 | 25.74 | 37.4 | 1.16 | 1635 | 35.10 |
| Static Water Level (WL): 33.39 | 13.0L | 7.09 | .218 | 28.37 | 84.7 | 1.43 | 1640 | 37.10 |
| One Casing Volume(gal): 7.06 | 16.0L | 7.10 | .182 | 29.25 | 112 | 2.65 | 1648 | 38.78 |
| 1634/12-20 Start Purge (hrs): 1545 | 19.0L | 7.20 | .185 | 29.46 | | 2.08 | 1655 | 38.50 |
| End Purge (hrs): | 33.0L | 7.40 | .201 | 31.4 | 14.7 | 4.61 | ~~0944~~ | 36.23 |
| Total Purge Time (min): | 39.0 | 7.39 | .200 | 30.7 | 15.0 | 4.59 | 0949 | 36.28 |
| Total Vol. Purged (gal): | 38.0 | 7.39 | .199 | 30.2 | 14.6 | 4.53 | 0954 | 36.31 |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 low Conc PAH | 4°c | 2x1L Amber | Y |
| 8270 SVOC | 4°c | 2x1L Amber | Y |
| 8082 PCB | 4°c | 1x1L Amber | Y |
| FL-PRO | 4°c | 2x1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1x250mL plastic | Y |
| 9012 Cyanide | NaOH | 1x250mL plastic | Y |
| 8011 EDB | HCl | 3x40mL glass vial | Y |
| 8260B VOCs | HCl | 3x40 mL glass vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate = 200mL/min
@ 1635 increase to 600mL/min
@ 1647 decrease to 300mL/min

restart at 12:20 @ 934 flowrate = 200mL/min
pump is warming water

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

C. Dolan

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: OLFS4-MW14D-001
Sample Location: MW14D
Sampled By: C. Dow
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[] ~~Monitoring~~ Well Data
[] Other Well Type:
[] QA Sample Type:

**SAMPLING DATA:**

| Date: 1-7-07 | Color | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Time: ~~1540~~ 1540 | (Visual) | (S.U.) | (mS/cm) | ($^0$C) | (NTU) | (mg/l) | (%) | |
| Method: low flow | | | | | | | | |

**PURGE DATA:**

| Date: 1-7-07 | ~~Color~~ Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ SWL |
|---|---|---|---|---|---|---|---|---|
| Method: low flow | 15.0 L | 5.54 | .027 | 24.72 | 12.3 | 6.30 | 1519 | 47.14 |
| Monitor Reading (ppm): 0.0 | 17.5 | 5.51 | .024 | 25.55 | 6.11 | 5.94 | 1524 | 47.13 |
| Well Casing Diameter & Material | 20.0 | 5.58 | .026 | 25.42 | 2.91 | 5.90 | 1529 | 47.13 |
| Type: 2" PVC | 22.5 | 5.62 | .027 | 25.38 | 1.25 | 5.89 | 1534 | 47.13 |
| Total Well Depth (TD): 79.85 | | | | | | | | |
| Static Water Level (WL): 47.05 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1505 | | | | | | | | |
| End Purge (hrs): 1534 | | | | | | | | |
| Total Purge Time (min): 25 | | | | | | | | |
| Total Vol. Purged (gal/L): 22.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | Y |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8018 PCB | 4°C | 1 x 1L Amber | |
| FL-PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | @ HNO$_3$ | 1 x 250 mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250 mL plastic | |
| 8011 EDB | HCl | 3 x 40 mL glass | |
| 8260B VOC | HCl | 3 x 40 mL glass | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge = 1.5 L/min
@ 1519 purge stop = 500 mL min

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

Signature(s): C. Dow

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanofley
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-15S-001
Sample Location: OLSF4-MW-15S
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-4-07 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1045 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Sub/Low Flow | Clear | 6.20 | .071 | 27.63 | 16.0 | 2.20 | | |

**PURGE DATA:**

| Date: 1-4-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | | | | | | | | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | | 6.12 | .090 | 21.63 | 37.5 | 6.56 | 10:15 | |
| Type: 2"/PVC | | 6.21 | .066 | 27.56 | 18.0 | 1.19 | 10:35 | |
| Total Well Depth (TD): 56.65 | | 6.20 | .071 | 27.63 | 16.0 | 2.20 | 10:45 | |
| Static Water Level (WL): 48.25 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1015 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sayfley Field Site 4
Project No.: 112606389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-16S-007
Sample Location: OLSF4-MW-16S.
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-07-06 / Time: | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD Time | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Low flow Sub. | Clear | 6.27 | 11 | 18.8 | 19 | 3.88 | 1600 | |

**PURGE DATA:**

| Date: 12-07-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD Time | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Low flow Sub | | 6.21 | 11 | 16.6 | 190 | 4.88 | 1410 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | | 6.21 | 11 | 16.6 | 190 | 4.89 | 1430 | |
| Type: 2" PVC | | 6.19 | 11 | 27.7 | 66 | 3.71 | 1515 | |
| Total Well Depth (TD): 54.7 | | 6.27 | 11 | 18.8 | 19 | 3.88 | 1600 | |
| Static Water Level (WL): 48.27 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1400 | | | | | | | | |
| End Purge (hrs): 1715 | | | | | | | | |
| Total Purge Time (min): 3hr 15min. | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Lew Conc. PAH 8270 | Cool 4°C | 2 1L Amber Glass | |
| SVOC 8270 | cool 4°C | 2 1L Amber Glass | |
| PCB 8082 | Cool 4°C | 1L Amber Glass | |
| FLPro | Cool 4°C | 2 1L Amber Glass | |
| TAL Metals 6010/7470 or | $HNO_3$ Cool 4°C | 250mL Plastic. | |
| As Cd Cr Pb only by 6010 | — | | |
| Cyanide 9012 | NaOH cool 4°C | 250mL Plastic. | |
| VOA 8011 for EDB-Sub-PEL | HCL Cool 4°C | 3, 40mL Clear Glass | |
| VOC 8260 | HCL Cool 4°C | 3, 40mL Clear Glass. | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanford
Project No.: 112600389

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW17S-001
Sample Location: OLSF4-MW17S
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[x] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-21-06 / Time: 12.45 | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | Clear | 7.32 | .187 | 33.60 | 18.0 | 5.16 | 1245 | |

**PURGE DATA:**

| Date: 12-21-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD (Time) | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | | 6.64 | .410 | ~~5 Er.~~ 22.39 | ~~5 Er.~~ | 3.48 | 0835 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 150 mL/m | 9.61 | .413 | 27.96 | 311.0 | 0.17 | 0900 | |
| Type: 2" / PVC | 200 mL/m | 9.62 | .471 | 28.44 | 207.6 | Er | 0915 | |
| Total Well Depth (TD): 55.26 | 200 mL/m | 10.31 | .365 | 30.52 | 71.8 | 0.21 | 0935 | |
| Static Water Level (WL): 45.87 | 200 mL/m | 9.99 | .338 | 31.21 | 35.0 | 0.90 | 1000 | |
| One Casing Volume(gal/L): | | 7.32 | .187 | 33.00 | 18.0 | 5.16 | 1245 | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Bad Sand Pack? Cloudy Sample metals

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OUFS4-MW165-0001
Sample Location: MW165
Sampled By: C. Dolan
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-21-06 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1100 | | | | | | | | |
| Method: Low flow | | | | | | | | |

**PURGE DATA:**

| Date: 12-21-06 | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Method: Low flow | 0.0 | 9.25 | .126 | 27.0 | off scale | 5.50 | 0957 | 44.31 |
| Monitor Reading (ppm): 0.0 | 1300 | 8.37 | 0.111 | 30.8 | 470 | 5.35 | 0919 | 45.58 |
| Well Casing Diameter & Material | 14.00 | 7.62 | 0.102 | 25.8 | ~~2485.9~~ | 5.25 | 0937 | 45.50 |
| Type: 2.0" PVC | 16.0 | 7.76 | 0.104 | 25.8 | 55.9 | 5.22 | 0957 | 45.37 |
| Total Well Depth (TD): 55.7 | 18.0 | 7.59 | 0.099 | 27.1 | 35.8 | 5.03 | 1017 | 45.50 |
| Static Water Level (WL): 42.43 | 20.0 | 7.35 | 0.096 | 27.4 | 25.9 | 4.90 | 1037 | 45.70 |
| One Casing Volume(gal/L): | 20.5 | 7.21 | 0.093 | 28.2 | 22.6 | 4.87 | 1042 | 45.85 |
| Start Purge (hrs): 0837 | 21.0 | 7.14 | 0.092 | 28.9 | 19.3 | 4.79 | 1047 | 45.90 |
| End Purge (hrs): 1057 | 21.5 | 7.13 | 0.092 | 29.0 | 20.2 | 4.78 | 1052 | 45.92 |
| Total Purge Time (min): 140 | 22.0 | 7.14 | 0.093 | 24.6 | 19.2 | 4.74 | 1057 | 45.67 |
| Total Vol. Purged (gal/L): 22.0 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 low conc. PAH | 4°C | 2x1L Amber | Y |
| 8270 SVOC | 4°C | 2x1L Amber | Y |
| 8082 PCB | 4°C | 1x1L Amber | Y |
| FL-PRO | 4°C | 2x1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1x250mL plastic | Y |
| 9012 Cyanide | NaOH | 1x250mL plastic | Y |
| 8011 EDB | HCl | 3x40mL glass vial | Y |
| 8260B VOCs | HCl | 3x40mL glass vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate = 500mL/min
200mL/min @ OFS7

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[✓] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLF84-MW20S-00
Sample Location: MW 20S
Sampled By: C. Orr
C.O.C. No.: 40912
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-20-05 | Color | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1400 | (Visual) | (S.U.) | (mS/cm) | (°C) | (NTU) | (mg/l) | (%) | |
| Method: low flow | clear | 8.26 | .203 | 28.6 | 5.00 | 0.81 | | |

**PURGE DATA:**

| Date: 12-20-05 | ~~Volume~~ | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Method: low flow | 4.0 | 8.34 | .182 | 28.0 | 12.6 | 7.37 | 1340 | 41.50 |
| Monitor Reading (ppm): 0.0 | 6.0 | 8.44 | .225 | 28.2 | 7.49 | 0.79 | 1345 | 41.67 |
| Well Casing Diameter & Material | 8.0 | 8.29 | .205 | 28.6 | 6.91 | 0.88 | 1350 | 41.69 |
| Type: 2" PVC | 10.0 | 8.26 | .203 | 28.6 | 5.00 | 0.81 | 1355 | 41.69 |
| Total Well Depth (TD): 45.00 | | | | | | | | |
| Static Water Level (WL): 39.26 | | | | | | | | |
| One Casing Volume(gal/L): 3.49 | | | | | | | | |
| Start Purge (hrs): 1330 | | | | | | | | |
| End Purge (hrs): 1355 | | | | | | | | |
| Total Purge Time (min): 25 | | | | | | | | |
| Total Vol. Purged (gal): 10 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 low Conc. PAH | 4°C | 2x1L Amber | Y |
| 8270 SVOC | 4°C | 2x1L Amber | Y |
| 8082 PCB | 4°C | 1x1L Amber | Y |
| FL-PRO | 4°C | 2x1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1x250mL plastic | Y |
| 9012 Cyanide | NaOH | 1x250mL plastic | Y |
| 8011 EDB | HCl | 3x40mL glass vial | Y |
| 8260B VOCs | HCl | 3x40mL glass vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate = 400mL/min

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

C. Orr

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanford
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW21S-001
Sample Location: OLSF4-MW21S
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-20-06 / Time: | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | | | | | | | | |

**PURGE DATA:**

| Date: 12-20-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | 200 ml/m | 6.60 | .118 | ~~5Er~~ 27.6 | ~~-5Er~~ | 2.64 | 1405 | 40.8 RLS ↓ |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 200ml/m | 6.58 | .119 | ~~29.35~~ | -5E | 3.12 | 1445 | 43.75 well dry |
| Type: 2"/PVC | 200 ml/m | 6.83 | .461 | 30.25 | 240 | 3.76 | 1550 | 43.75+ |
| Total Well Depth (TD): 44.79 | | | | | | | | |
| Static Water Level (WL): 40.2 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

well Dry Did Not sample

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sunflex CTO 29
Project No.: 1126 003889

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-21S-00
Sample Location: OLSF4-MW-21S
Sampled By: S.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-6-07 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1100 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Sub/Low Flow | Clear | 5.85 | 0.068 | 27.25 | 14.1 | 3.98 | | |

**PURGE DATA:**

| Date: 1-7-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | 75 mL/m | 5.97 | 0.086 | 22.94 | 123.0 | 3.54 | 1000 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 75mL/m | 5.96 | 0.087 | 22.96 | 120 | 3.61 | 1015 | |
| Type: 2"/PVC | 75mL/m | 5.85 | 0.075 | 25.26 | 70.2 | 4.11 | 1030 | |
| Total Well Depth (TD): 44.76 | 75mL/m | 5.85 | 0.068 | 27.25 | 14.1 | 3.98 | 1100 | ▽42.96 |
| Static Water Level (WL): 40.69 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Low Conc. PAH 8270 | Cool 4°C | 2, 1L Amber glass | |
| SVOC 8270 | Cool 4°C | 2, 1L Amber glass | |
| PCB 8082 | Cool 4°C | 2, 1L Amber glass | |
| FL Pro | Cool 4°C | 2, 1L Amber glass | |
| TAL Metals 6010/7470 or | ~~HNO3~~ | | |
| As Cd Cr Pb only by 6010 | ~~NaOH~~ Cool 4°C | 250mL Plastic | |
| Cyanide 9012 | NaOH Cool 4°C | 250mL Plastic. | |
| VOA 8011 for EDB-Sub-PEL. | HCL Cool 4°C | 3X40mL Clear Glass | |
| VOC 8260 | HCL Cool 4°C | 3X40mL Clear Glass. | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:** | **Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sayfley
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW22D-001
Sample Location: OLSF4-MW22D-
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-19-06 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: ~~1035~~ | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Sub/Low flow | Clear | 4.73 | .028 | 24.84 | 8.2 | 7.47 | 1345 | |

**PURGE DATA:**

| Date: 12-19-06 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | | | | | | | Time | |
| Monitor Reading (ppm): | | ~~See Low Flow Purge Data Sheet~~ | | | | | | |
| Well Casing Diameter & Material | | 6.01 | .066 | 23.53 | 669.0 | 2.06 | 11:35 | .54/min |
| Type: 2"/PVC | | 5.35 | .036 | 24.53 | 42.5 | 4.73 | 11:45 | .54/min |
| Total Well Depth (TD): ~~91~~ 90.59 | | Pump Kicked Out Voltage | | | | | 11:47 | — |
| Static Water Level (WL): 51.3 | | 5.34 | .038 | 24.49 | 66 | 6.46 | 11:55 | .54/min |
| One Casing Volume(gal/L): | | Pump Kick out Voltage | | | | → | 1205 | — |
| Start Purge (hrs): 11.35 | | 5.26 | .044 | 24.94 | 98.5 | 4.23 | 1215 | .554/m |
| End Purge (hrs): 1345 | | 4.73 | .028 | 24.84 | 8.2 | 7.47 | 1345 | .564/m |
| Total Purge Time (min): ~~2hr 10min~~ | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: SLFS4-MW23S-001
Sample Location: MW23S
Sampled By: C. Dolan
C.O.C. No.: 40200
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 12-19-06 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | ~~Salinity~~ 1.1 (%) | ~~Other~~ SWL |
|---|---|---|---|---|---|---|---|---|
| Time: 1230 | | | | | | | | |
| Method: low flow | | | | | | | | |

**PURGE DATA:**

| Date: 12-19-06 | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ time | ~~Other~~ SWL |
|---|---|---|---|---|---|---|---|---|
| Method: low flow | 5.0L | 7.67 | 1.31 | 26.6 | 28.5 | 6.79 | 1143 | 25.71 |
| Monitor Reading (ppm): 0.0 | 7.5L | 7.63 | 1.29 | 26.9 | 15.2 | 6.07 | 1148 | 25.71 |
| Well Casing Diameter & Material | 10.0L | 7.87 | 1.29 | 27.4 | 14.8 | 4.78 | 1153 | 25.71 |
| Type: 2.0" PVC | 12.5L | 7.92 | 1.29 | 27.5 | 15.7 | 4.02 | 1158 | 25.71 |
| Total Well Depth (TD): 40 | 15.0L | 7.93 | 1.30 | 27.7 | 11.9 | 3.53 | 1203 | 25.71 |
| Static Water Level (WL): 25.63 | 17.5L | 7.92 | 1.30 | 27.8 | 13.9 | 3.01 | 1208 | 25.71 |
| One Casing Volume(gal/L): 8.74 | 20.0L | 7.91 | 1.29 | 27.9 | 9.63 | 2.46 | 1213 | 25.71 |
| Start Purge (hrs): 1133 | 22.5 | 7.90 | 1.29 | 28.1 | 7.26 | 2.03 | 1218 | 25.71 |
| End Purge (hrs): 1223 | 25.0 | 7.89 | 1.29 | 28.1 | 8.41 | 1.99 | 1223 | 25.71 |
| Total Purge Time (min): 50 | | | | | | | | |
| Total Vol. Purged (gal/L): 25.0 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 low conc. PAH | 4°C | 2x1L Amber | Y |
| 8270 SVOC | 4°C | 2x1L Amber | Y |
| 8082 PCB | 4°C | 1x1L Amber | Y |
| FL-PRO | 4°C | 2x1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1x250 mL Plastic | Y |
| 9012 Cyanide | NaOH | 1x250mL Plastic | Y |
| 8011 EDB | HCl | 3x40 mL vials | Y |
| 8260B VOCs | HCl | 3x40 mL vials | Y |
| TCL SVOCs + App IX, TCL Pest, | | | |
| PCBs + App IX, TCL Herbicides + | | | |
| App IX, + TAL metals | 4°C | 2x 1L Amber | Y |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate - 500 mL/min

| Circle if Applicable: | | Signature(s): |
|---|---|---|
| MS/MSD | Duplicate ID No.: | [signature] |

5:01 - TMJ - 1.1it skip ballawcoot

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanfley CTO 29
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-24S-001
Sample Location: OLSF4-MW-24S-
Sampled By: J.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-6-07 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1725 | Visual | Standard | mS/cm | °C | NTU | mg/l | ▽ | |
| Method: Sub/Low Flow | Clear | 5.97 | 0.044 | 30.40 | 17.0 | 3.15 | 51.24 | |

**PURGE DATA:**

| Date: 1-6-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | 75 mL/m | 6.37 | .067 | 24.99 | >5 Err | 5.21 | 1630 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 75mL/m | 6.25 | 0.062 | 25.41 | 650 | 3.78 | 1645 | |
| Type: | 75mL/m | 6.15 | 0.059 | 28.29 | 179.0 | 3.99 | 1655 | 49.69 ▽ |
| Total Well Depth (TD): 55.55 | 75mL/m | 6.09 | .055 | 30.05 | 89.4 | 4.02 | 1700 | 49.99 ▽ |
| Static Water Level (WL): 48.25 | 75mL/m | 6.03 | 0.048 | 30.14 | 39.0 | 3.64 | 1710 | 50.51 ▽ |
| One Casing Volume(gal/L): | 50mL/m | 5.97 | 0.044 | 30.40 | 17.0 | 3.15 | 1725 | 51.04 ▽ |
| Start Purge (hrs): 1630 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Low Conc PAH 8270 | Cool 4°C | 2x1L Amber glass | |
| SVOC 8270 | Cool 4°C | 2x1L Amber glass | |
| PCB 8082 | Cool 4°C | 1L Amber glass | |
| FLPRO | Cool 4°C | 2x1L Amberglass | |
| TAL Metals 6010/7470 or | — | — | |
| As, Cd Cr, Pb only by 6010 | $HNO_3$ Cool 4°C | 250mL Plastic. | |
| Cyanide. 9012 | NaOH Cool 4°C | 250mL Plastic. | |
| VOA 8011 for EDB | HCL Cool 4°C | 3x40mL Clear glass | |
| VOC 8260 | HCL Cool 4°C | 3x40mL Clear glass. | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:** | **Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLFS4-MW25S-20(
Sample Location: MW25S
Sampled By: C. Dan
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 1-6-07 | | | | | | | | |
| Time: 1520 | | | | | | | | |
| Method: low flow | | | | | | | | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Date: 1-6-07 | | | | | | | | |
| Method: low flow | 0.5L | 6.07 | .122 | 23.48 | 82.2 | .19 | 1330 | 47.50 |
| Monitor Reading (ppm): D.O | 1.5L | 6.12 | .123 | 24.25 | 68.4 | .47 | 1340 | 47.48 |
| Well Casing Diameter & Material | 2.5 | 6.12 | .120 | 25.47 | 70.9 | .63 | 1350 | 47.35 |
| Type: 2.0" PVC | 3.5 | 6.12 | .135 | 29.89 | 115 | .50 | 1400 | 47.33 |
| Total Well Depth (TD): 55.21 | 4.5 | 6.12 | .134 | 28.61 | 119 | .63 | 1410 | 47.33 |
| 46.89 Static Water Level (WL): ~~[illegible]~~ | 5.5 | 6.14 | .120 | 22.59 | 82.0 | .61 | 1420 | 47.32 |
| One Casing Volume(gal/L): 5.4 | 7.5 | 6.11 | .121 | 28.77 | 76.3 | .62 | 1440 | 47.33 |
| Start Purge (hrs): 1325 | 9.5 | 6.12 | .121 | 24.86 | 55.6 | .57 | 1500 | 47.34 |
| End Purge (hrs): 1515 | 10.0 | 6.06 | .120 | 29.74 | 363 | .63 | 1505 | 47.34 |
| Total Purge Time (min): 210 | 10.5 | 6.11 | .121 | 28.76 | 22.4 | .62 | 1510 | 47.33 |
| Total Vol. Purged (gal/L): 11.0 | 11.0 | 6.10 | .120 | 28.81 | 18.1 | .63 | 1515 | 47.33 |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | Yes |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| FL-PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250 mL plastic | |
| 47.35 47.35 9012 Cyanide | NaOH | 1 x 250 mL plastic | |
| 8011 EDB | HCl | 3 x 40 mL glass | |
| 8260B VOC | HCl | 3 x 40 mL glass | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

pose rate - 100mL/min
pump is warming up water

-16
9
54
90
144
312
1152
4320
54

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanflex CTO 29
Project No.: 112600389

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLSF4-MW-26D-001
Sample Location: OLSF4-MW-26D
Sampled By: S.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-5-07<br>Time: 1620 | Color<br>Visual | pH<br>Standard | S.C.<br>mS/cm | Temp.<br>°C | Turbidity<br>NTU | DO<br>mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | Clear | 5.49 | .215 | 25.28 | 3.21 | 0.11 | | |

**PURGE DATA:**

| Date: 1-5-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | 1.25 L/min | 5.45 | .206 | 23.91 | 724.0 | 6.12 | 1555 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | ~~1600~~ | |
| Well Casing Diameter & Material | 1.25 L/m | 5.52 | .206 | 24.60 | 69.2 | 0.18 | 1600 | 42.55 ▽ |
| Type: 2" / PVC | 1.25 L/m | 5.45 | .221 | 24.72 | 10.66 | 0.04 | 1605 | 42.55 ▽ |
| Total Well Depth (TD): 81.37 | 1.25 L/m | 5.49 | .220 | 24.63 | 3.18 | 0.03 | 1615 | 42.39 ▽ |
| Static Water Level (WL): 42.31 | 500 mL/m | 5.49 | .215 | 25.28 | 3.21 | 0.11 | 1620 | 42.37 ▽ |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1555 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

| | | | |
|---|---|---|---|
| Project Site Name: | Saufley Site 4 | Sample ID No.: | OLFS4-MW27S-001 |
| Project No.: | 112G00389 | Sample Location: | MW27S |
| | | Sampled By: | C.Dan |
| [] Domestic Well Data | | C.O.C. No.: | |
| [X] Monitoring Well Data | | Type of Sample: | |
| [] Other Well Type: | | [] Low Concentration | |
| [] QA Sample Type: | | [] High Concentration | |

**SAMPLING DATA:**

| Date: ~~1-6-07~~ | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1102 | | | | | | | | |
| Method: low flow | | | | | | | | |

**PURGE DATA:**

| Date: 1-6-07/1-7 | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ Time | ~~Other~~ ORP | |
|---|---|---|---|---|---|---|---|---|---|
| Method: low flow | 1.0L | 6.01 | .083 | 25.08 | 464 | 6.37 | 1642 | 48.83 | 1-6 |
| Monitor Reading (ppm): 0.0 | 2.0L | 6.05 | .083 | 25.50 | 437 | 6.30 | 1647 | 49.07 | |
| Well Casing Diameter & Material | 4.0L | | | 32.32 | | | 1657 | | |
| Type: 2.0" PVC | 4.0L | 6.35 | .085 | 26.39 | ~~55~~ | 7.26 | 1020 | 49.20 | K |
| Total Well Depth (TD): 54.85 | 5.0L | 6.32 | .087 | 30.97 | 37 | 6.95 | 1030 | 50.02 | |
| Static Water Level (WL): 48.35 | 7.0 | 6.29 | .087 | 30.22 | 28.6 | 6.21 | 1035 | 50.01 | 1-7 |
| One Casing Volume(gal/L): 4.25 | 8.0 | 6.30 | .085 | 27.79 | 21.2 | 6.18 | 1040 | 49.96 | |
| Start Purge (hrs): 1637/1000 | 9.0 | 6.27 | .082 | 27.79 | 104.1 | 6.35 | 1045 | 49.95 | |
| End Purge (hrs): 1100 | 10.0 | 6.22 | .081 | 31.54 | 73.9 | 6.60 | 1050 | 49.97 | |
| Total Purge Time (min): 80 | 11.0 | 6.76 | .081 | 29.71 | 26.2 | 6.45 | 1055 | 49.97 | |
| Total Vol. Purged (gal/L): 16 | 12.0 | 6.24 | .081 | 29.54 | 19.1 | 6.37 | 1100 | 49.96 | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | ~~2x1L~~ 2x1L Amber | |
| 8270 SVOC | 4°C | 2x1L Amber | |
| 8082 PCB | 4°C | 1x1L Amber | |
| FL-PRO | 4°C | 2x1L Amber | |
| 6010/7470 TAL metals | HNO3 | 1x 250ml plastic | |
| 9012 Cyanide | NaOH | 1x 250ml plastic | |
| 8011 EDB | HCl | 3x40mL glass | |
| 8260 VOC | HCl | 3x40mL glass | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate = 200ml/min

pump heating water

76
7
132
3.8
896
3360
4256

@ 1657 stopped pump b/c of over heating
resume purging 1000 1-7
pump surged causing WL to drop

| Circle if Applicable: | | Signature(s): |
|---|---|---|
| MS/MSD | Duplicate ID No.: | C. Dan |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLFSY-MW28S-001
Sample Location: MW28S
Sampled By: C. Odom
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 1-4-07 | | | | | | | | |
| Time: 1237 | | | | | | | | |
| Method: low flow | | | | | | | | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Date: 1-4-07 | | | | | | | | |
| Method: low flow | 1.25 L | 6.14 | .305 | 23.96 | 195 | .50 | 1140 | 30.50 |
| Monitor Reading (ppm): 0.0 | 2.50 | 6.15 | .300 | 25.41 | 79.5 | .50 | 1145 | 30.50 |
| Well Casing Diameter & Material | 3.75 | 6.13 | .295 | 25.84 | 76.0 | .49 | 1150 | 30.51 |
| Type: 2.0" PVC | 5.0 | 6.12 | .288 | 26.09 | 22.1 | 0.47 | 1155 | 30.51 |
| Total Well Depth (TD): 45.31 | 6.25 | 6.12 | .276 | 26.45 | 13.2 | 0.48 | 1200 | 30.51 |
| Static Water Level (WL): 30.51 | 7.50 | 6.12 | .269 | 26.53 | 9.04 | 0.47 | 1205 | 30.51 |
| One Casing Volume(gal): 9.0 | 8.75 | 6.12 | .266 | 26.70 | 6.37 | 0.47 | 1210 | 30.50 |
| Start Purge (hrs): 1135 | 10.0 | 6.13 | .263 | 26.74 | 4.61 | 0.46 | 1215 | 30.50 |
| End Purge (hrs): 1215 | | | | | | | | |
| Total Purge Time (min): 40 | | | | | | | | |
| Total Vol. Purged (gal): 10.0 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | ✓ |
| 8270 SVOC | 4°C | 2 x 1L Amber | ↓ |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| FL-PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250 mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250 mL plastic | |
| 8011 EDB | HCl | 3 x 40 mL glass | |
| 8260B VOC | HCl | 3 x 40 mL glass | ↓ |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate = 250 mL/min

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

C. Odom

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[✓] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: DLFS4-MW29D-001
Sample Location: MW 29D
Sampled By: C. Dan
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-5-06 / Time: 1145 / Method: Low flow | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: 1-5-06 / Method: low flow | Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Monitor Reading (ppm): 0.0 | 1.5 | 5.42 | .026 | 23.80 | 51.1 | 1.91 | 1050 | 42.60 |
| Well Casing Diameter & Material Type: 2.0" PVC | 3.0 | 5.46 | .071 | 23.84 | 85.5 | 2.02 | 1055 | 42.61 |
| Total Well Depth (TD): 79.85 | 6.0 | 5.54 | .078 | 26.13 | 54.5 | 1.29 | 1105 | 42.61 |
| Static Water Level (WL): 42.55 | 9.0 | 5.54 | .077 | 26.12 | 16.1 | 0.61 | 1115 | 42.67 |
| One Casing Volume(gal/L): 2.26 | 10.5 | 5.52 | .091 | 26.07 | 12.5 | .31 | 1120 | 42.68 |
| Start Purge (hrs): 1045 | 20.0 | 5.58 | .077 | 25.91 | 26.3 | .45 | 1125 | 42.67 |
| End Purge (hrs): 1135 | 23.5 | 5.59 | .077 | 25.74 | 14.1 | .40 | 1135 | 42.64 |
| Total Purge Time (min): 50 | 29.0 | 5.63 | .079 | 26.10 | 5.5 | .39 | 1135 | 42.68 |
| Total Vol. Purged (gal): 6.25 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | ✓ |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| FL PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250mL plastic | |
| 504 EDB | HCl | 3 x 40mL glass vial | ✓ |
| 8260 VOCs | HCl | 3 x 40mL glass vial | |

**OBSERVATIONS / NOTES:**

purge rate - 300mL/min
@ 1105 purge rate = 500mL/min
unexpected surge produced more water than calculated

| Circle if Applicable: | | Signature(s): |
|---|---|---|
| MS/MSD | Duplicate ID No.: | |

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLFS4-MW305-0001
Sample Location: MW 305
Sampled By: C. Odom
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-4-07 / Time: 1600 / Method: low flow | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | clear | 6.51 | .102 | 27.07 | | | | |

**PURGE DATA:**

| Date: 1-4-07 | ~~Cond.~~ Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Method: low flow | 1.5 | 6.43 | .106 | 26.82 | 20.2 | 0.82 | 1550 | 32.95 |
| Monitor Reading (ppm): 55 | 3.0 | 6.51 | .103 | 27.18 | 13.1 | 0.91 | 1555 | 33.10 |
| Well Casing Diameter & Material | 4.5 | 6.51 | .102 | 27.07 | 10.7 | .63 | 1600 | 33.31 |
| Type: 2.0" PVC | | | | | | | | |
| Total Well Depth (TD): 40.0 | | | | | | | | |
| Static Water Level (WL): 31.51 | | | | | | | | |
| One Casing Volume(gal/D): 3.3 | | | | | | | | |
| Start Purge (hrs): 1545 | | | | | | | | |
| End Purge (hrs): 1600 | | | | | | | | |
| Total Purge Time (min): 15 | | | | | | | | |
| Total Vol. Purged (gal/Q): 4.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | Y |
| 8270 SVOC | 4°C | 2 x 1L Amber | Y |
| 8082 PCB | 4°C | 1 x 1L Amber | Y |
| FL-PRO | 4°C | 2 x 1L Amber | Y |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250 mL plastic | Y |
| 9012 Cyanide | NaOH | 1 x 250 mL plastic | Y |
| 8011 EDB | HCl | 3 x 40 mL glass vial | Y |
| 8260B VOC | HCl | 3 x 40 mL glass vial | Y |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate - 300mL/min

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

C. Odom

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

Sample ID No.: DLF39-MW315-00
Sample Location: MW315
Sampled By: C. Dan
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[✓] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

**SAMPLING DATA:**

| Date: 1-5-07 | Color | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Time: | (Visual) | (S.U.) | (mS/cm) | ($^0$C) | (NTU) | (mg/l) | (%) | |
| Method: Low flow | | | | | | | | |

**PURGE DATA:**

| Date: 1-5-07 | ~~Purge~~ Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Turb~~ Salinity | ~~Sal~~ Other |
|---|---|---|---|---|---|---|---|---|
| Method: Low flow | 1.0L | 6.10 | .132 | 25.22 | 250 | .27 | 1425 | 32.10 |
| Monitor Reading (ppm) 20.0 | 3.0 | 6.16 | .129 | 26.35 | 81.8 | .39 | 1435 | 32.45 |
| Well Casing Diameter & Material | 5.0L | 6.77 | .124 | 29.39 | 40 | .29 | 1445 | 33.48 |
| Type: 2.0" PVC | 8.0L | 6.84 | .122 | 30.34 | 19 | .11 | 1450 | 34.10 |
| Total Well Depth (TD): 40 | 7.0L | 6.84 | .121 | 28.45 | 9.0 | .17 | 1455 | 34.32 |
| Static Water Level (WL): 30.71 | 8.0L | 6.88 | .120 | 29.22 | 25 | .20 | 1500 | 34.50 |
| One Casing Volume(gal/L) 6.08 | 9.0L | 6.84 | .124 | 29.83 | 12 | .14 | 1505 | 34.80 |
| Start Purge (hrs): 1420 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | ✓ |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| FL-PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | $HNO_3$ | 1 x 250mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250mL plastic | |
| 8011 EDB | HCl | 3 x 40mL glass | |
| 8260 VOC | HCl | 3 x 40mL glass | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge rate ~ 200mL/min
pump raises water temp

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanfley SF CTO 29
Project No.: 112600389

Sample ID No.: OLSF4-MW-32S-0011
Sample Location: OLSF4-MW-32S
Sampled By: S.D. Spalding
C.O.C. No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: 1-5-07 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1110 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Sub/Low Flow | Clear | 6.45 | .100 | 27.12 | 2.1 | .81 | ~~1040~~ | |

**PURGE DATA:**

| Date: 1-5-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | 120 ml/m | 6.38 | .102 | 23.57 | 4.5 | 1.72 | 1040 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | | 6.42 | .099 | 25.97 | 6.9 | 1.10 | 1045 | |
| Type: 2"/PVC | | 6.44 | .100 | 27.06 | 3.4 | .78 | 1050 | |
| Total Well Depth (TD): 39.46 | | 6.47 | .101 | 26.93 | 2.2 | .80 | 1055 | |
| Static Water Level (WL): 30.3 | 120 ml/m | 6.45 | .100 | 27.12 | 2.1 | .81 | 1110 | ≈ 31.6 |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1035 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | # | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sawkey
Project No.: 112601389

Sample ID No.: OLSF4-MW-335-001
Sample Location: OLSF4-MW-335
Sampled By: S.D. Spalding
C.O.C. No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: / Time: | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |

**PURGE DATA:**

| Date: 1-4-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low flow | | 6.23 | .079 | 23.54 | 80.2 | 6.54 | 1545 | |
| Monitor Reading (ppm): | | See Low Flow Purge Data Sheet | | | | | 1555 | |
| Well Casing Diameter & Material | | 6.18 | .078 | 26.32 | 12 | 5.02 | | |
| Type: 2" PVC | | 6.28 | .082 | 27.46 | 8.5 | 4.22 | | |
| Total Well Depth (TD): 39.75 | | | | | | | | |
| Static Water Level (WL): 29.35 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: OLF54-MW345-001
Sample Location: MW345
Sampled By: C. Dan
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 1-8-07 / Time: 1015 / Method: low flow | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | clear | 6.77 | .126 | 26.43 | 16 | 1.15 | | |

**PURGE DATA:**

| Date: 1-5-07 | ~~Color~~ Volume | pH | S.C. | Temp. | Turbidity | DO | ~~Salinity~~ | ~~Other~~ |
|---|---|---|---|---|---|---|---|---|
| Method: low flow | 1.0 | 6.56 | .135 | 27.61 | 100 | 1.14 | 0945 | 32.11 |
| Monitor Reading (ppm): 10.0 | 2.0 | 6.74 | .134 | 24.25 | 100 | 1.29 | 0950 | 32.17 |
| Well Casing Diameter & Material | 3.0 | 6.76 | .127 | 25.23 | 22 | 1.28 | 0955 | 32.17 |
| Type: 2.0" PVC | 4.0 | 6.76 | .126 | 25.88 | 14 | 1.17 | 1000 | 32.17 |
| Total Well Depth (TD): 39.60 | 5.0 | 6.77 | .126 | 26.43 | 16 | 1.15 | 1005 | 32.17 |
| Static Water Level (WL): 31.41 | | | | | | | | |
| One Casing Volume(gal): 5.0L | | | | | | | | |
| Start Purge (hrs): 0940 | | | | | | | | |
| End Purge (hrs): 1005 | | | | | | | | |
| Total Purge Time (min): 25 | | | | | | | | |
| Total Vol. Purged (gal): 5.0 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| 8270 PAH | 4°C | 2 x 1L Amber | Y |
| 8270 SVOC | 4°C | 2 x 1L Amber | |
| 8082 PCB | 4°C | 1 x 1L Amber | |
| ~~8015~~ FL-PRO | 4°C | 2 x 1L Amber | |
| 6010/7470 TAL metals | HNO3 | 1 x 250 mL plastic | |
| 9012 Cyanide | NaOH | 1 x 250mL plastic | |
| 8011 EDB | HCl | 3 x 40 mL glass | |
| 8260B VOC | HCl | 3 x 40 mL glass | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

purge vol = 200mL/min

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sanford Field CTO 29
Project No.: 112600289

Sample ID No.: OLSF4-MW-355-00 / 00 ID
Sample Location: OLSF4-MW-355--
Sampled By: J.D. Spalding
C.O.C. No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: 1-8-07 / Time: 1035 | Color Visual | pH Standard | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/l | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | Clear | 6.19 | 0.096 | 28.96 | 12.8 | 4.18 | | ▽ 31.19 |

**PURGE DATA:**

| Date: 1-8-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | 150 mL/m | 6.08 | 0.098 | 33.07 | 94.2 | 5.56 | 0935 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 150mL/m | 6.14 | 0.097 | 24.30 | 90.4 | 5.70 | 0950 | 30.24 ▽ |
| Type: 2" / PVC | 150mL/m | 6.13 | 0.096 | 27.51 | 51.8 | 5.38 | 1000 | 30.37 ▽ |
| Total Well Depth (TD): 36.12 | 150mL/m | 6.17 | 0.098 | 28.81 | 54.7 | 4.80 | 1010 | 30.58 ▽ |
| Static Water Level (WL): 29.41 | 150mL/m | 6.17 | 0.098 | 29.16 | 33.8 | 4.34 | 1020 | 30.62 ▽ |
| One Casing Volume(gal/L): | 200mL/m | 6.31 | 0.097 | 29.00 | 23.7 | 4.17 | 1030 | ▽ 31.20 |
| Start Purge (hrs): 0935 | 200mL/m | 6.19 | 0.096 | 28.96 | 12.8 | 4.18 | 1035 | ▽ 31.19 |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Sauflex CTO 29
Project No.: 112600/389

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: OLSF4-MW-36S-001
Sample Location: OLSF4-MW-36S
Sampled By: S.D. Spalding
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: 1-5-07 | Color | pH | S.C. | Temp. | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Time: 1445 | Visual | Standard | mS/cm | °C | NTU | mg/l | | |
| Method: Sub/Low Flow | Clear | 5.98 | .141 | 26.98 | 4.38 | 1.95 | | |

**PURGE DATA:**

| Date: 1-5-07 | Volume | pH | S.C. | Temp. (C) | Turbidity | DO | TBD | TBD |
|---|---|---|---|---|---|---|---|---|
| Method: Sub/Low Flow | 125 ml/min | 5.99 | .139 | 23.22 | 61.7 | 3.55 | 1415 | |
| Monitor Reading (ppm): | | **See Low Flow Purge Data Sheet** | | | | | | |
| Well Casing Diameter & Material | 200 ml/min | 5.99 | .138 | 25.43 | 33.7 | 2.24 | 1430 | -30.27 |
| Type: 2" / PVC | | 5.99 | .139 | 27.13 | 10.82 | 2.09 | 1435 | -30.27 |
| Total Well Depth (TD): 39.02 | | 5.99 | .140 | 26.68 | 7.19 | 2.00 | 1440 | |
| Static Water Level (WL): 29.82 | 200 ml/min | 5.98 | .141 | 26.98 | 4.38 | 1.95 | 1445 | -30.28 |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1415 | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

**Circle if Applicable:**

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[X] Other Well Type: DPT Screen Point
[] QA Sample Type:

Sample ID No.: OLF54-DPW1-G53-55
Sample Location: DPW1
Sampled By: Gary J. Davis
C.O.C. No.: JO 2807
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. ($^0$C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 9-8-06 | | | | | | | | |
| Time: 1530 | | | | | | | | |
| Method: Grab | | | | | | | | |

**PURGE DATA:**

| Date: | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected ~~✓~~ |
|---|---|---|---|
| TCL VOCs & App IX | HCL | 3-40ml VOAs | ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[X] Other Well Type: DPT Screen Point
[] QA Sample Type:

Sample ID No.: OLFSA-DPW3-G53-55
Sample Location: DPW3
Sampled By: Gary J. Davis
C.O.C. No.: 2804
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 9-9-06 / Time: 1215 / Method: Grab | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. ($^0$C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TCL VOCs & App IX | HCL | 3-40ml. VOAs | ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[X] Other Well Type: DPT Screen Point
[] QA Sample Type:

Sample ID No.: OLFS4-DPW5-G 53-55
Sample Location: DPW 5
Sampled By: Gary J. Davis
C.O.C. No.: 2806
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 9-9-06 / Time: 1755 / Method: Grab | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. ($^0$C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TCL VOCs + App IX | HCL | 3- 40ml VOAs | ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):** Gary J. Davis

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[X] Other Well Type: DPT Screen Point
[] QA Sample Type:

Sample ID No.: OLF54-DPW7-G053-55
Sample Location: DPW7
Sampled By: Gary J. Davis
C.O.C. No.: 1804
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 9-11-06 / Time: 1500 / Method: Grab | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: 9-11-06 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TCL VOCs + App IX | HCL | 3-40ml VOAs | ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Saufley Site 4
Project No.: 112G00389

[] Domestic Well Data
[] Monitoring Well Data
[X] Other Well Type: DPT Screen Point
[] QA Sample Type:

Sample ID No.: OLFSA-DPW9-G-53-55
Sample Location: DPW9
Sampled By: Gary J. Davis
C.O.C. No.: 3808
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 9-10-06<br>Time: 1405<br>Method: Grab | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. ($^0$C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

**PURGE DATA:**

| Date: | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: | | | | | | | | |
| Monitor Reading (ppm): | | | | | | | | |
| Well Casing Diameter & Material | | | | | | | | |
| Type: | | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): | | | | | | | | |
| End Purge (hrs): | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TCL VOCs & App IX | HCL | 3-40 ml voas | ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

Circle if Applicable:
MS/MSD
Duplicate ID No.: OLFSA-DUP02-G

Signature(s): Gary J. Davis

Tetra Tech NUS, Inc.

# MONITORING WELL DEVELOPMENT RECORD



Well: OLSF4-MW-365
Site: Saufley Site 4
Date Installed: _____
Date Developed: 12-15-06
Dev. Method: _____
Pump Type: Waterra

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): _____
Static Water Level After (ft.): _____
Screen Length (ft.): _____
1 Well Volume: (.1632 X Feet H2O)
Casing ID (in.): 2-inch

Responsible Personnel: Gary Davis
Drilling Co.: ProSonic
Project Name: Saufley Site 4
Project Number: 112G00389

| Time | Estimated Sediment Thickness (Ft.) | Cumulative Water Volume (Gal.) | Water Level Readings (Ft. below TOC) | Temperature (Degrees C) | pH | Specific Conductance (Units mS/cm) | Turbidity (NTU) | Remarks (odor, color, etc.) DO SAL TDS ORP |
|---|---|---|---|---|---|---|---|---|
| 1200 Start | | | | | | | | |
| 1305 | | ~5gal | | 23.44 | 6.96 | 0.111 | 407 | 5.45 0 0.07 -35 |
| slowed pump 1320 | | ~10gal | | 24.39 | 6.62 | 0.111 | 341 | 4.35 0 0.07 -24 |
| 1340 | | ~12gal | | 25.02 | 6.83 | 0.112 | 264 | 5.52 0 0.07 -38 |
| sped up 1345 | | ~14gal | | 24.61 | 6.76 | 0.110 | 216 | 5.55 0 0.07 -12 |
| 1410 | | ~30gal | | 24.35 | 7.11 | 0.111 | 285 | 4.74 0 0.07 -30 |
| - Not enough to pump then monsoon. Not enough water. | | | | | | | | |
| | | | | | | | | Should be sufficient for |
| 1055 | | ~32gal | ~31.5 | 24.87 | 6.06 | 0.108 | 593 | low flow sampling |
| 1315 | | ~40gal | | 23.96 | 6.04 | 0.103 | 306 | 4.99 0 0.07 47 |
| 1530 | | ~50gal | ~31.5 | 24.15 | 5.96 | 0.103 | 37.9 | 5.76 0 0.07 41 |
| 1535 | | ~55gal | | 24.34 | 6.03 | 0.103 | 0 | 5.87 0 0.07 37 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | - Done | | | | |
| | | | | | | | | |

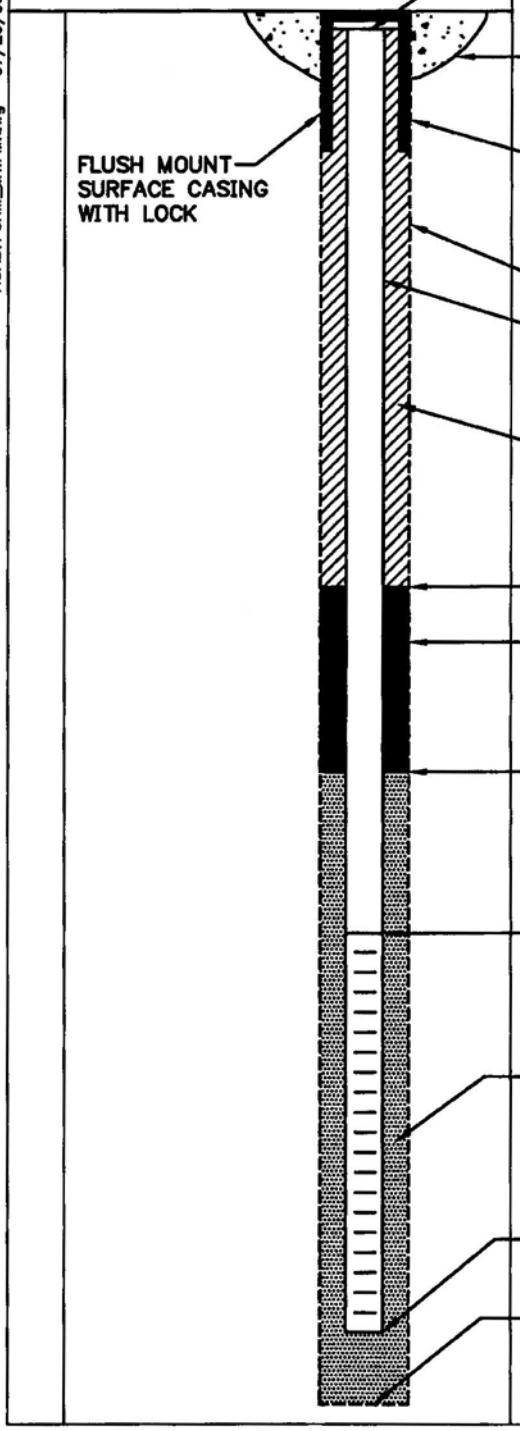
12-7-06 Monsoon Smaller tubing

WELL NO.: OLFS4-MW- 01D2

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-01D2 | DRILLING METHOD: Sonic |
| DATE BEGUN: 11-29-06 | DATE COMPLETED: 11-29-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 130

ELEVATION / DEPTH BOTTOM OF SAND: 141 (Sand later bailed to 135')

ELEVATION/DEPTH BOTTOM OF HOLE: 141

BACKFILL MATERIAL BELOW SAND: Natural

ACAD: FORM_MWFM.dwg 07/20/99 INL

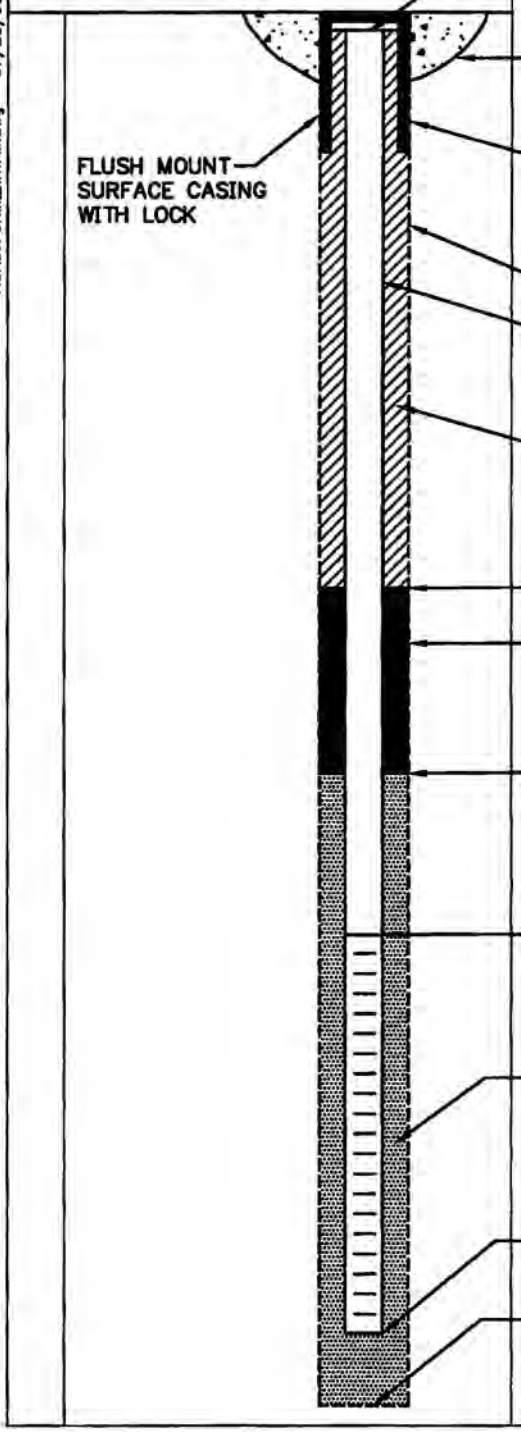
WELL NO.: OLFS4-MW-02-D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-02D | DRILLING METHOD: Sonic |
| DATE BEGUN: 11-29-06 | DATE COMPLETED: 11-29-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 171

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 173

ELEVATION/DEPTH TOP OF SCREEN: 175

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 180

ELEVATION / DEPTH BOTTOM OF SAND: 180

ELEVATION/DEPTH BOTTOM OF HOLE: 180

BACKFILL MATERIAL BELOW SAND: Natural

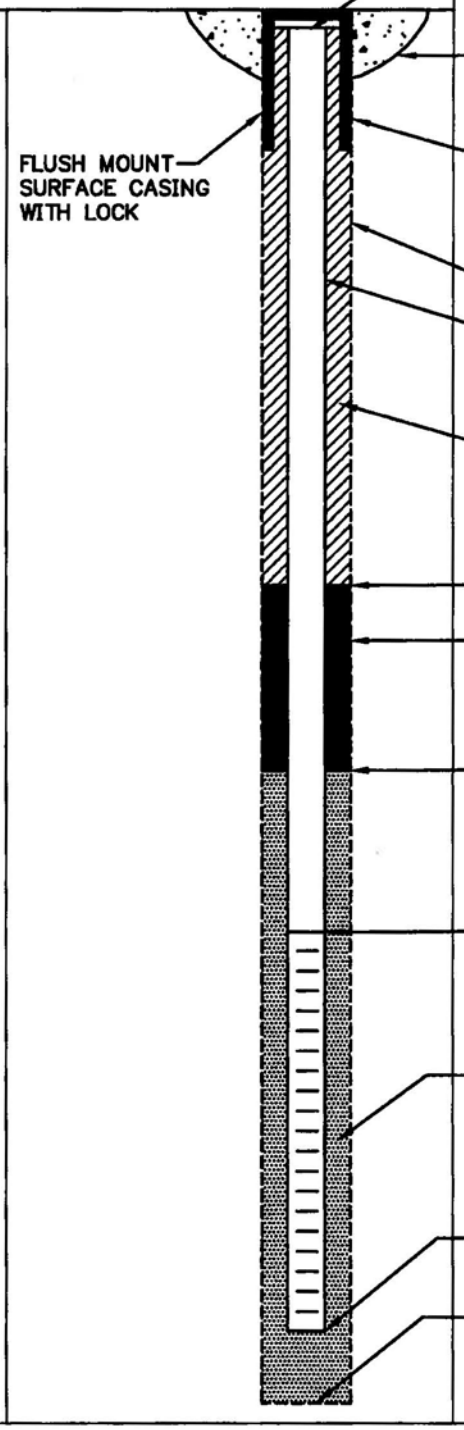
WELL NO.: OLFS4-MW-03-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-03-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 11-30-06 | DATE COMPLETED: 11-30-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 20 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 160

ELEVATION / DEPTH BOTTOM OF SAND: 160

ELEVATION/DEPTH BOTTOM OF HOLE: 160

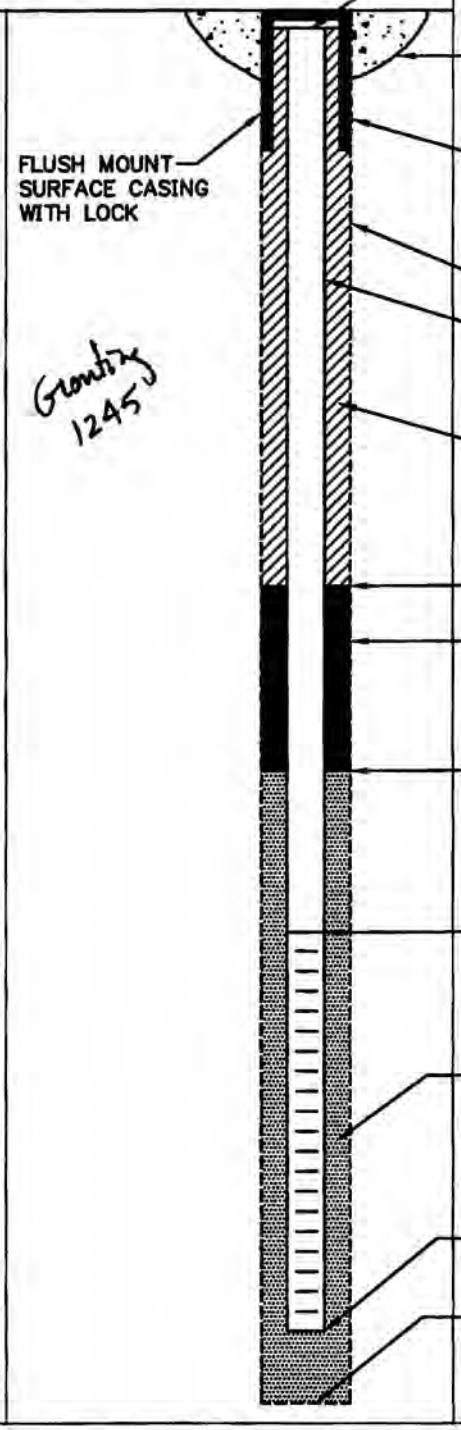
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-04D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-04D | DRILLING METHOD: Sonic |
| DATE BEGUN: 11-30-06 | DATE COMPLETED: 11-30-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 171

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 173

ELEVATION/DEPTH TOP OF SCREEN: 175

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 180

ELEVATION / DEPTH BOTTOM OF SAND: 181

ELEVATION/DEPTH BOTTOM OF HOLE: 181

BACKFILL MATERIAL BELOW SAND: Natural

ACAD: FORM_MWFM.dwg 07/20/99 INL

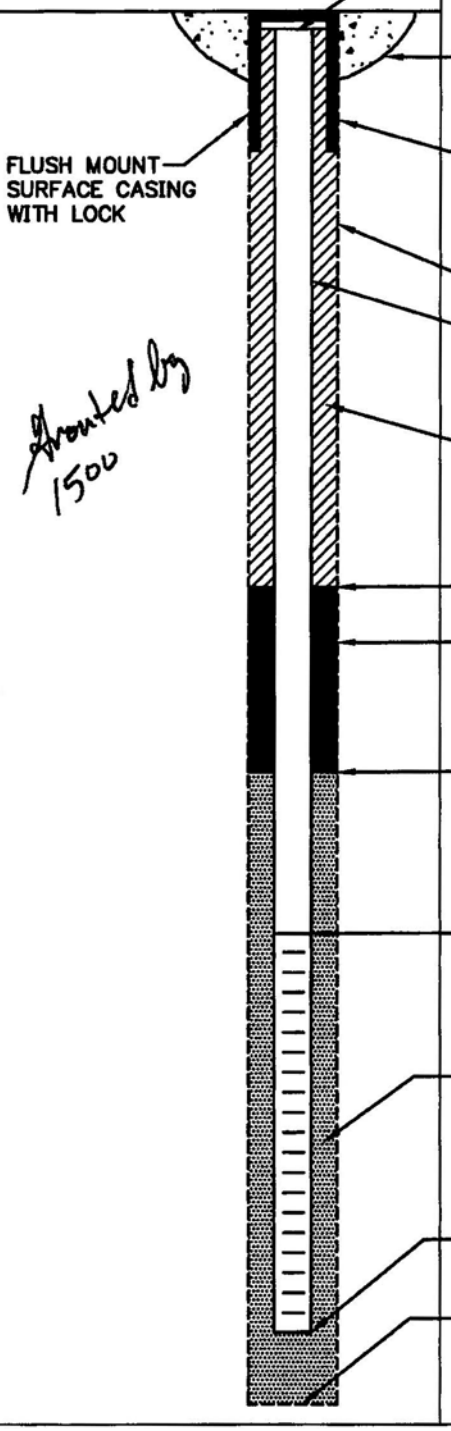
WELL NO.: OLFS4-MW-05-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | | | |
|---|---|---|---|---|---|
| PROJECT | Saufley Site 4 | LOCATION | Pensacola, FL | DRILLER | ProSonic |
| PROJECT NO. | 112G00389 | BORING | MW-05S | DRILLING METHOD | Sonic |
| DATE BEGUN | 11-30-06 | DATE COMPLETED | 11-30-06 | | |
| FIELD GEOLOGIST | Gary J. Davis | | | DEVELOPMENT METHOD | Pump & Surge |
| GROUND ELEVATION | | DATUM | | | |

ACAD: FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 155

ELEVATION/DEPTH BOTTOM OF HOLE: 155

BACKFILL MATERIAL BELOW SAND: Natural

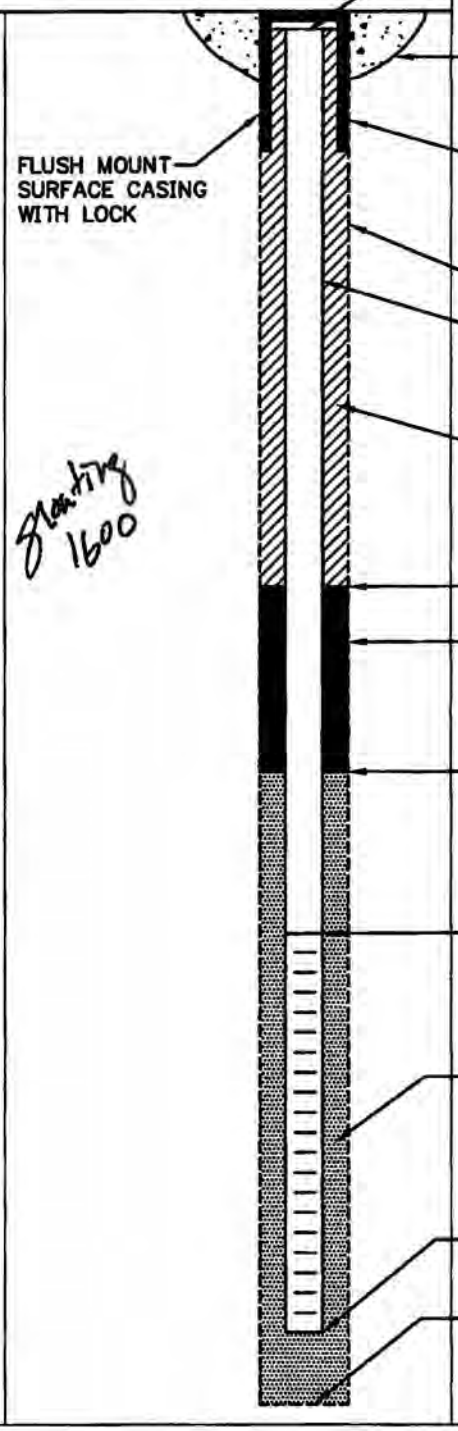
WELL NO.: OLFS4-MW- 06-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-06-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 11-30-06 | DATE COMPLETED: 11-30-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 155

ELEVATION/DEPTH BOTTOM OF HOLE: 155

BACKFILL MATERIAL BELOW SAND: Natural

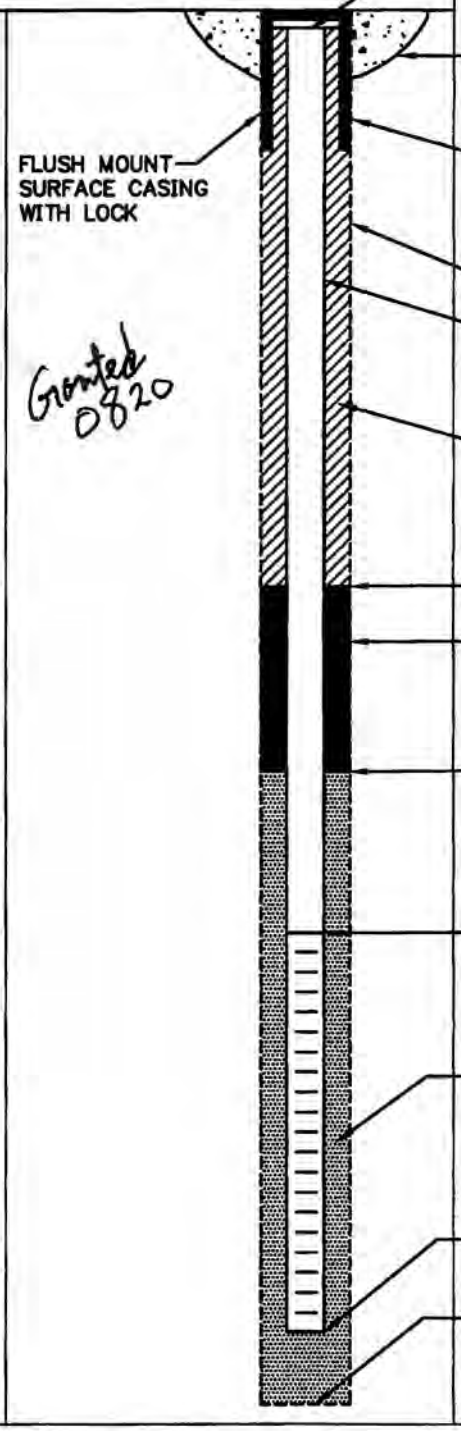
WELL NO.: OLFS4-MW-07-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic | |
| PROJECT NO.: 112G00389 | BORING: MW-07S | DRILLING METHOD: Sonic | |
| DATE BEGUN: 11-30-06 12-1-06 | DATE COMPLETED: 11-30-06 12-1-06 | | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge | |
| GROUND ELEVATION: | DATUM: | | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 155

ELEVATION/DEPTH BOTTOM OF HOLE: 155

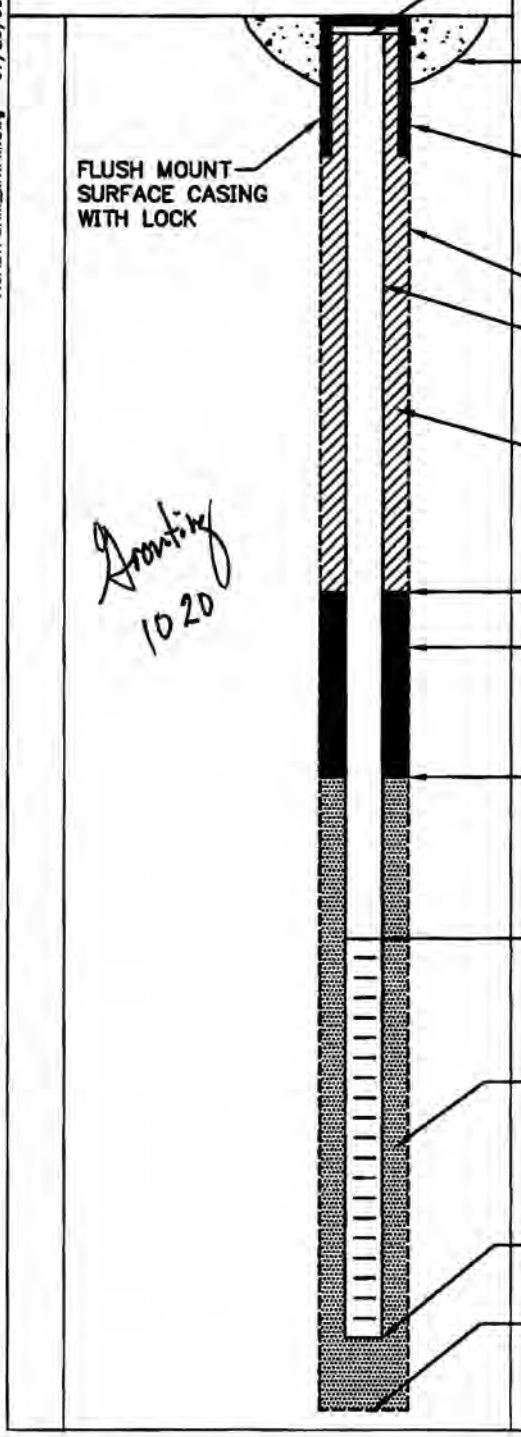
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-08-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-08-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-1-06 | DATE COMPLETED: 12-1-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 155

ELEVATION/DEPTH BOTTOM OF HOLE: 155

BACKFILL MATERIAL BELOW SAND: Natural

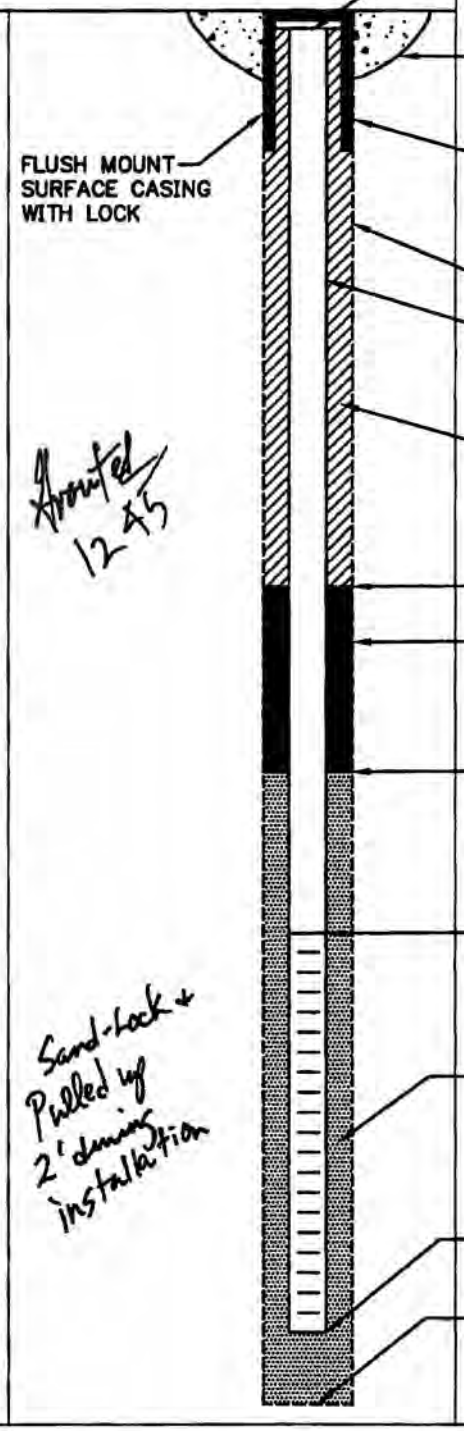
ACAD: FORM_MWFM.dwg 07/20/99 INL

WELL NO.: OLFS4-MW-09-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-09-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-1-06 | DATE COMPLETED: 12-1-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 136 ~~138~~ Dup

ELEVATION/DEPTH TOP OF SCREEN: 138 ~~140~~ Dup

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 153 ~~155~~ Dup

ELEVATION / DEPTH BOTTOM OF SAND: 153 ~~155~~

ELEVATION/DEPTH BOTTOM OF HOLE: 153 ~~155~~

BACKFILL MATERIAL BELOW SAND: Natural

ACAD: FORM_MWFM.dwg 07/20/99 INL

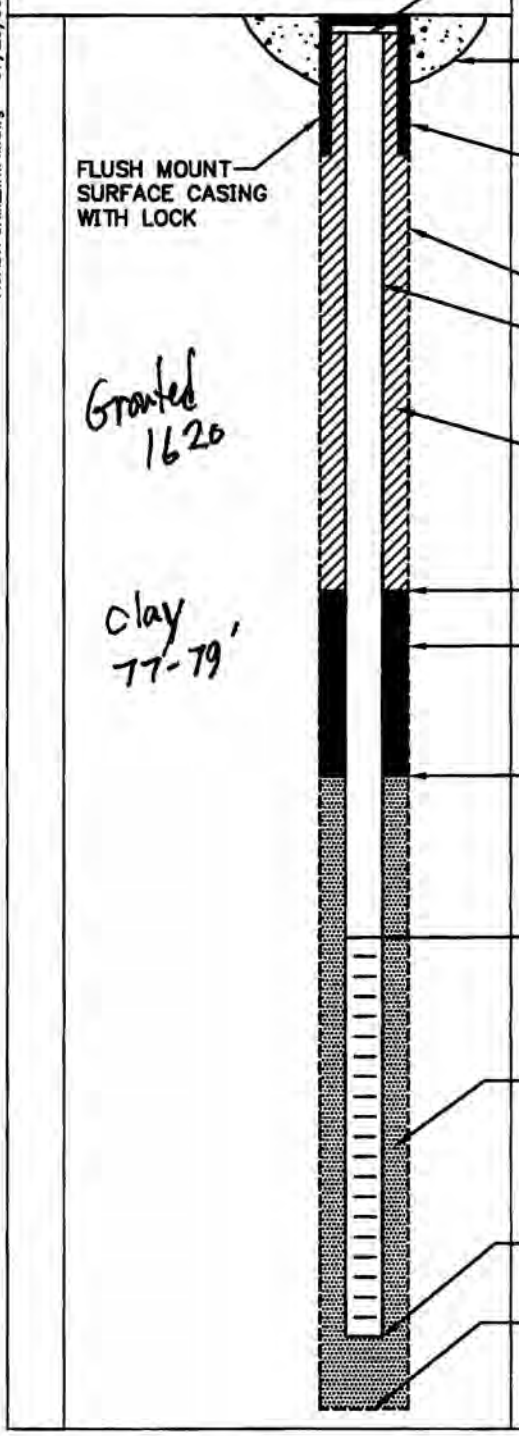
WELL NO.: OLFS4-MW-10D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-10D | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-1-06 | DATE COMPLETED: 12-1-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 177

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 178

ELEVATION/DEPTH TOP OF SCREEN: 180

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 185

ELEVATION / DEPTH BOTTOM OF SAND: 185

ELEVATION/DEPTH BOTTOM OF HOLE: 185

BACKFILL MATERIAL BELOW SAND: Natural

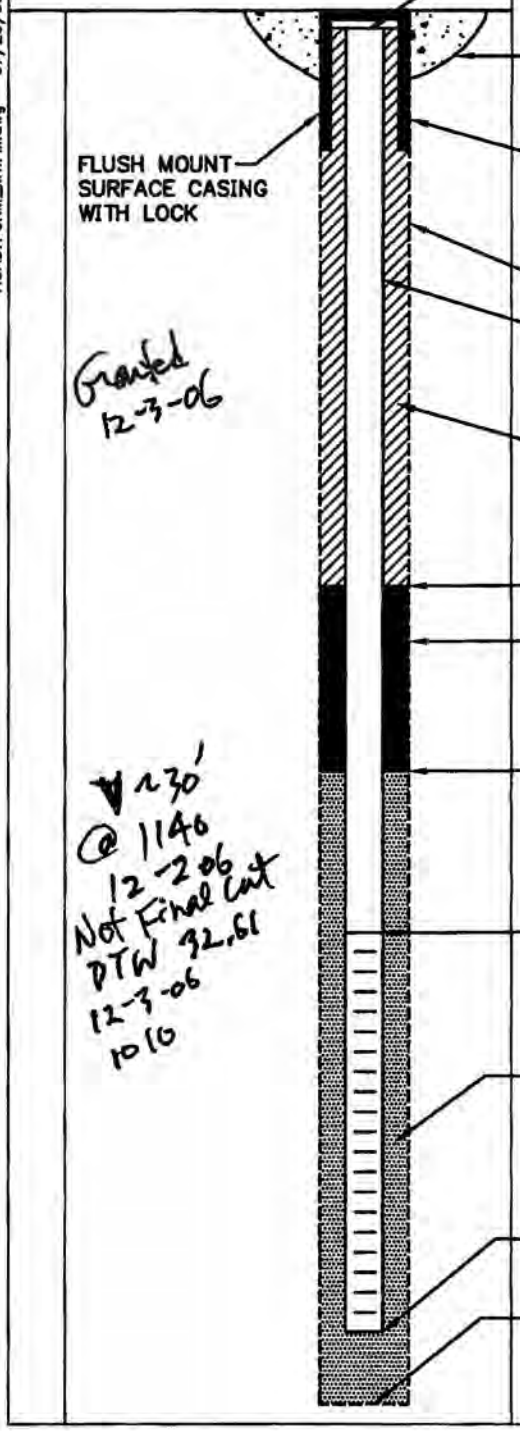
WELL NO.: OLFS4-MW-11-S

# OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

Tetra Tech NUS, Inc.

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-11S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-2-06 | DATE COMPLETED: 12-2-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

Granted 12-3-06

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

▼ 130' @ 1146 12-2-06 Not Final Cut DTW 32.61 12-3-06 1010

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 140

ELEVATION/DEPTH BOTTOM OF HOLE: 140

BACKFILL MATERIAL BELOW SAND: Natural

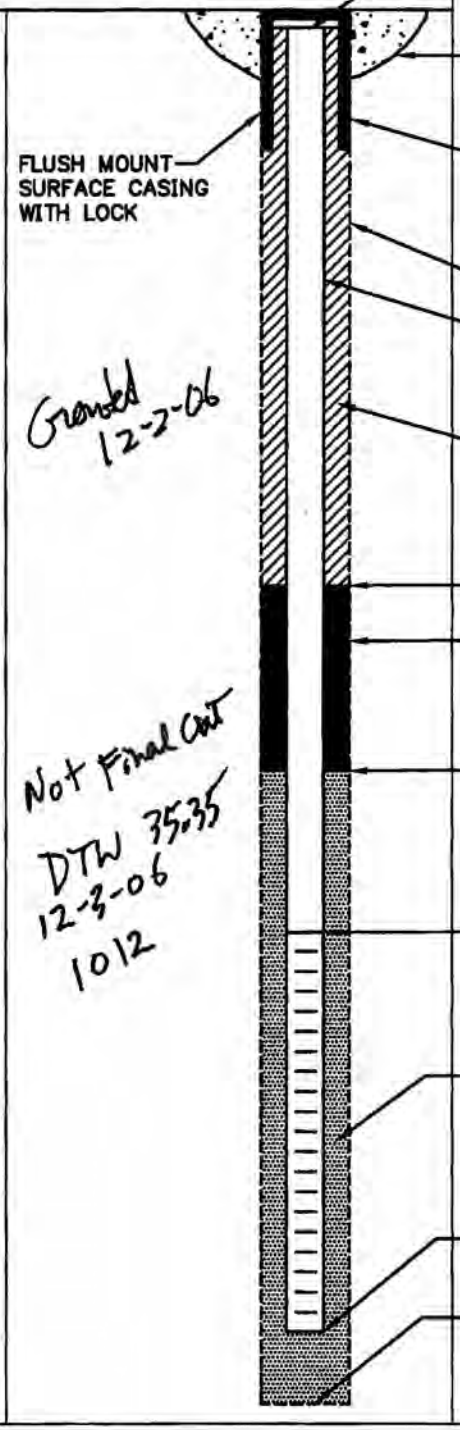
WELL NO.: OLFS4-MW- 12-S

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

**Tetra Tech NUS, Inc.**

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-12-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-2-06 | DATE COMPLETED: 12-2-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 20 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 145

ELEVATION / DEPTH BOTTOM OF SAND: 145

ELEVATION/DEPTH BOTTOM OF HOLE: 145

BACKFILL MATERIAL BELOW SAND: Natural

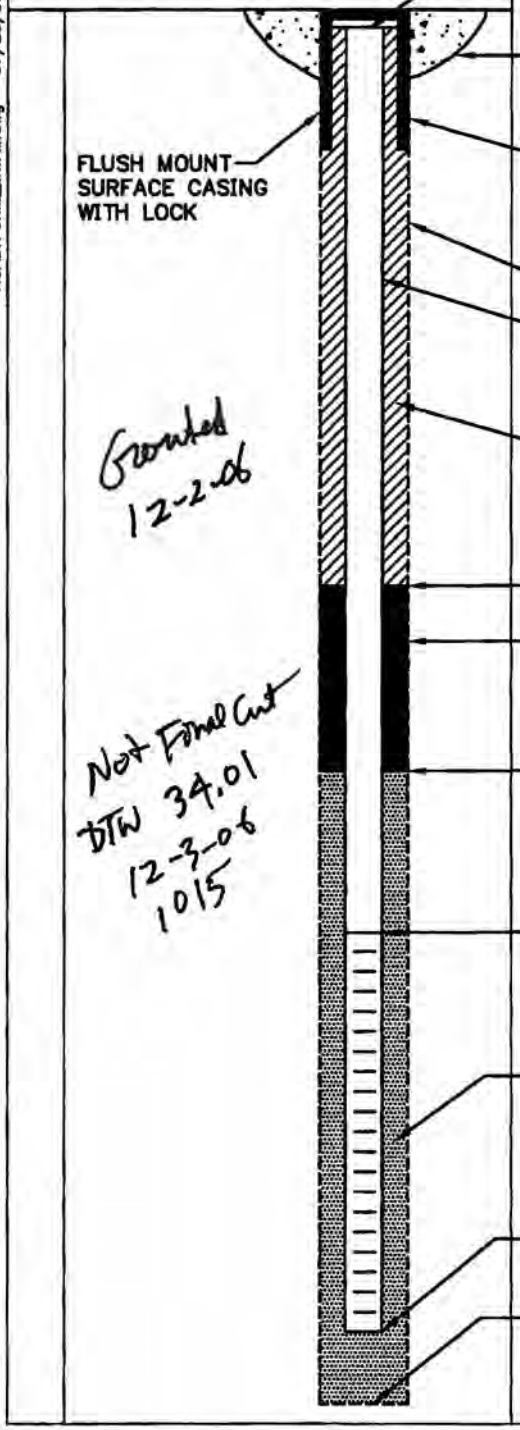
WELL NO.: OLFS4-MW-13S

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

**Tetra Tech NUS, Inc.**

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-13S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-2-06 | DATE COMPLETED: 12-2-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 20 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 145

ELEVATION / DEPTH BOTTOM OF SAND: 145

ELEVATION/DEPTH BOTTOM OF HOLE: 145

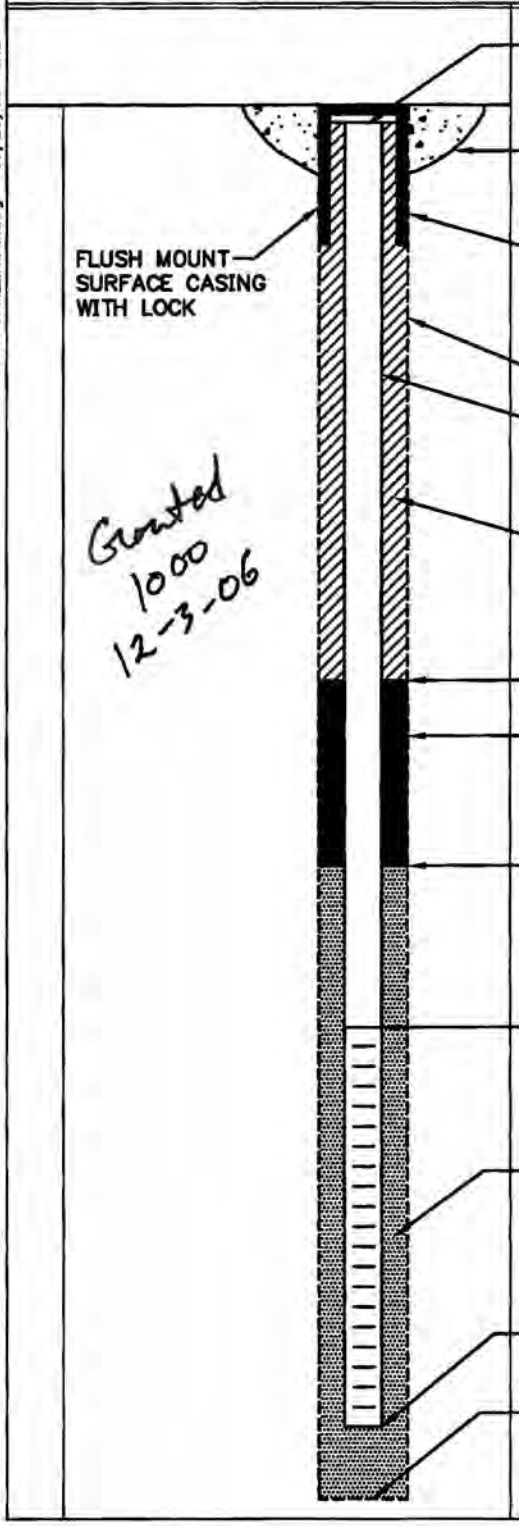
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-14D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic | |
| PROJECT NO.: 112G00389 | BORING: MW-14D | DRILLING METHOD: Sonic | |
| DATE BEGUN: 12-3-06 | DATE COMPLETED: 12-3-06 | | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge | |
| GROUND ELEVATION: | DATUM: | | |




ELEVATION TOP OF RISER: 

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 165

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 173

ELEVATION/DEPTH TOP OF SCREEN: 175

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 180

ELEVATION / DEPTH BOTTOM OF SAND: 181

ELEVATION/DEPTH BOTTOM OF HOLE: 181

BACKFILL MATERIAL BELOW SAND: Natural

ACAD: FORM_MWFM.dwg 07/20/99 INL

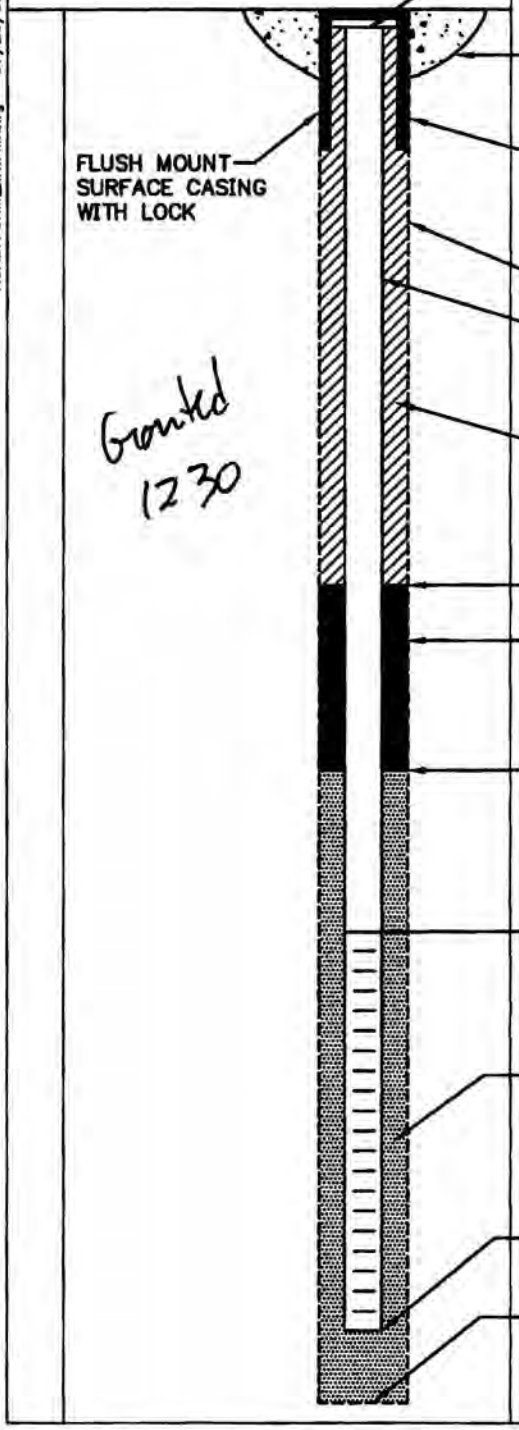
WELL NO.: OLFS4-MW-155

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-15-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-3-06 | DATE COMPLETED: 12-3-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 153

ELEVATION/DEPTH BOTTOM OF HOLE: 153

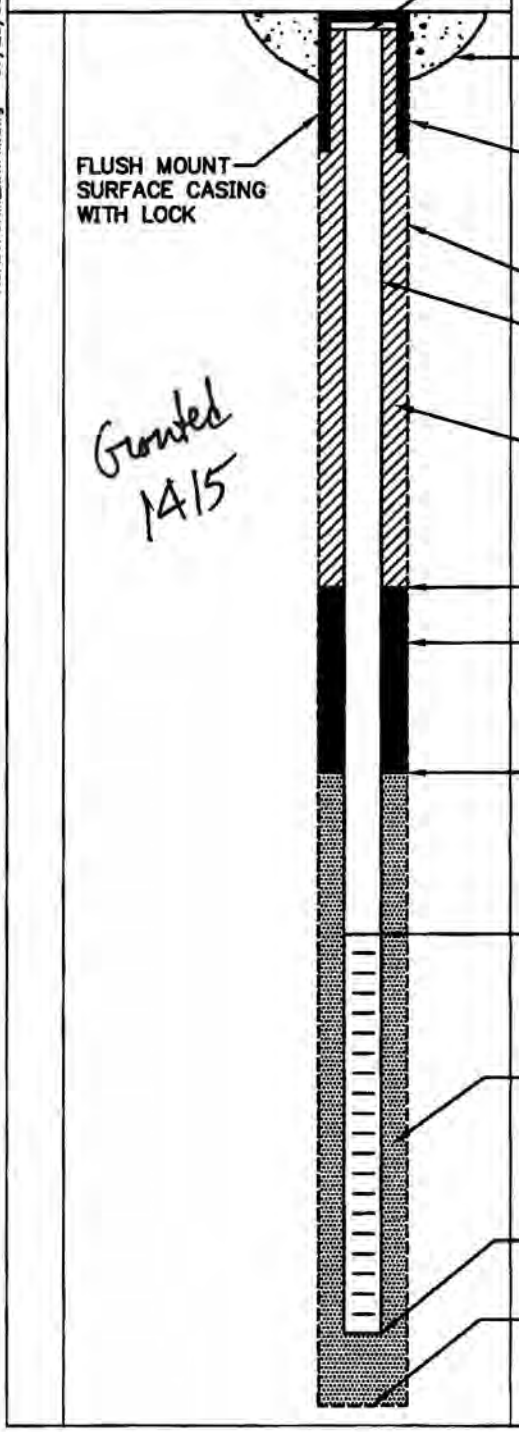
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-16S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-16S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-3-06 | DATE COMPLETED: 12-3-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 153

ELEVATION/DEPTH BOTTOM OF HOLE: 155

BACKFILL MATERIAL BELOW SAND: Native

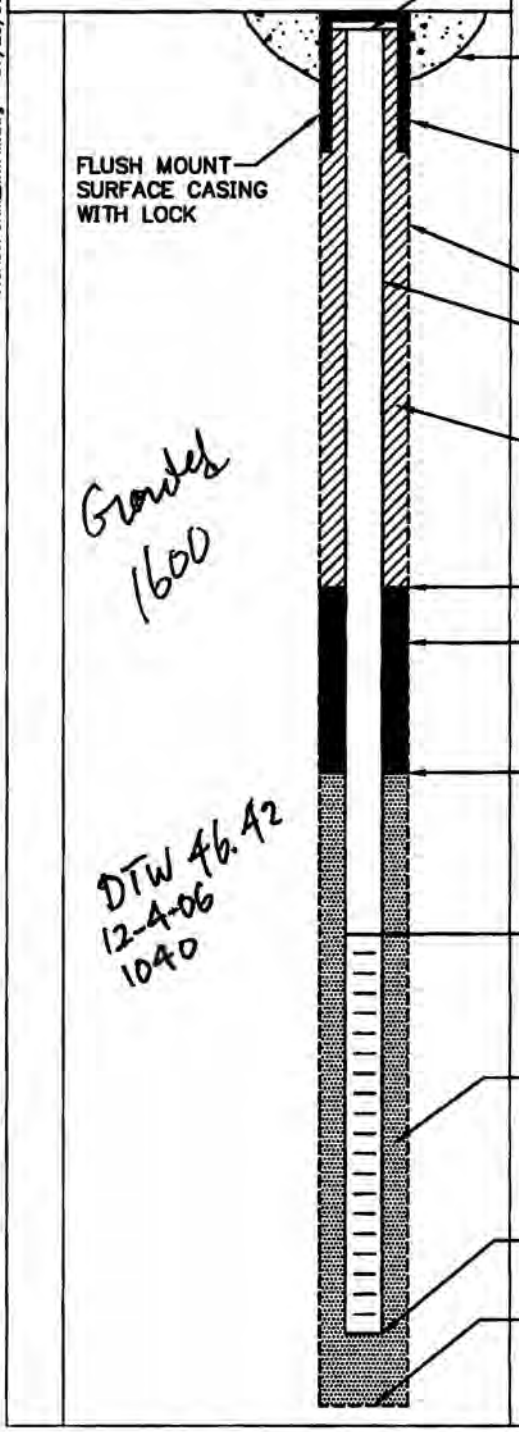
ACAD: FORM_MWFM.dwg 07/20/99 INL

WELL NO.: OLFS4-MW-175

**Tetra Tech NUS, Inc.**

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: MW-175 | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-3-06 | DATE COMPLETED: 12-3-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 131

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 133

ELEVATION/DEPTH TOP OF SCREEN: 135

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 20 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 155

ELEVATION/DEPTH BOTTOM OF HOLE: 153

BACKFILL MATERIAL BELOW SAND: Natural

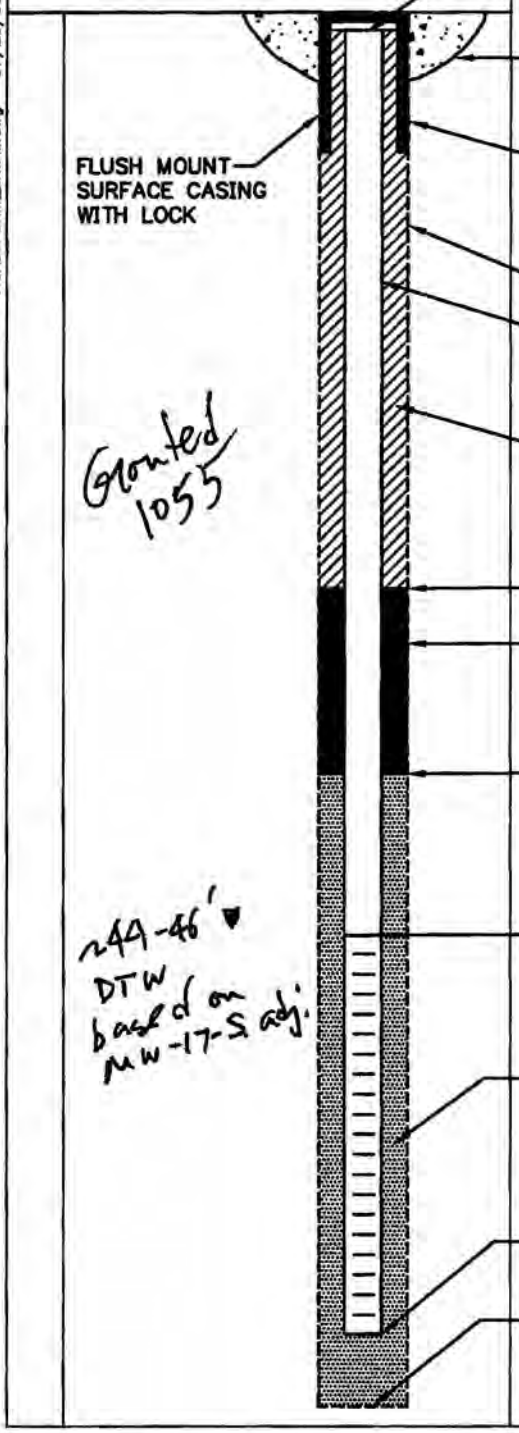
ACAD: FORM_MWFM.dwg 07/20/99 INL

WELL NO.: OLFS4-MW-18-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-18-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-4-06 | DATE COMPLETED: 12-4-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 156

ELEVATION/DEPTH BOTTOM OF HOLE: 156

BACKFILL MATERIAL BELOW SAND: Natural

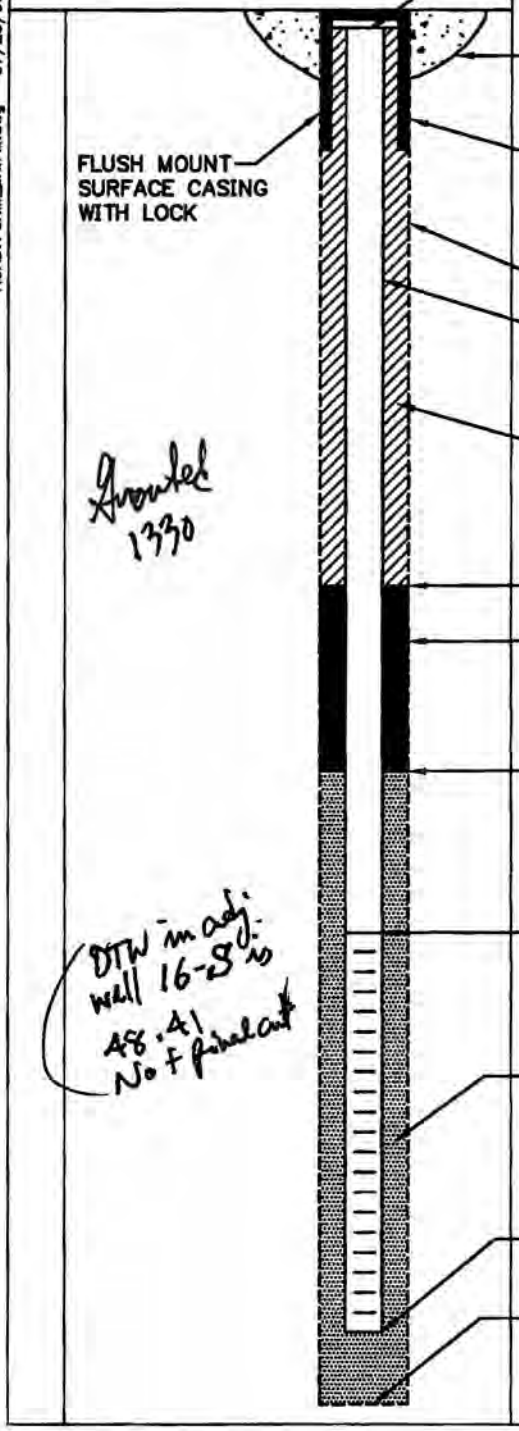
ACAD: FORM_MWFM.dwg 07/20/99 INL

WELL NO.: OLFS4-MW-19-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-4-06 | DATE COMPLETED: 12-4-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 156

ELEVATION/DEPTH BOTTOM OF HOLE: 156

BACKFILL MATERIAL BELOW SAND: Natural

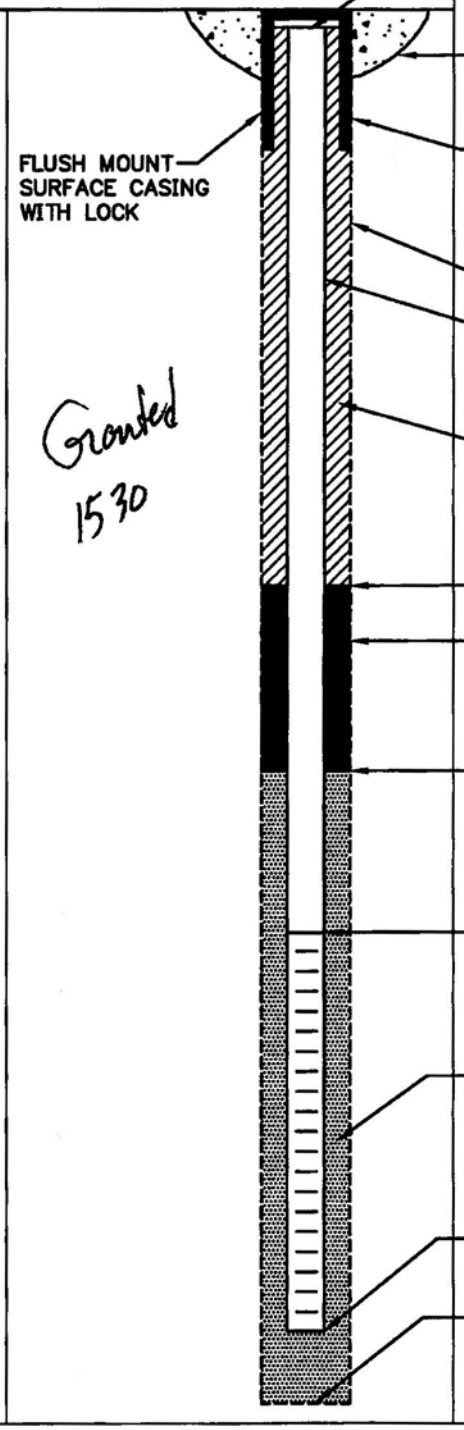
ACAD: FORM_MWFN.dwg 07/20/99 INL

WELL NO.: OLFS4-MW- 20S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW 20S' | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-4-06 | DATE COMPLETED: 12-4-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 126

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 128

ELEVATION/DEPTH TOP OF SCREEN: 130

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 145

ELEVATION / DEPTH BOTTOM OF SAND: 146

ELEVATION/DEPTH BOTTOM OF HOLE: 146

BACKFILL MATERIAL BELOW SAND: Natural

ACAD:FORM_MWFM.dwg 07/20/99 INL

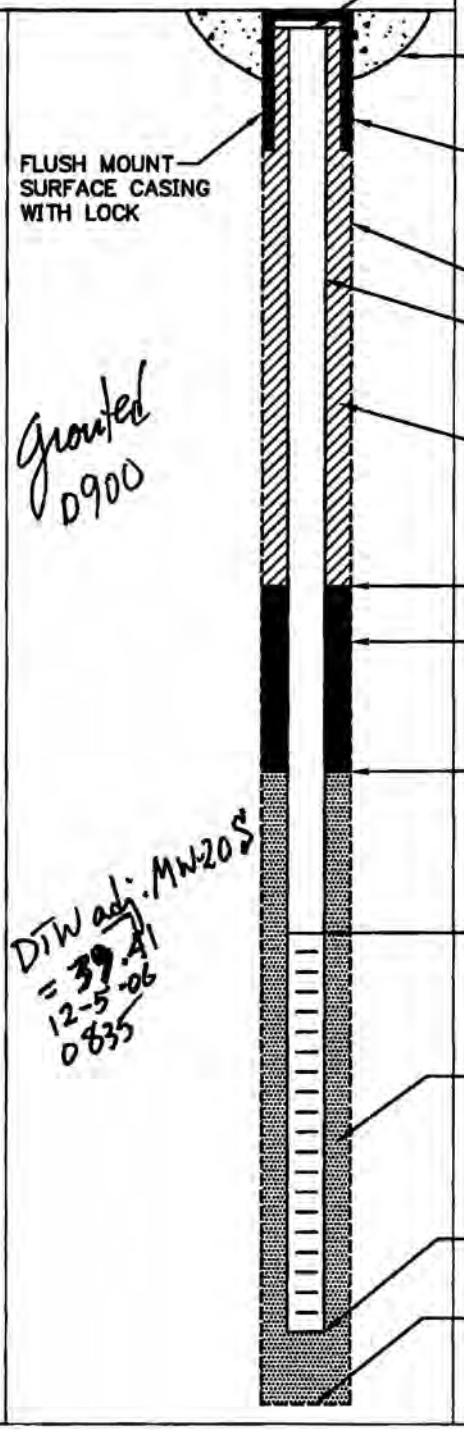
WELL NO.: OLFS4-MW-21-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic | |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-21-S | DRILLING METHOD: Sonic | |
| DATE BEGUN: 12-5-06 | DATE COMPLETED: 12-5-06 | | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge | |
| GROUND ELEVATION: | DATUM: | | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 126

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 128

ELEVATION/DEPTH TOP OF SCREEN: 130

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 145

ELEVATION / DEPTH BOTTOM OF SAND: 146

ELEVATION/DEPTH BOTTOM OF HOLE: 146

BACKFILL MATERIAL BELOW SAND: Natural

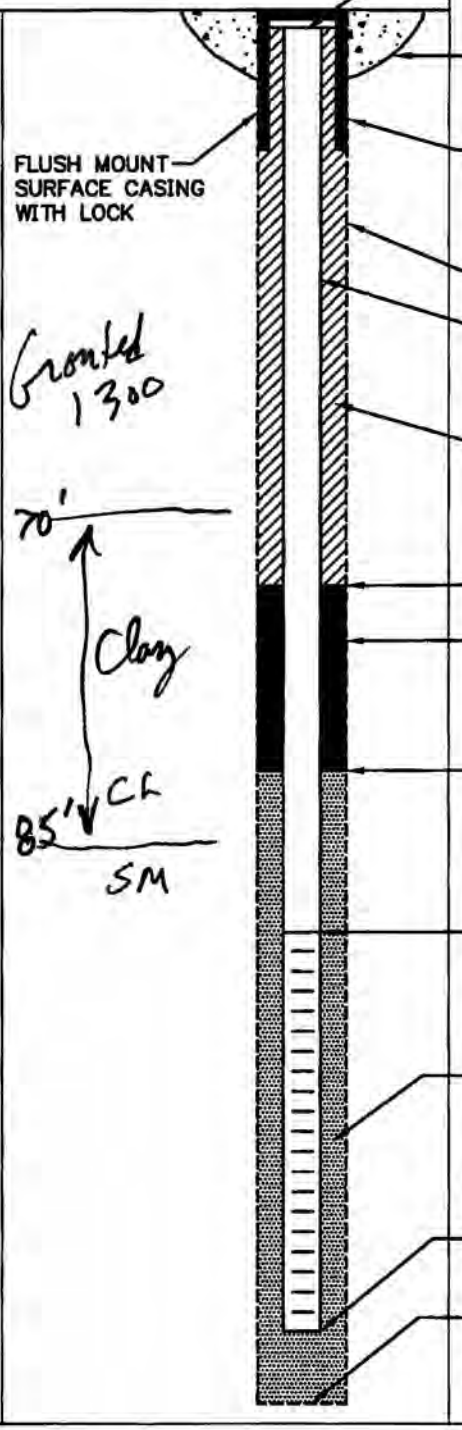
WELL NO.: OLFS4-MW-22D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-22D | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-5-06 | DATE COMPLETED: 12-5-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 182

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 184

ELEVATION/DEPTH TOP OF SCREEN: 186

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 191

ELEVATION / DEPTH BOTTOM OF SAND: 191

ELEVATION/DEPTH BOTTOM OF HOLE: 191

BACKFILL MATERIAL BELOW SAND: Natural

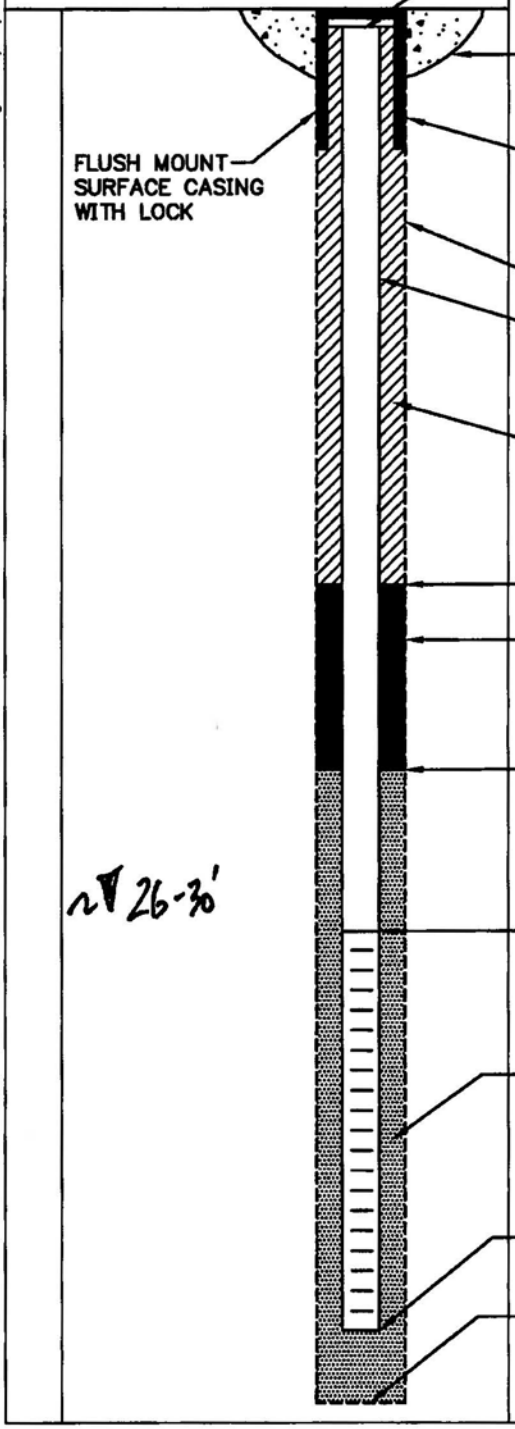
WELL NO.: OLFS4-MW-23S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-23S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-5-06 | DATE COMPLETED: 12-5-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 116

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 118

nT 26-30'

ELEVATION/DEPTH TOP OF SCREEN: 120

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 20 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

BACKFILL MATERIAL BELOW SAND: Natural

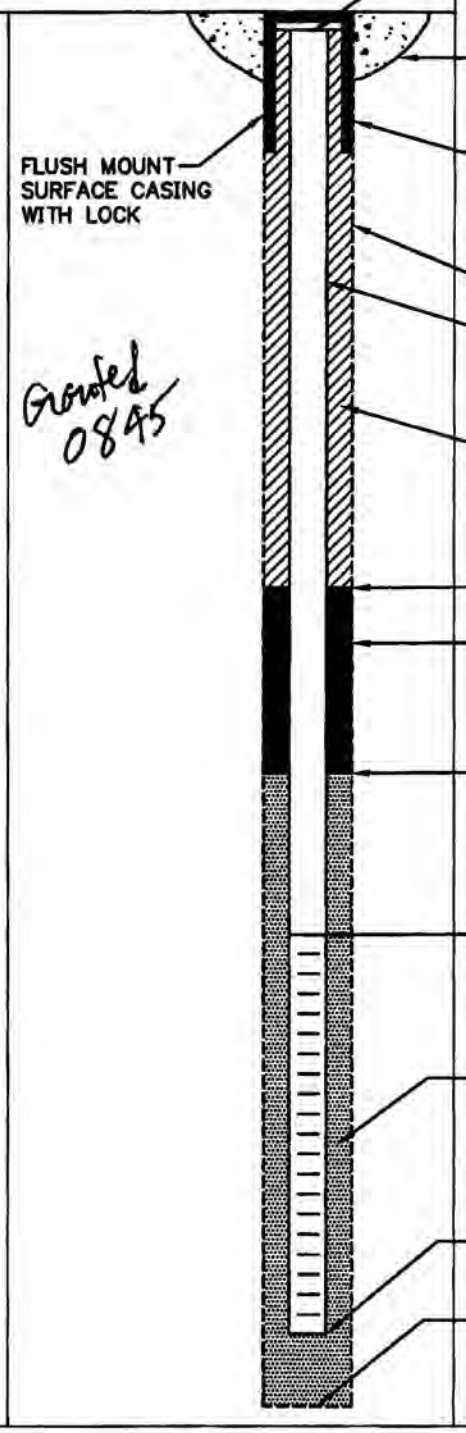
WELL NO.: OLFS4-MW-24-S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-24-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-6-06 | DATE COMPLETED: 12-6-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 155

ELEVATION/DEPTH BOTTOM OF HOLE: 155

BACKFILL MATERIAL BELOW SAND: Natural

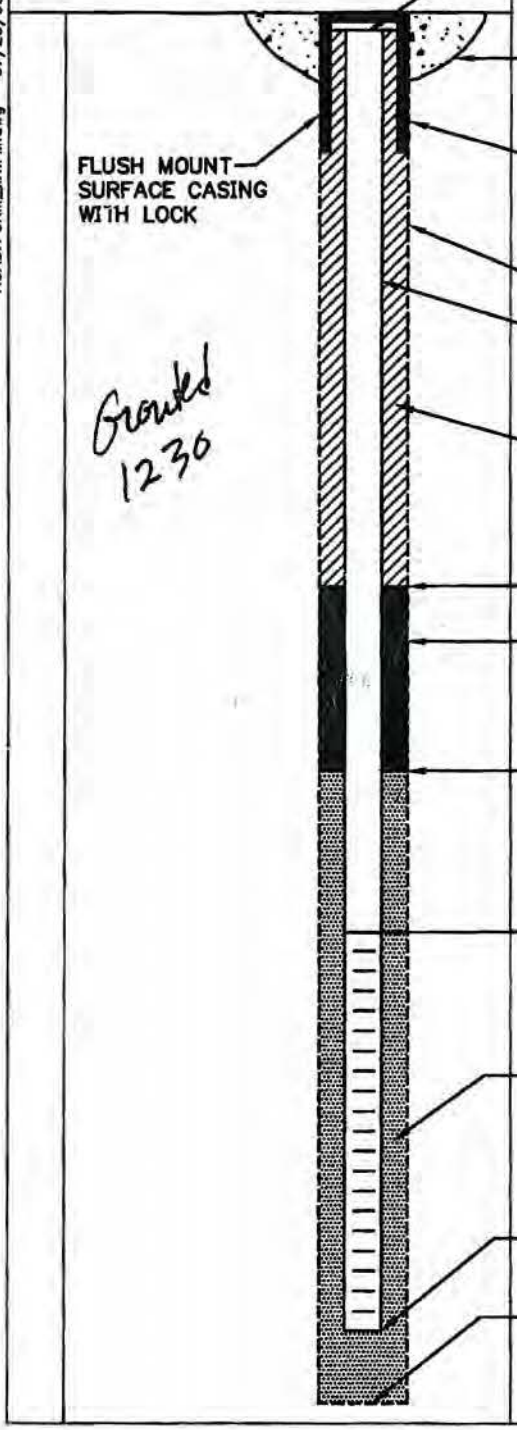
WELL NO.: OLFS4-MW- 255

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW25-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-7-06 | DATE COMPLETED: 12-7-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 156

ELEVATION/DEPTH BOTTOM OF HOLE: 156

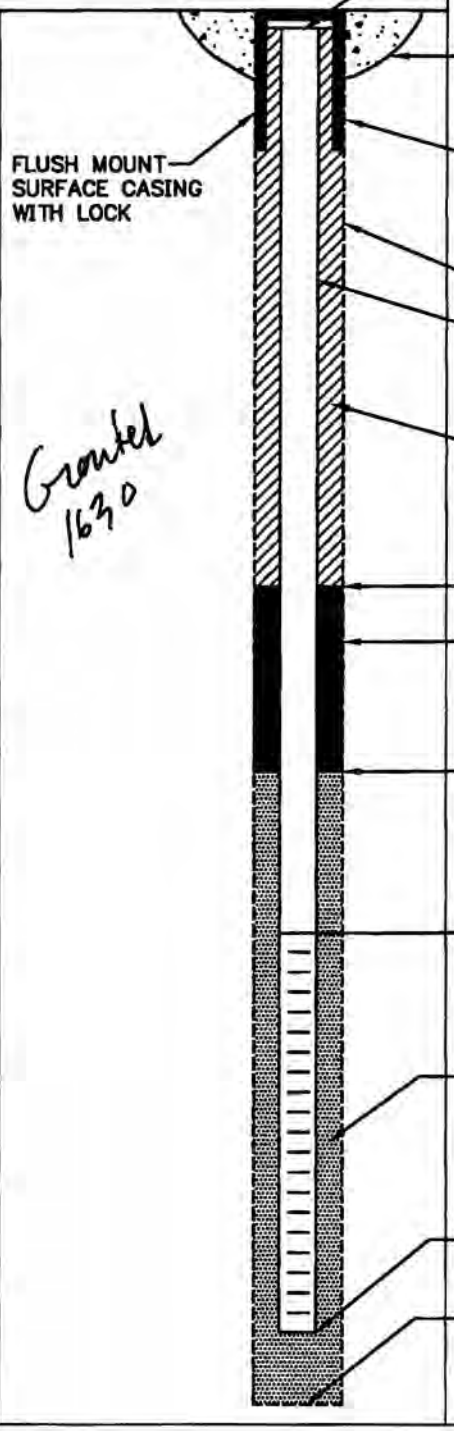
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW- 26D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic | |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW26D | DRILLING METHOD: Sonic | |
| DATE BEGUN: 12-7-06 | DATE COMPLETED: 12-7-06 | | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge | |
| GROUND ELEVATION: | DATUM: | | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 172

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 174

ELEVATION/DEPTH TOP OF SCREEN: 176

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 181

ELEVATION / DEPTH BOTTOM OF SAND: 181

ELEVATION/DEPTH BOTTOM OF HOLE: 181

BACKFILL MATERIAL BELOW SAND: Natural

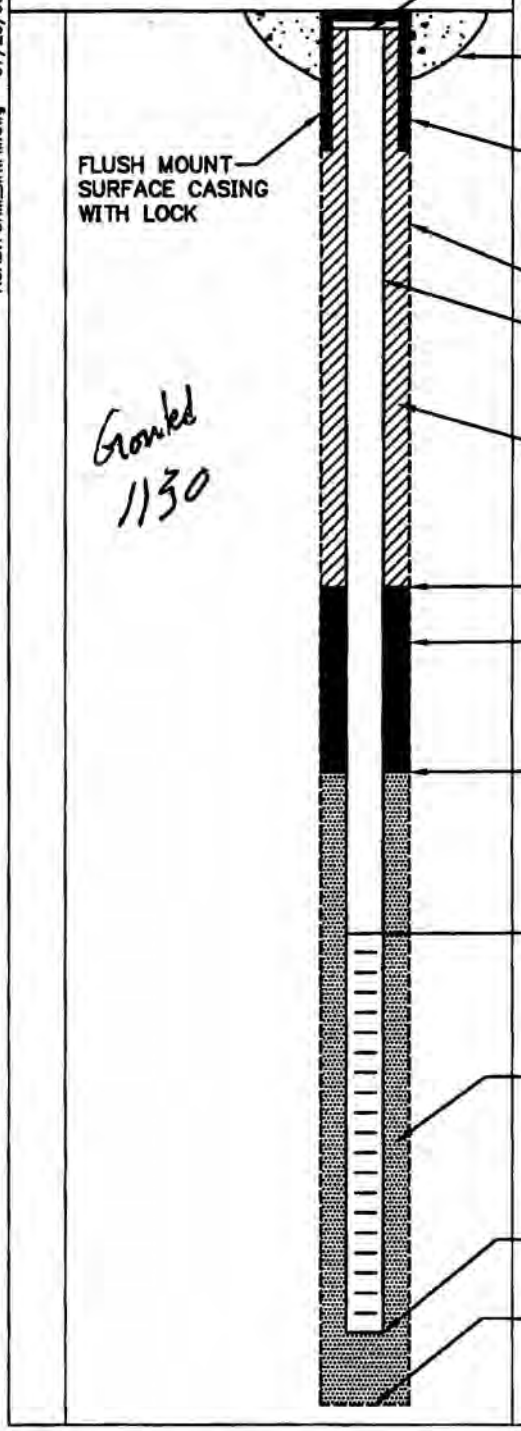
ACAD: FORM_MWFM.dwg 07/28/99 INL

WELL NO.: OLFS4-MW-~~25-S~~ change to 27S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-25-S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-6-06 | DATE COMPLETED: 12-6-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF SAND: 156

ELEVATION/DEPTH BOTTOM OF HOLE: 156

BACKFILL MATERIAL BELOW SAND: Natural

ACAD: FORM_MWFM.dwg 07/20/99 INL

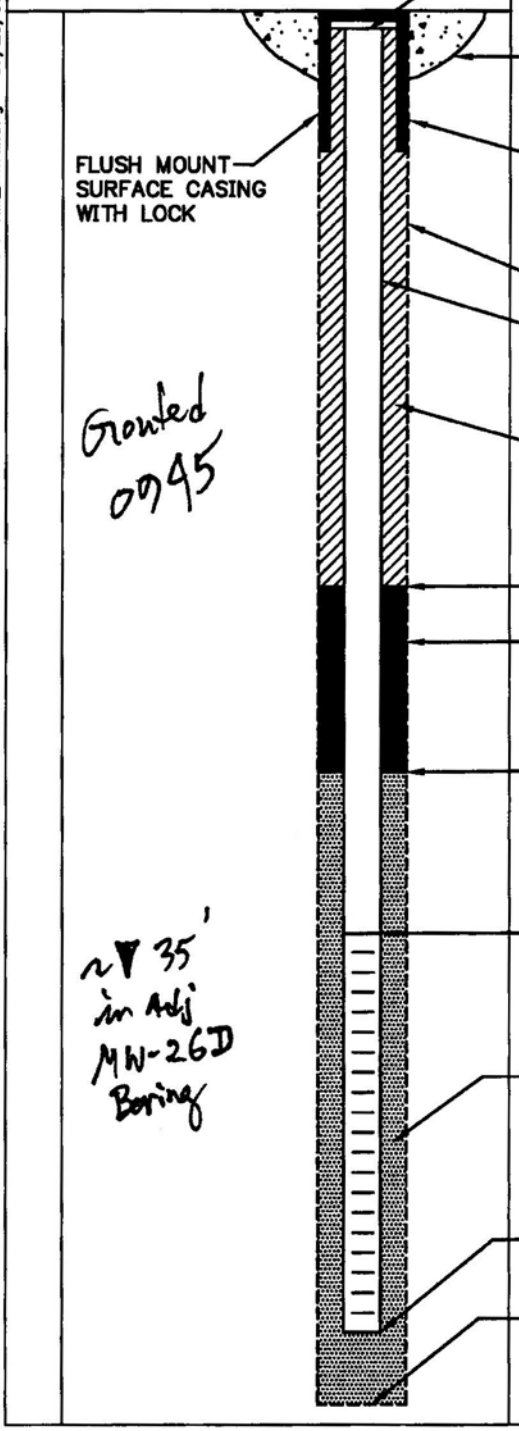
WELL NO.: OLFS4-MW- 28 S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW 28 S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-13-06 | DATE COMPLETED: 12-13-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 126

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 128

ELEVATION/DEPTH TOP OF SCREEN: 130

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 145

ELEVATION / DEPTH BOTTOM OF SAND: 145

ELEVATION/DEPTH BOTTOM OF HOLE: 145

BACKFILL MATERIAL BELOW SAND: Natural

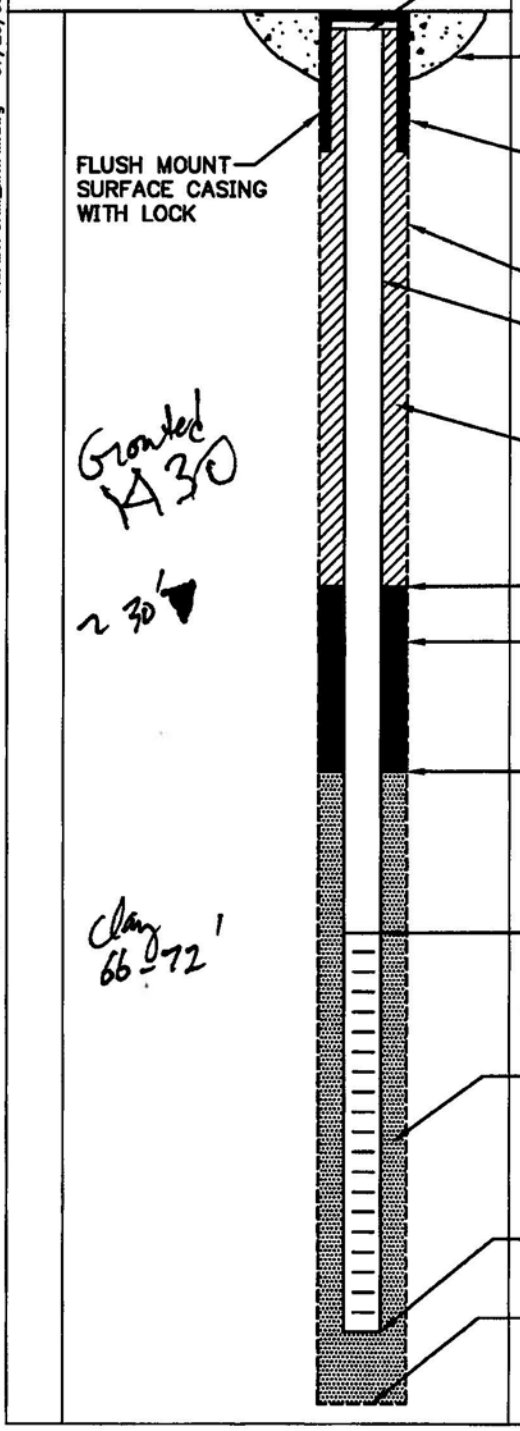
WELL NO.: OLFS4-MW- 29D

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic | |
| PROJECT NO.: 112G00389 | BORING: 12-13-06 | DRILLING METHOD: Sonic | |
| DATE BEGUN: 12-13-06 | DATE COMPLETED: OLFSA-MW29D | | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge | |
| GROUND ELEVATION: | DATUM: | | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 170

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 172

ELEVATION/DEPTH TOP OF SCREEN: 175

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 5 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 180

ELEVATION / DEPTH BOTTOM OF SAND: 181

ELEVATION/DEPTH BOTTOM OF HOLE: 181

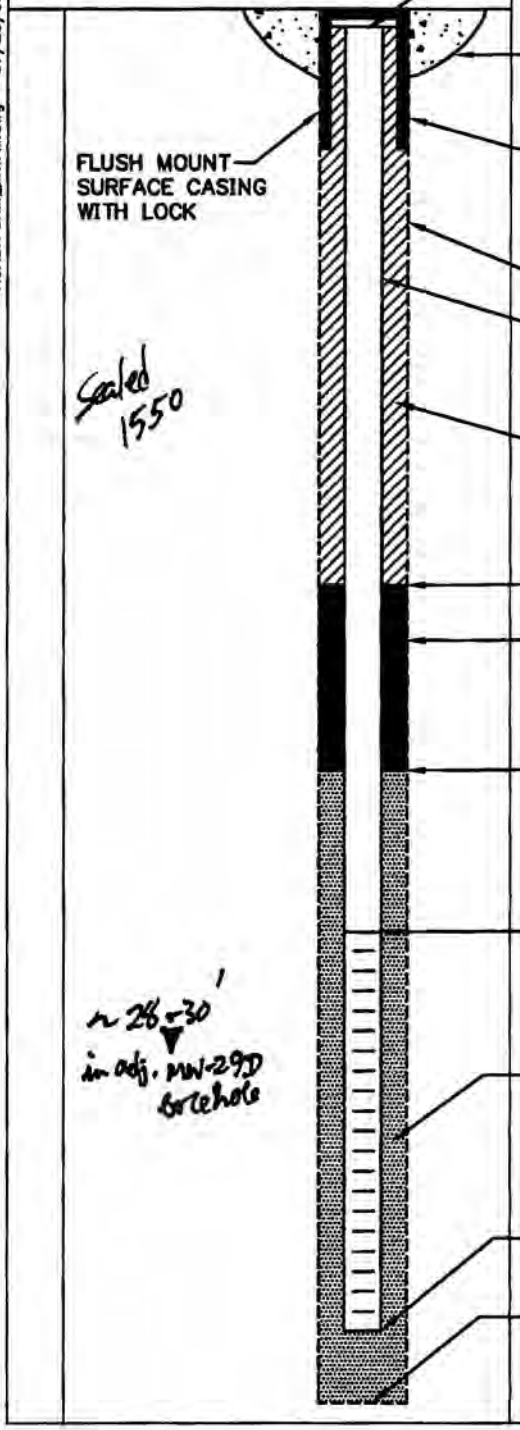
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-305

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW305 | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-13-06 | DATE COMPLETED: 12-13-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

BACKFILL MATERIAL BELOW SAND: Natural

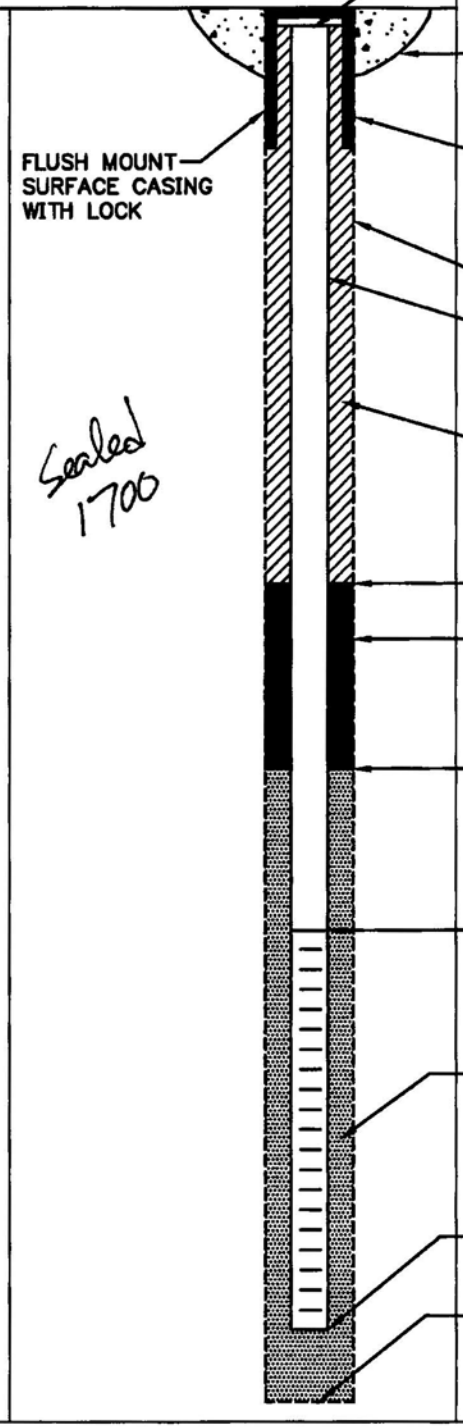
ACAD:FORM_MWFM.dwg 07/20/99 INL

WELL NO.: OLFS4-MW-31S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-31S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-13-06 | DATE COMPLETED: 12-13-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

BACKFILL MATERIAL BELOW SAND: Natural

07/28/99 INL ACAD:FORM_MWFM.dwg

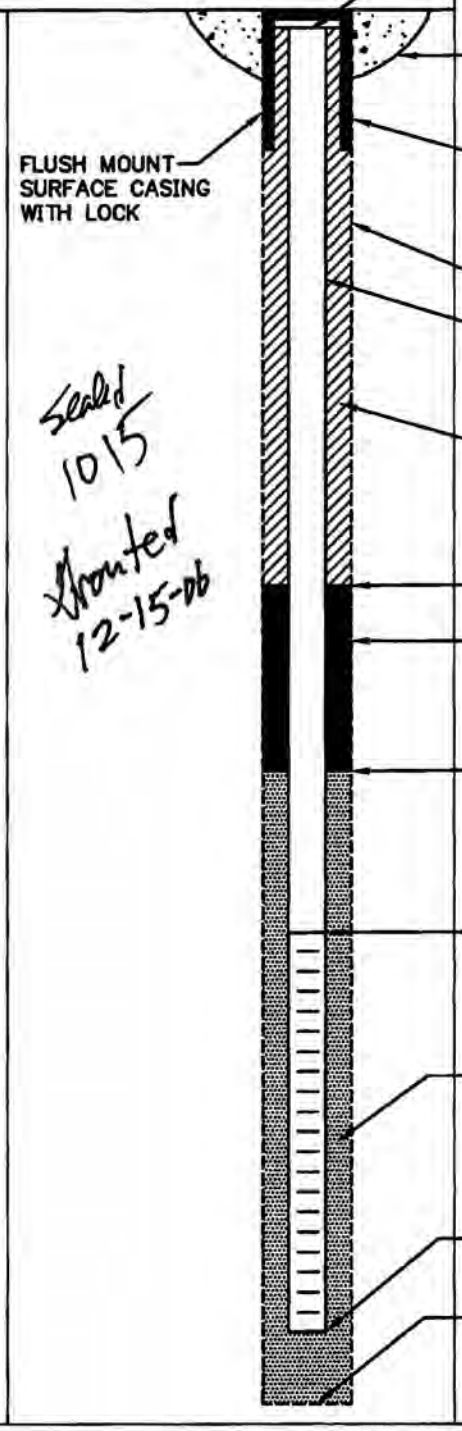
WELL NO.: OLFS4-MW-32S

**Tetra Tech NUS, Inc.**

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW32S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-14-06 | DATE COMPLETED: 12-14-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/28/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

BACKFILL MATERIAL BELOW SAND: Natural

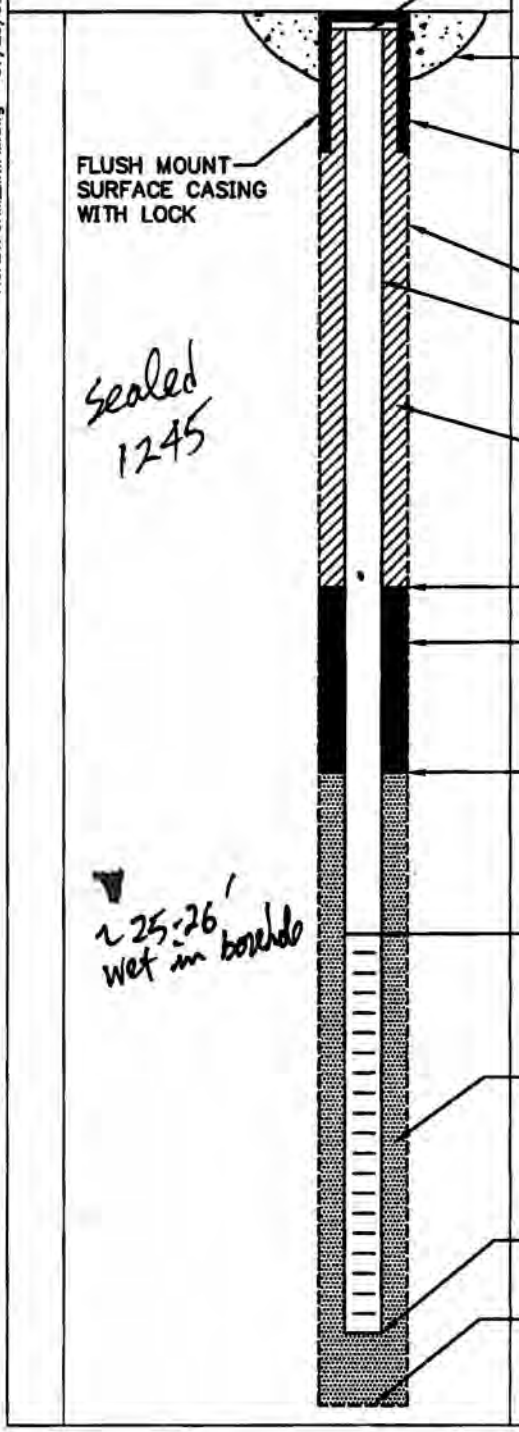
WELL NO.: OLFS4-MW-335

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-335 | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-14-06 | DATE COMPLETED: 12-14-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD:FORM_MWFM.dwg 07/20/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 16 / 21

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 18 / 23

ELEVATION/DEPTH TOP OF SCREEN: 20 / 25

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

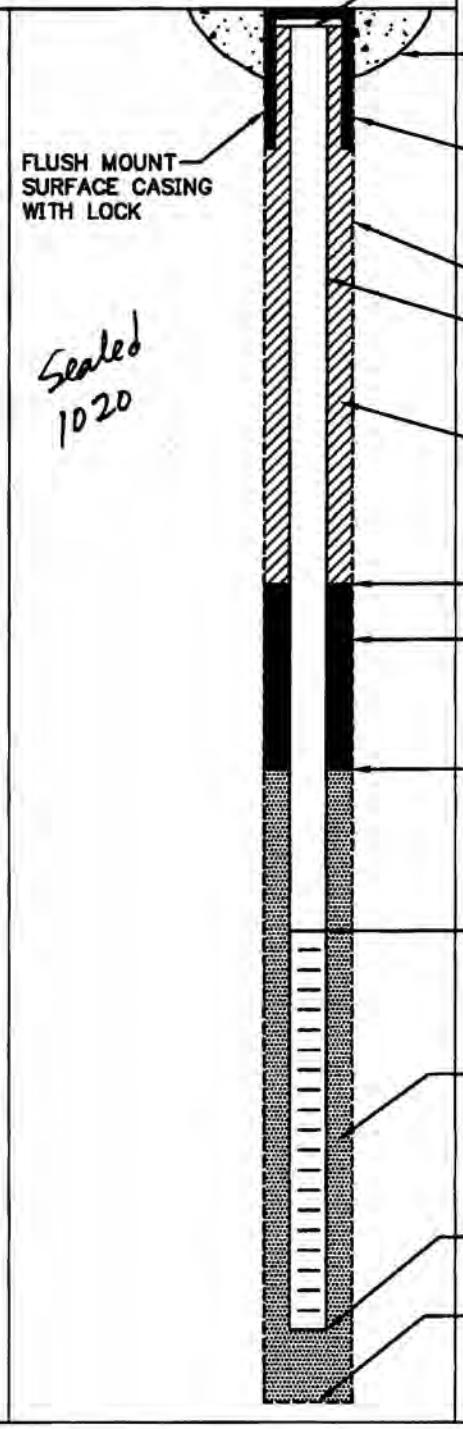
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-34S

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

**Tetra Tech NUS, Inc.**

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-34S | DRILLING METHOD: Sonic |
| DATE BEGUN: 12-14-06 | DATE COMPLETED: 12-14-06 | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

BACKFILL MATERIAL BELOW SAND: Natural

ACAD:FORM_MWFM.dwg 07/28/99 INL

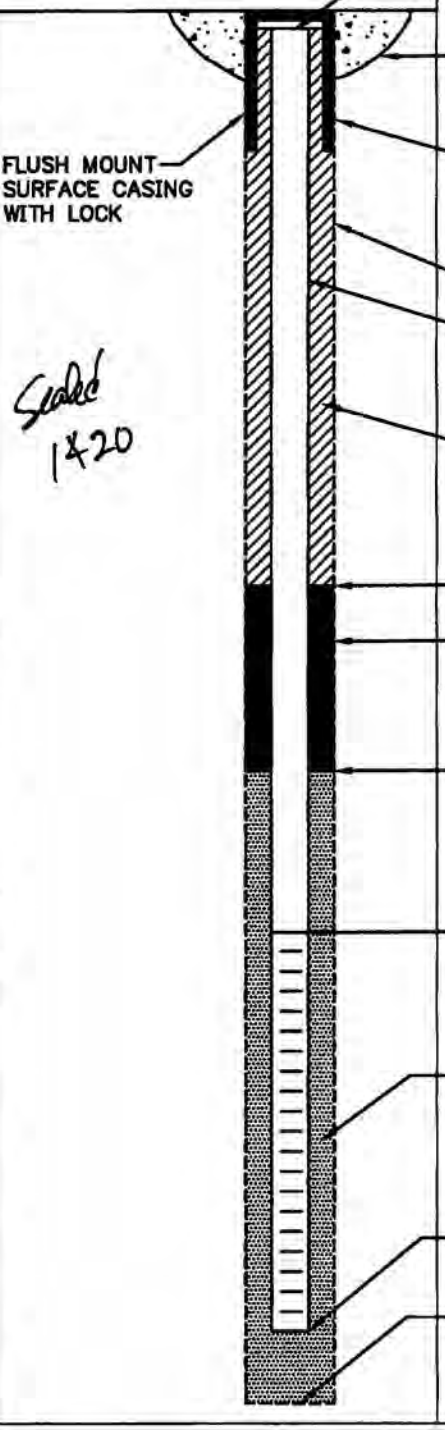
WELL NO.: OLFS4-MW-35S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | |
|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic |
| PROJECT NO.: 112G00389 | BORING: | DRILLING METHOD: Sonic |
| DATE BEGUN: | DATE COMPLETED: | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge |
| GROUND ELEVATION: | DATUM: | |

ACAD: FORM_MWFM.dwg 07/28/99 INL




ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

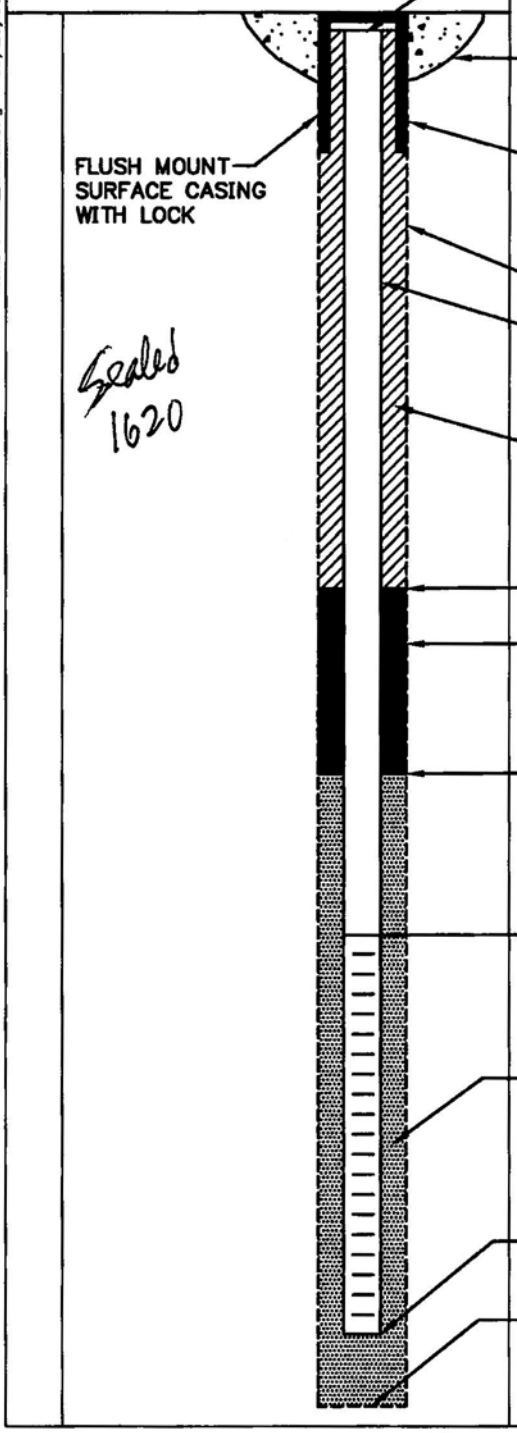
BACKFILL MATERIAL BELOW SAND: Natural

WELL NO.: OLFS4-MW-36S

Tetra Tech NUS, Inc.

# OVERBURDEN
# MONITORING WELL SHEET
# FLUSH - MOUNT

| | | | |
|---|---|---|---|
| PROJECT: Saufley Site 4 | LOCATION: Pensacola, FL | DRILLER: ProSonic | |
| PROJECT NO.: 112G00389 | BORING: OLFS4-MW-36S | DRILLING METHOD: Sonic | |
| DATE BEGUN: 12-14-06 | DATE COMPLETED: 12-14-06 | | |
| FIELD GEOLOGIST: Gary J. Davis | | DEVELOPMENT METHOD: Pump & Surge | |
| GROUND ELEVATION: | DATUM: | | |




ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: 2' X 2' Concrete Pad

TYPE OF PROTECTIVE CASING: 8-inch Steel Manhole

I.D. OF PROTECTIVE CASING: 10-inch Skirt

DIAMETER OF HOLE: 6-Inch

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2-Inch

TYPE OF BACKFILL/SEAL: Portland/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121

TYPE OF SEAL: 30/65 Fine Sand

ELEVATION/DEPTH TOP OF SAND: 123

ELEVATION/DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010-inch X 15 Feet

TYPE OF SAND PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 140

ELEVATION / DEPTH BOTTOM OF SAND: 141

ELEVATION/DEPTH BOTTOM OF HOLE: 141

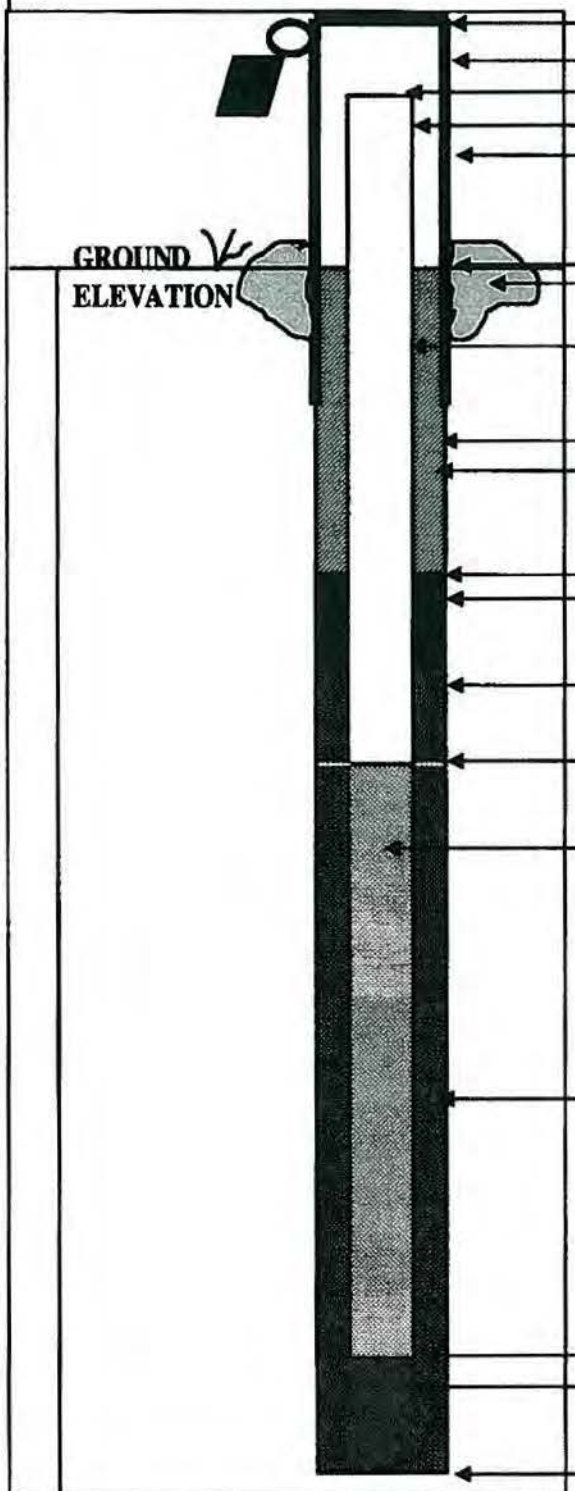
BACKFILL MATERIAL BELOW SAND: Natural

ACAD:FORM_MWFM.dwg 07/20/99 INL

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | S.t.4 Sanfly | DRILLING Co.: | Boart Longyear | BORING No.: | MW37 |
| PROJECT No.: | 112G00385 | DRILLER: | Mark Pudzo | DATE COMPLETED: | 6-4-07 |
| SITE: | S.t.4 | DRILLING METHOD: | 10" Sonic | NORTHING: | |
| GEOLOGIST: | Curtis Dean | DEV. METHOD: | ~~bail~~ | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK-UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: bentonite grout

ELEVATION / DEPTH OF SEAL: 47'

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 52'

ELEVATION / DEPTH TOP OF SCREEN: 54.5'

TYPE OF SCREEN: slotted

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -64.5'

ELEVATION / DEPTH BOTTOM OF FILTER PACK: -64.5'

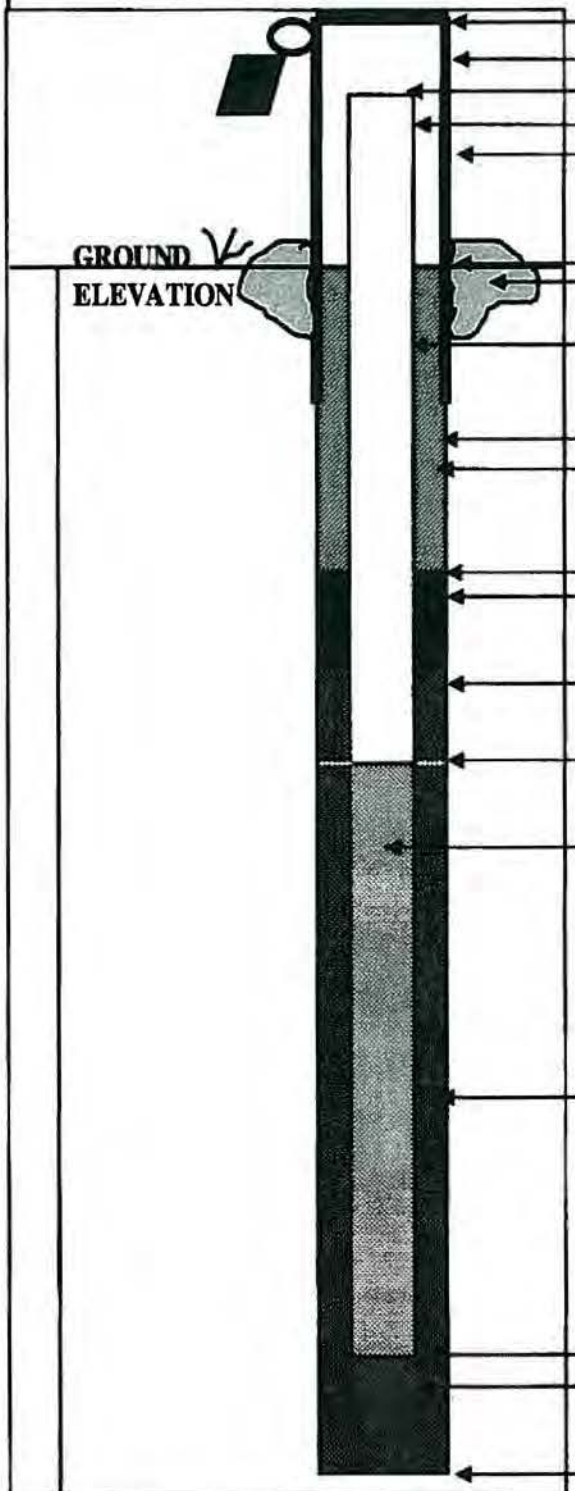
TYPE OF BACKFILL BELOW WELL: -64.5'

ELEVATION / DEPTH OF BOREHOLE: '

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | S.L.G. Landfill | DRILLING Co.: | Boart Longyear | BORING No.: | MW38 |
| PROJECT No.: | 112G00388 | DRILLER: | Mark Wilder | DATE COMPLETED: | 6-4-07 |
| SITE: | 4 | DRILLING METHOD: | Sonic | NORTHING: | |
| GEOLOGIST: | Cook | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: ~~bentonite~~ grout

ELEVATION / DEPTH OF SEAL: 47.5'

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 33'

ELEVATION / DEPTH TOP OF SCREEN: -55.0'

TYPE OF SCREEN: slotted

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -65.0'

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

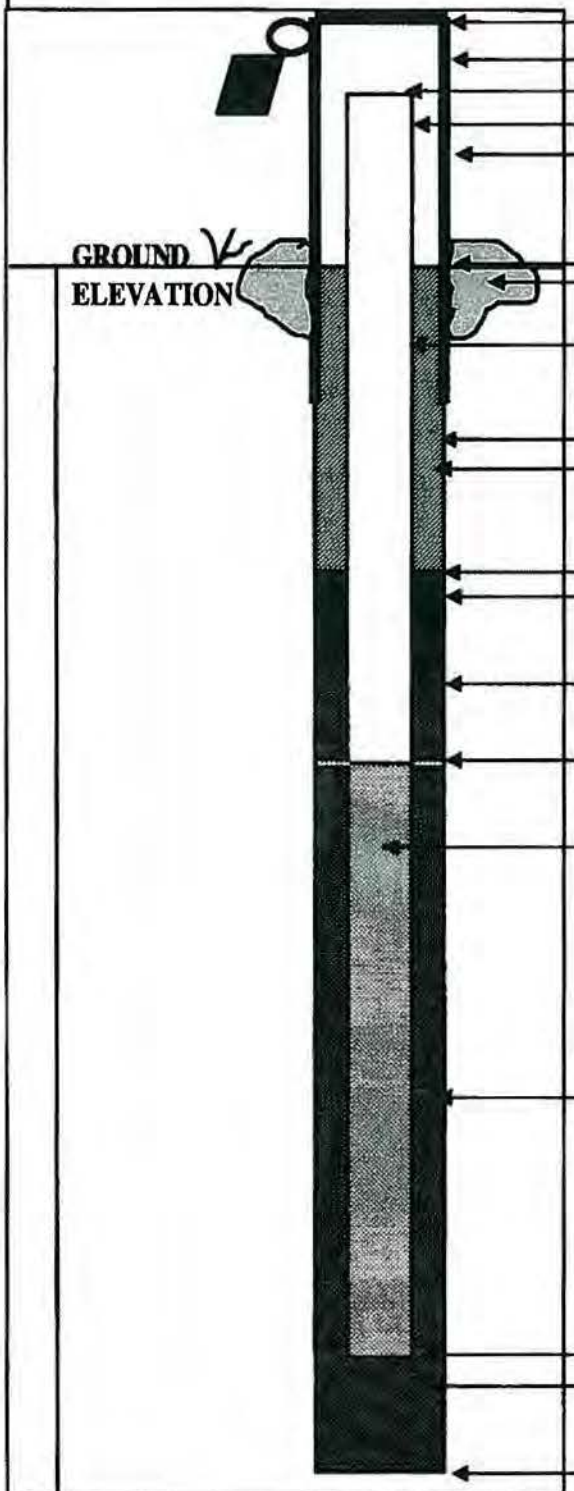
TYPE OF BACKFILL BELOW WELL: -65.0'

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | S.L. 4 Sanitary | DRILLING Co.: | Boart Longyear | BORING No.: | MW39 |
| PROJECT No.: | 112601389 | DRILLER: | M. McLaw | DATE COMPLETED: | 6-5-02 |
| SITE: | 4 | DRILLING METHOD: | Prosonic | NORTHING: | |
| GEOLOGIST: | Curtis Odom | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: 6"/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: ~~bentonite~~ grout

ELEVATION / DEPTH OF SEAL: 37/

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: ~~40~~ 42/

ELEVATION / DEPTH TOP OF SCREEN: -44.89/

TYPE OF SCREEN: slot #10

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -54.89/

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

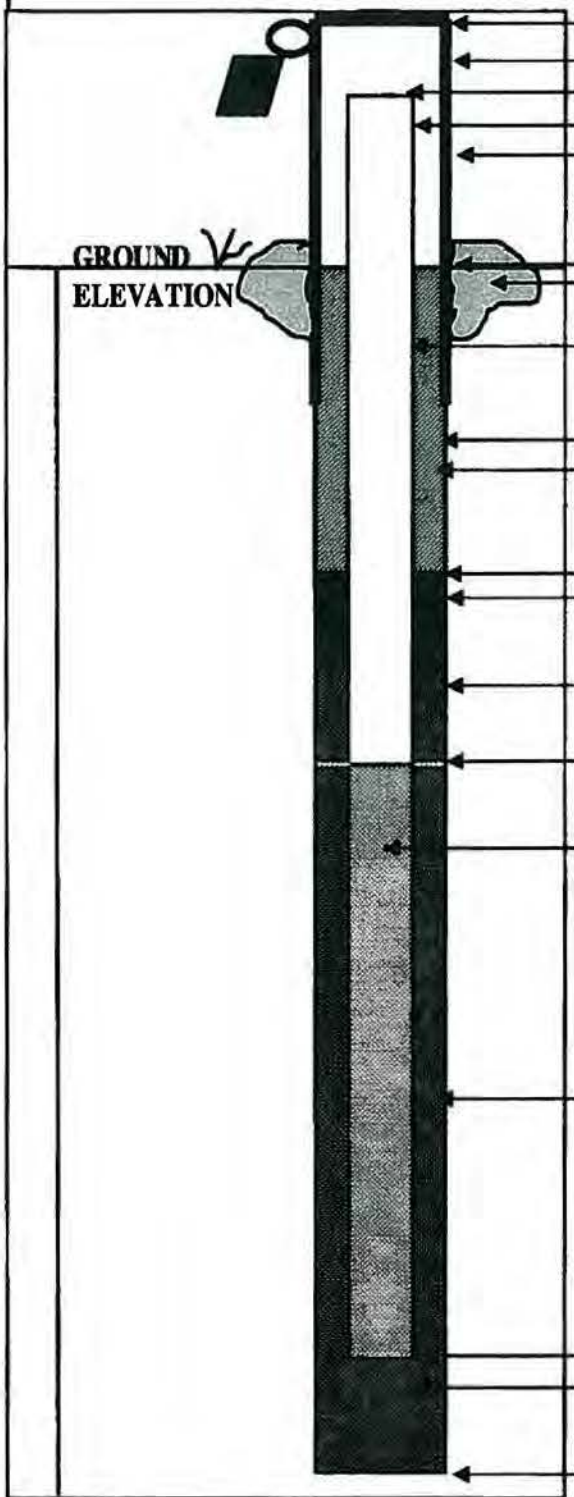
TYPE OF BACKFILL BELOW WELL: -54.89

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | S.k 4 Surface | DRILLING Co.: | Boart Longyear | BORING No.: | MW40 |
| PROJECT No.: | 112G02789 | DRILLER: | M. McLean | DATE COMPLETED: | 6-5-09 |
| SITE: | 4 | DRILLING METHOD: | rotasonic | NORTHING: | |
| GEOLOGIST: | C. Doan | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: grout

ELEVATION / DEPTH OF SEAL: 471

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 521

ELEVATION / DEPTH TOP OF SCREEN: 541.6

TYPE OF SCREEN: sl. Hed

SLOT SIZE X LENGTH: 10"

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -64.86

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

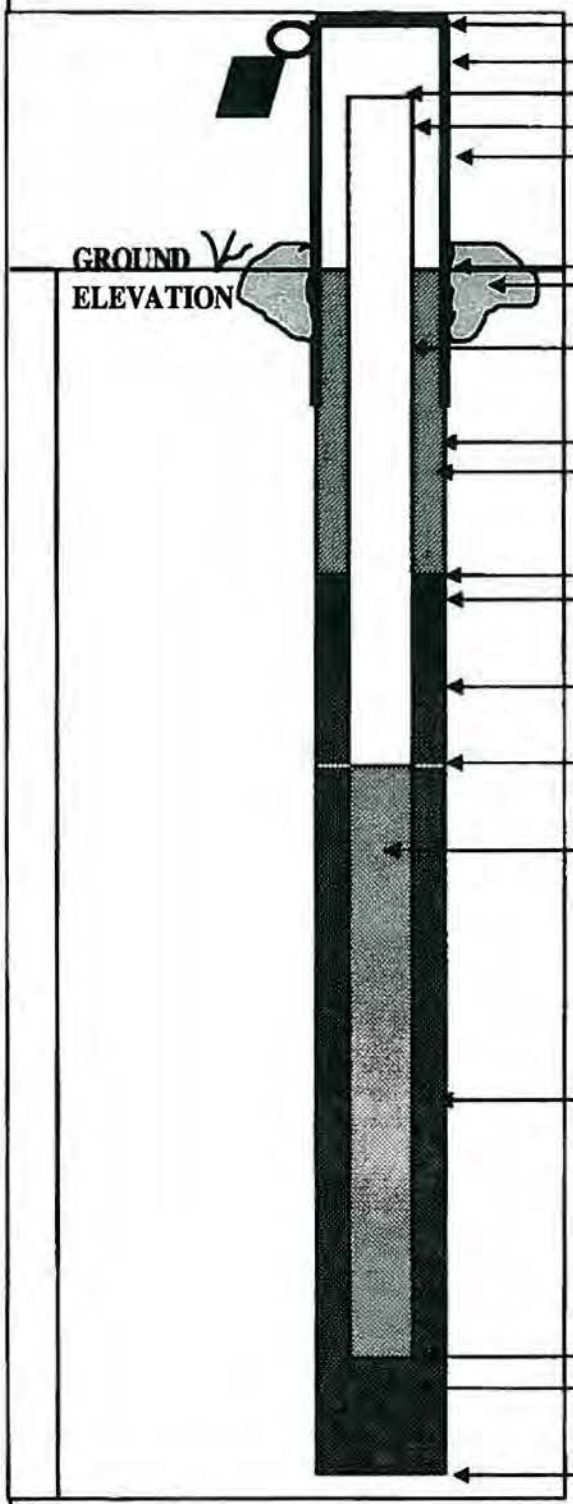
TYPE OF BACKFILL BELOW WELL: ~~Grout~~

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | Site 4 Sanford | DRILLING Co.: | Boart Longyear | BORING No.: | MW42 |
| PROJECT No.: | 112G00389 | DRILLER: | M McLean | DATE COMPLETED: | 6-6-07 |
| SITE: | 4 | DRILLING METHOD: | Rotosonic | NORTHING: | |
| GEOLOGIST: | G Dolan | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: ~~Aqua~~ 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: _____

ELEVATION / DEPTH OF SEAL: 281

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 331

ELEVATION / DEPTH TOP OF SCREEN: 365

TYPE OF SCREEN: slotted PVC

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 465

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

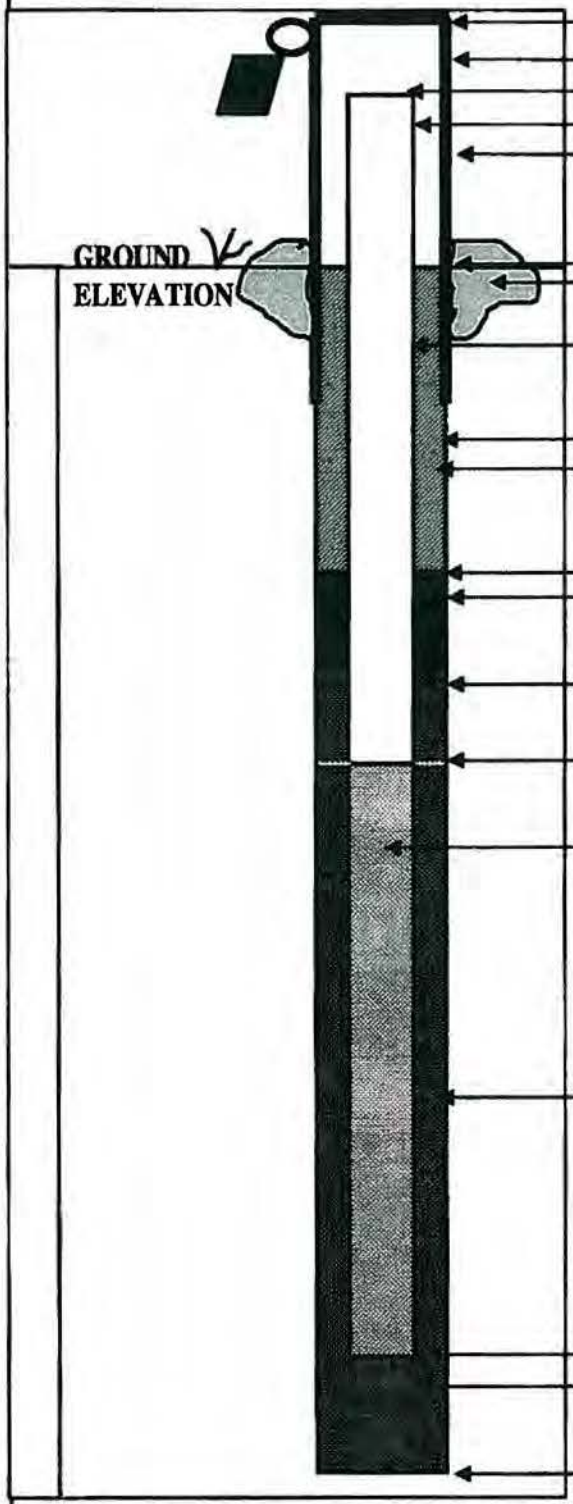
TYPE OF BACKFILL BELOW WELL: 465

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | Site 4 Saufley | DRILLING Co.: | Boart Longyear | BORING No.: | MW41 |
| PROJECT No.: | 112 G03891 | DRILLER: | M. Meyer | DATE COMPLETED: | 6-5-96 |
| SITE: | 4 | DRILLING METHOD: | 10 to 5in | NORTHING: | |
| GEOLOGIST: | C. Odom | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: grout

ELEVATION / DEPTH OF SEAL: 49 /

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 53 /

ELEVATION / DEPTH TOP OF SCREEN: 54.95 /

TYPE OF SCREEN: sloted PVC

SLOT SIZE X LENGTH: 10"

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -64.95 /

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

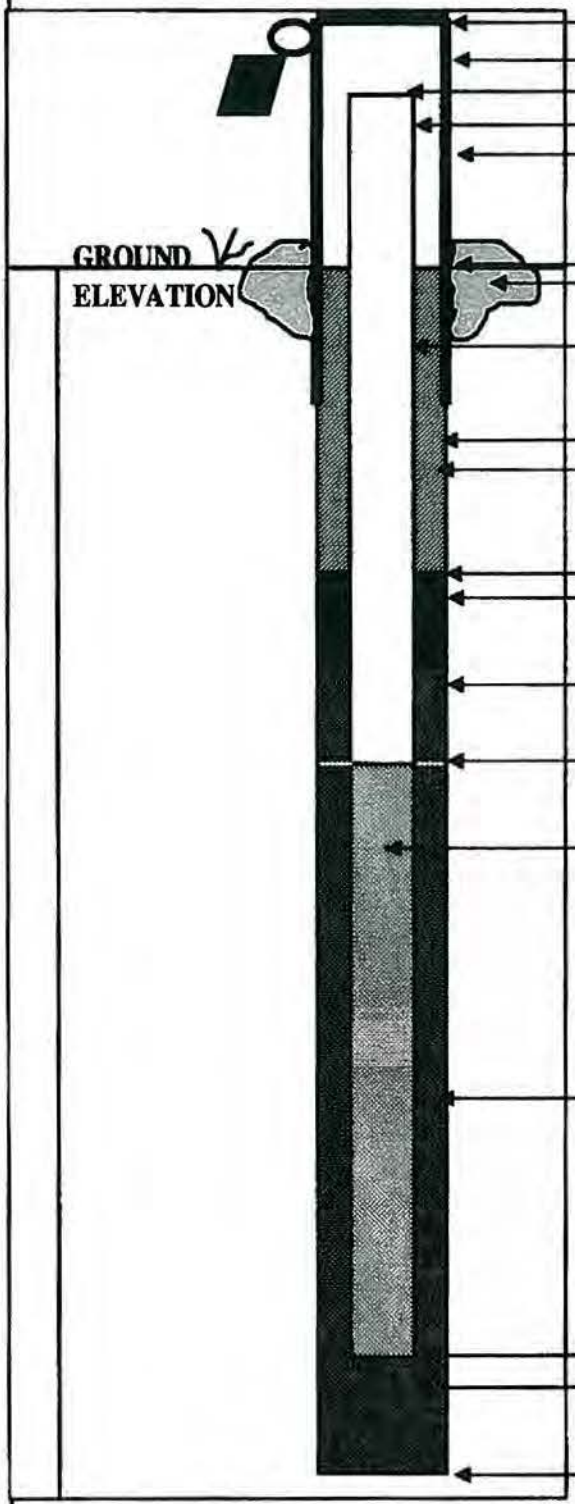
TYPE OF BACKFILL BELOW WELL: ~~-64.95~~

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | |
|---|---|---|---|
| PROJECT: Site 4 Scuttle | DRILLING Co.: Boart Longyear | BORING No.: MW 43 | |
| PROJECT No.: 112G00389.4 | DRILLER: M. McLean | DATE COMPLETED: 6-6-07 | |
| SITE: | DRILLING METHOD: Hollow-S | NORTHING: | |
| GEOLOGIST: C. Odom | DEV. METHOD: | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK-UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: +6.0"

TYPE OF SEAL: grout

ELEVATION / DEPTH OF SEAL: 34 /

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 38 /

ELEVATION / DEPTH TOP OF SCREEN: 41.32 /

TYPE OF SCREEN: Slotted PVC

SLOT SIZE X LENGTH: #10 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -51.32 /

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

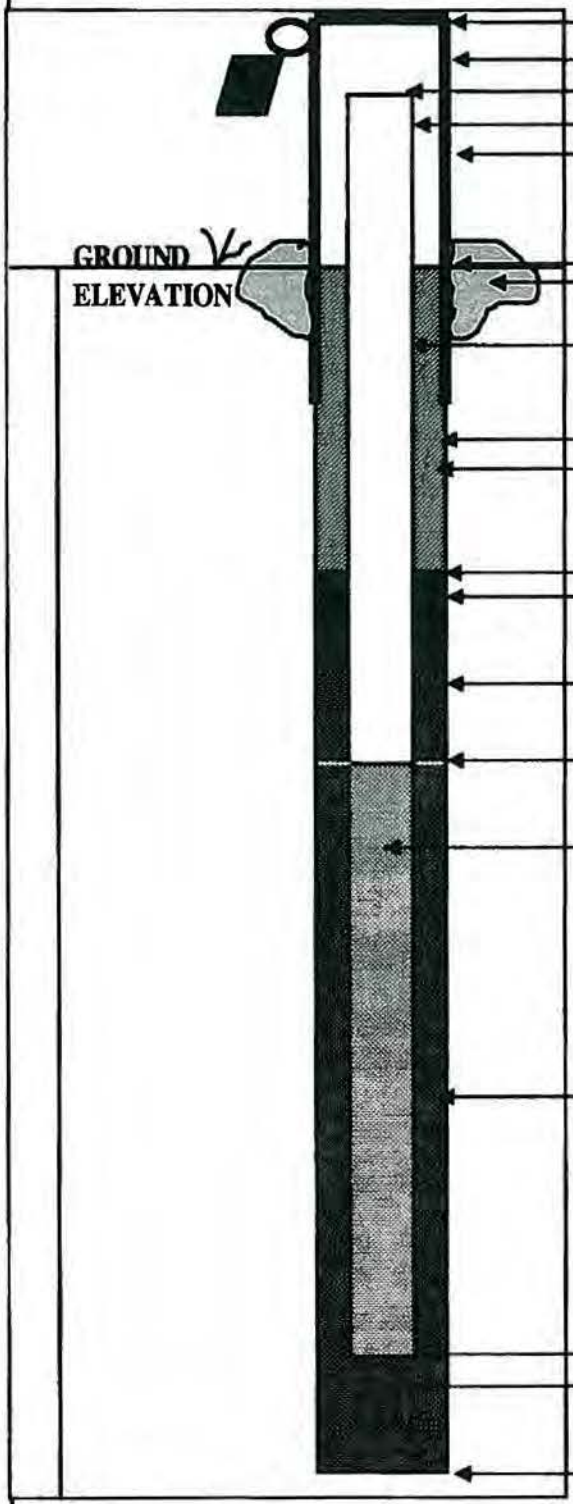
TYPE OF BACKFILL BELOW WELL: -51.32

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | S.Ic 4 Sanitary | DRILLING Co.: | Boart Longyear | BORING No.: | MW44 |
| PROJECT No.: | 112G00389 | DRILLER: | M. McLean | DATE COMPLETED: | 6-6-02 |
| SITE: | 4 | DRILLING METHOD: | Hollow Stem | NORTHING: | |
| GEOLOGIST: | C. Odom | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: 6.0"

TYPE OF SEAL: Grout

ELEVATION / DEPTH OF SEAL: / 39

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: / 43

ELEVATION / DEPTH TOP OF SCREEN: / 44.83

TYPE OF SCREEN: slotted PVC

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / -54.82

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

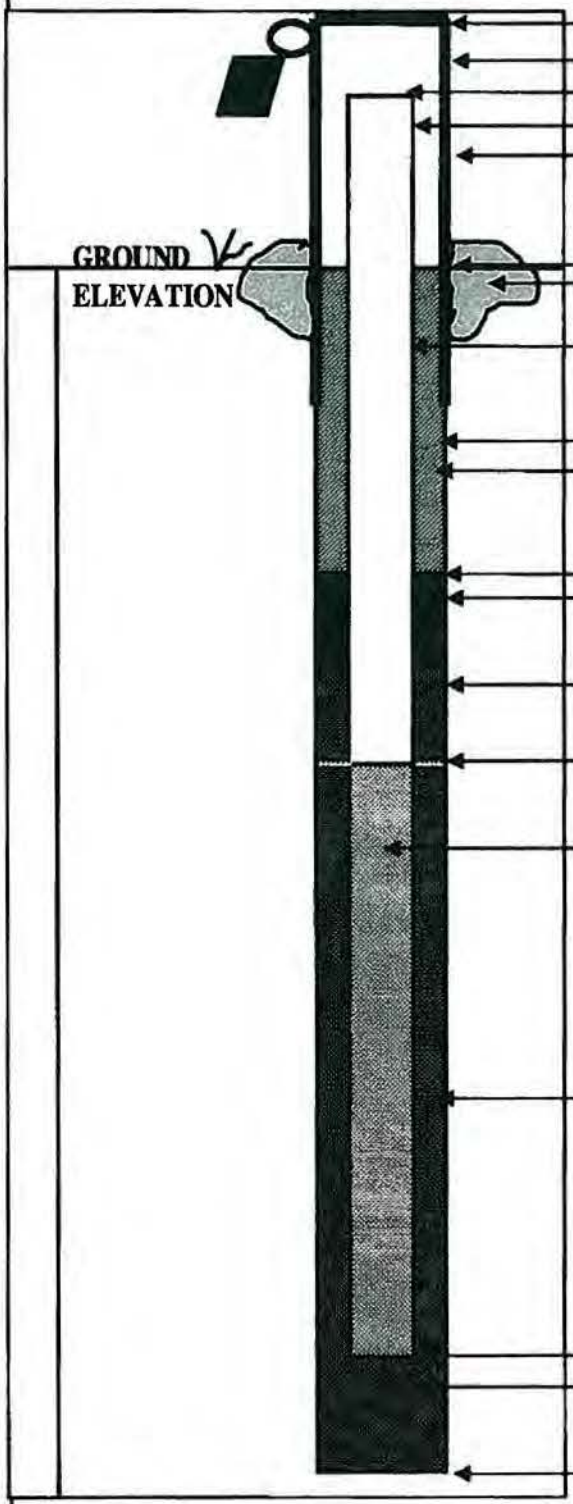
TYPE OF BACKFILL BELOW WELL: -54.82

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: _____

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: | Site 4 Saufley | DRILLING Co.: | Boart Longyear | BORING No.: | MW45 |
| PROJECT No.: | 112G02289 | DRILLER: | M. McLean | DATE COMPLETED: | 6-7-07 |
| SITE: | 4 | DRILLING METHOD: | rotosonic | NORTHING: | |
| GEOLOGIST: | C. Odom | DEV. METHOD: | | EASTING: | |




ELEVATION OF TOP OF SURFACE CASING: _____

STICK -UP TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

RISER STICK-UP ABOVE GROUND SURFACE: _____

I.D. OF SURFACE CASING: N/A

TYPE OF SURFACE CASING: N/A

GROUND ELEVATION: _____

TYPE OF SURFACE SEAL: grout

RISER PIPE I.D.: 2.0"

TYPE OF RISER PIPE: PVC

BOREHOLE DIAMETER: +6.0"

TYPE OF SEAL: grout

ELEVATION / DEPTH OF SEAL: 43'

TYPE OF SEAL: bentonite

ELEVATION / DEPTH TOP OF FILTER PACK: 48'

ELEVATION / DEPTH TOP OF SCREEN: 51.05'

TYPE OF SCREEN: slotted PVC

SLOT SIZE X LENGTH: 10'

I.D. OF SCREEN: 2.0"

TYPE OF FILTER PACK: 20/30 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: -61.05'

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

TYPE OF BACKFILL BELOW WELL: -61.05

ELEVATION / DEPTH OF BOREHOLE: /

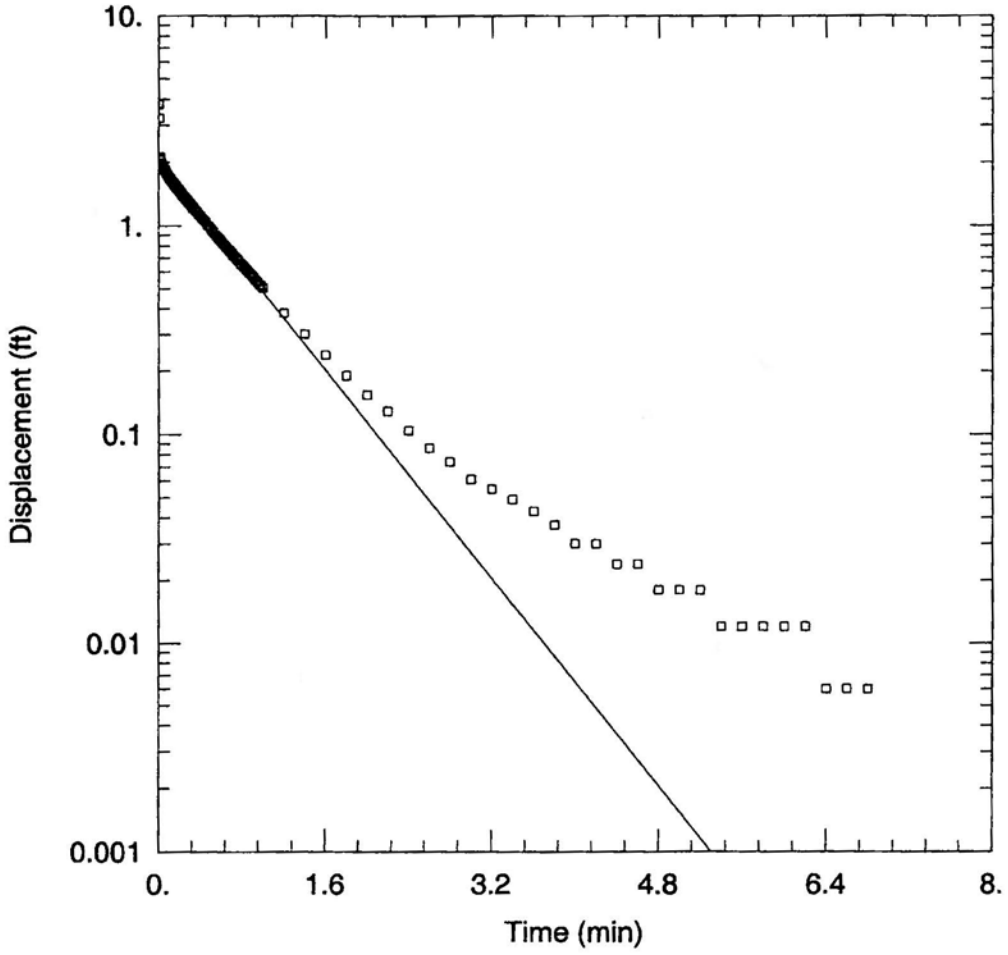
| Site Information | |
|---|---|
| Site Name | UST 2406 |
| Project | OLF SAUFLEY |
| Project Number | N 2042 |
| Date | 1/31/03 |
| Personnel | W. D. Olson / M. Akers |

| Well Information | |
|---|---|
| Name | DMW-30 |
| Inside Diameter | 2" |
| Borehole Diameter | 8" |
| Total Depth | 81.70 |
| Depth to Water | 39.78 |
| Water Column | 41.92 |
| Screen length | 5 |
| TOC Elevation | |

| Data Logger | |
|---|---|
| Model | SE 1000B |
| Serial Number | LKB -761 |
| Test Rate | Log 1 |
| Mode (TOC/SUR) | SUR / TOC / SUR |
| Level/Func. | Level |

| XD | |
|---|---|
| Model | PTX-161D |
| Serial Number | 276708 |
| Scale | 19.512 |
| Offset | -0.034 |
| Linearity | NA |
| PSI | 20 |

| Test Data | | | |
|---|---|---|---|
| Test Number | T7 | T8 | T9 |
| ID | 30 | 30 | 30 |
| Slug In/Out | IN | OUT | IN |
| XD depth | 50' | 50' | 50' |
| XD install time | 1055 | 1055 | 1055 |
| XD reading | 10.00 | 10.08 | 10.06 |
| slug depth | ~~35~~ 39.7 | ~~39~~.7 | ~~39~~.7 |
| slug install time | 1105 | 1108 | 1140 |
| slug length | 5' | 5' | 5' |
| slug diameter | 1¼" | 1¼" | 1¼" |
| slug volume | | | |
| slug displacement | | | |
| reference setting | 0.00 | 0.00 | 0.00 |
| reference reading | 10.06 | 10.08 | 10.07 |
| start time | 1108 | 1120 | 1140 |
| initial displacement | 2.471 | 3.85 3.833 | 2.736 |
| end time | 1118 | 1130 | 1150 |
| final XD reading | 10.07 | 10.06 | 10.08 |




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW30OU1.AQT
Date: 02/06/03 Time: 10:53:42

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

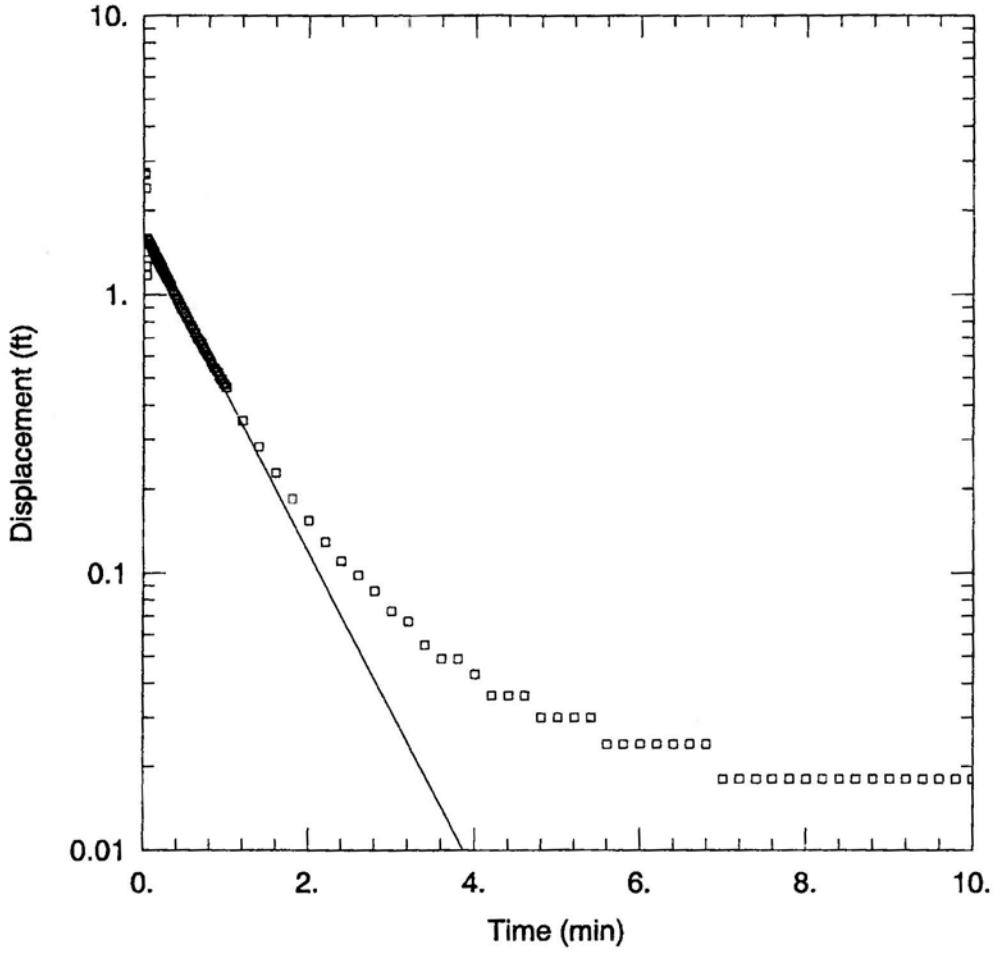
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 3.833 ft
Water Column Height: 41.92 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.01778 ft/min
Solution Method: Bouwer-Rice
y0 = 2.015 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW30IN2.AQT
Date: 02/06/03 Time: 10:47:30

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

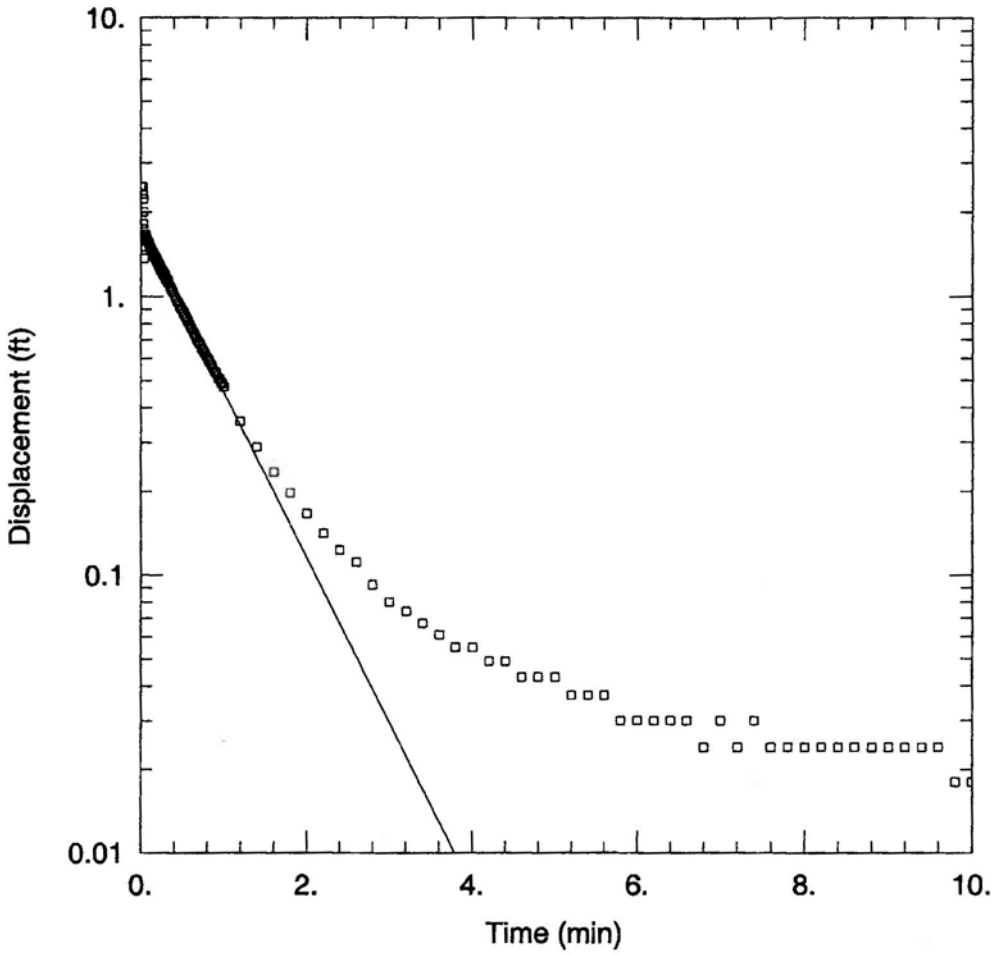
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.736 ft
Water Column Height: 41.92 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.01635 ft/min
Solution Method: Bouwer-Rice
y0 = 1.647 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW30IN1.AQT
Date: 02/06/03 Time: 10:39:49

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.471 ft
Water Column Height: 41.92 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.01694 ft/min
Solution Method: Bouwer-Rice
y0 = 1.777 ft

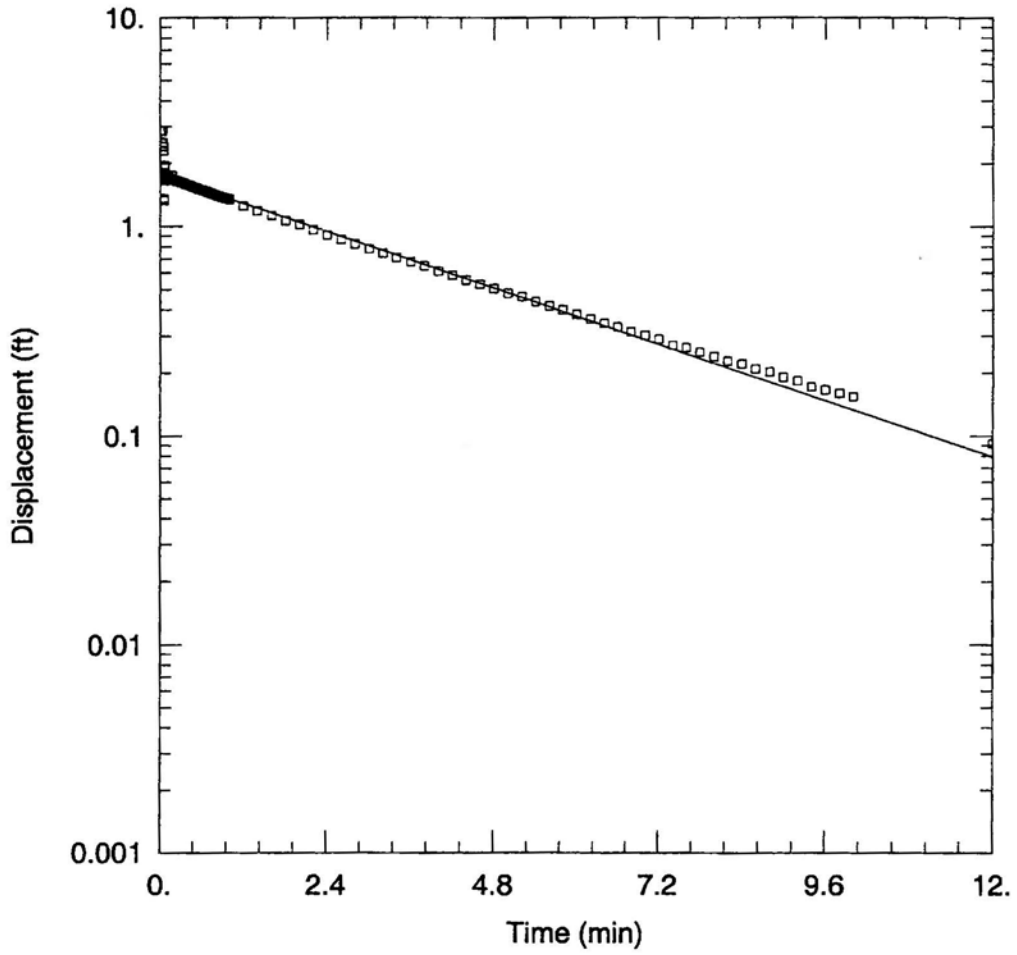
| Site Information | |
|---|---|
| Site Name | UST 2406 |
| Project | Saufley |
| Project Number | N |
| Date | N2642 |
| Personnel | 1/31/03 |
| | W.D. 0150W / M. Akers |

| Well Information | |
|---|---|
| Name | DMW-31 |
| Inside Diameter | 2" |
| Borehole Diameter | 8" ? |
| Total Depth | 79.29 |
| Depth to Water | 28.36 |
| Water Column | 50.93 |
| Screen length | 5' |
| TOC Elevation | |

| Data Logger | |
|---|---|
| Model | SE 1000B |
| Serial Number | 1KB-761 |
| Test Rate | Log 1 |
| Mode (TOC/SUR) | SUR / TOC / SUR |
| Level/Func. | Level |

| XD | |
|---|---|
| Model | PTX-161D |
| Serial Number | 276708 |
| Scale | 19.512 |
| Offset | -0.034 |
| Linearity | NA |
| PSI | 20 |

| Test Data | | | |
|---|---|---|---|
| Test Number | T4 | T5 | T6 |
| ID | 31 | 31 | 31 |
| Slug In/Out | IN | OUT | IN |
| XD depth | 50' | 50' | 50' |
| XD install time | 0907 | 0907 | 0907 |
| XD reading | 21.30 | | |
| slug depth | 33.4 | 33.4 | 33.4 |
| slug install time | ~~09~~0920 | 0940 | |
| slug length | 5' | 5' | 5' |
| slug diameter | 1¼" | 1¼" | 1¼" |
| slug volume | | | |
| slug displacement | | | |
| reference setting | 0.00 | 0.00 | 0.00 |
| reference reading | 21.30 21.07 | 21.08 | 21.08 |
| start time | 0940 | 1004 | 1035 |
| initial displacement | 2.724 | 4.814 | 2.98 |
| end time | 1000 | 1024 | 1047 |
| final XD reading | ~~20~~ 21.07 | ~~1024~~ 21.03 | 21.16 |




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW31IN2.AQT
Date: 02/06/03 Time: 11:09:27

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

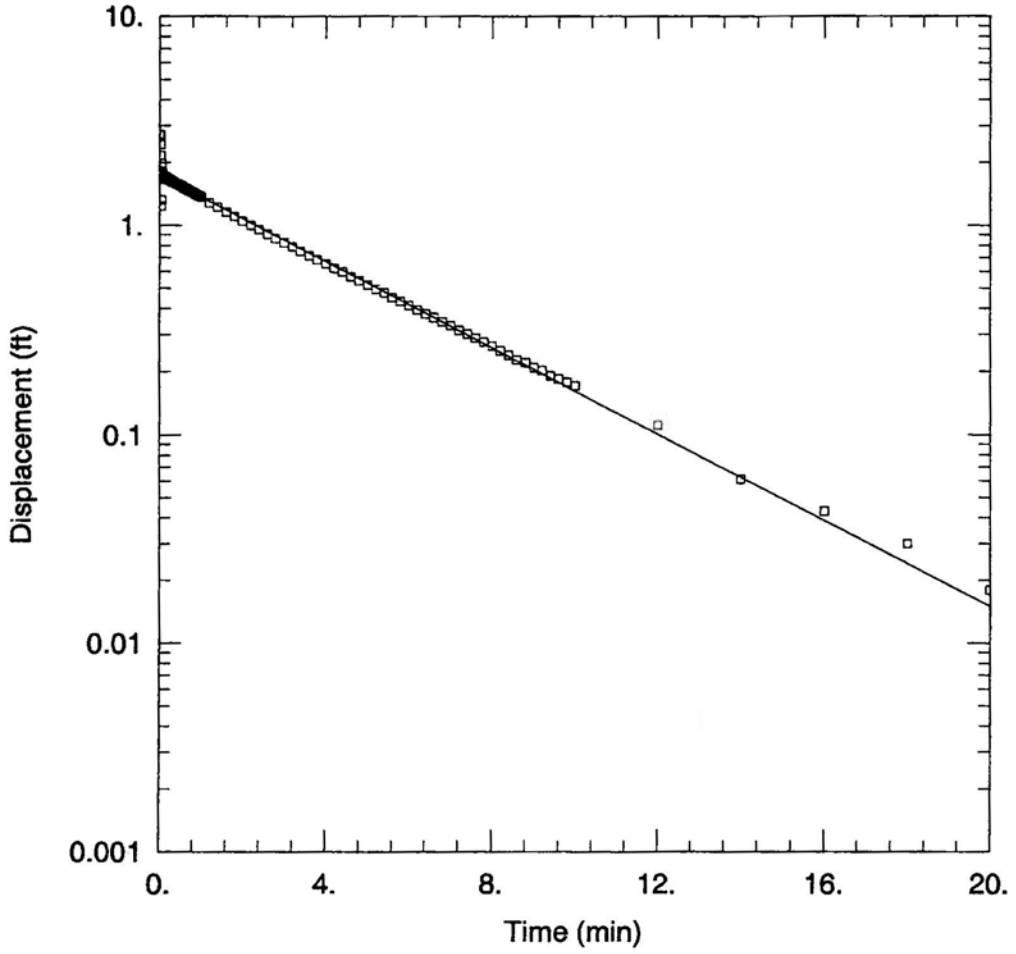
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.86 ft
Water Column Height: 50.93 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.003258 ft/min
Solution Method: Bouwer-Rice
y0 = 1.752 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW31IN1.AQT
Date: 02/06/03 Time: 11:00:51

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

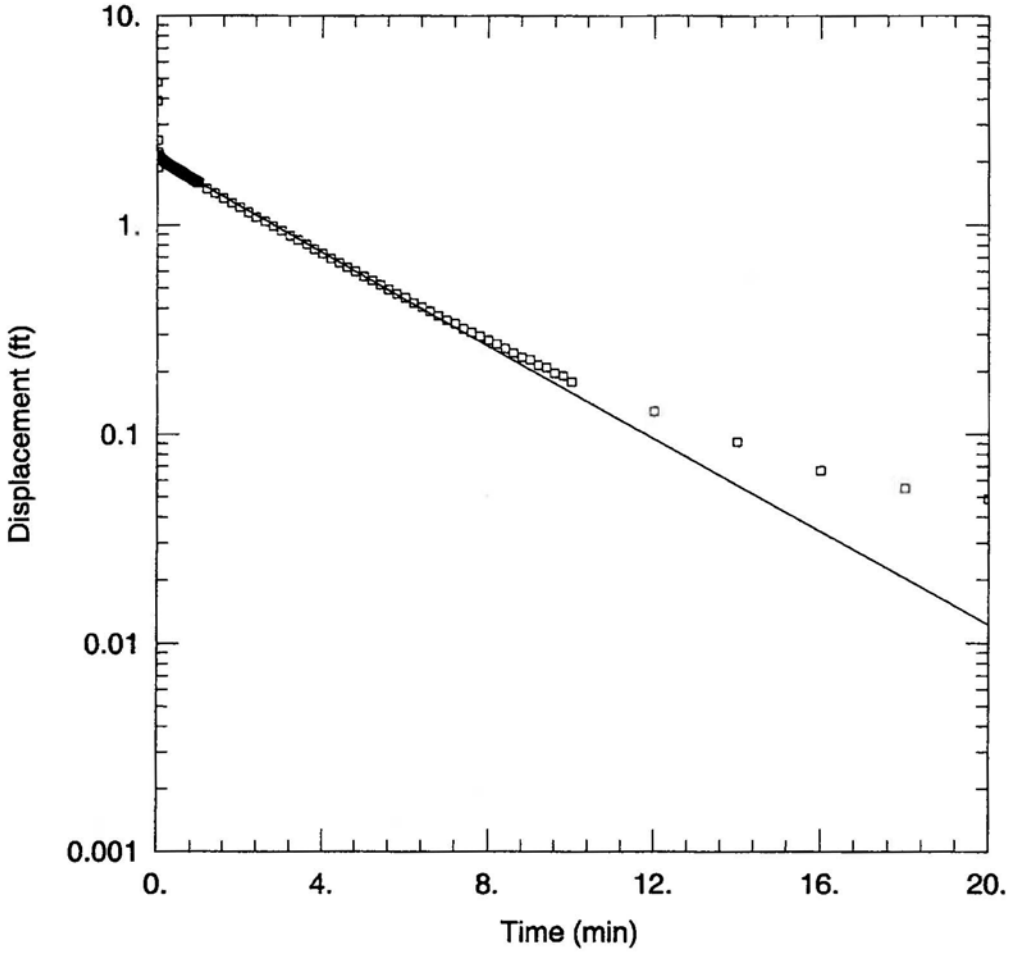
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.724 ft
Water Column Height: 50.93 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.003001 ft/min
Solution Method: Bouwer-Rice
y0 = 1.735 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW31OU1.AQT
Date: 02/06/03 Time: 11:13:30

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 4.814 ft
Water Column Height: 50.93 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.003234 ft/min
Solution Method: Bouwer-Rice
y0 = 2.047 ft

| Site Information | |
|---|---|
| Site Name | UST 2406 |
| Project | Sawfley |
| Project Number | N2642 |
| Date | 1/31/03 |
| Personnel | W.D. OKSOW/ M: Akers |

| Well Information | DMW32 |
|---|---|
| Name | DMW32 |
| Inside Diameter | 2" |
| Borehole Diameter | 6" |
| Total Depth | ~~130'~~ 140' |
| Depth to Water | 29.20 |
| Water Column | ~~100~~.80 |
| Screen length | 5' |
| TOC Elevation | |

| Data Logger | |
|---|---|
| Model | SE 1000B |
| Serial Number | 1KB-761 |
| Test Rate | Log 1 |
| Mode (TOC/SUR) | SUR (TOC/SUR |
| Level/Func. | Level) |

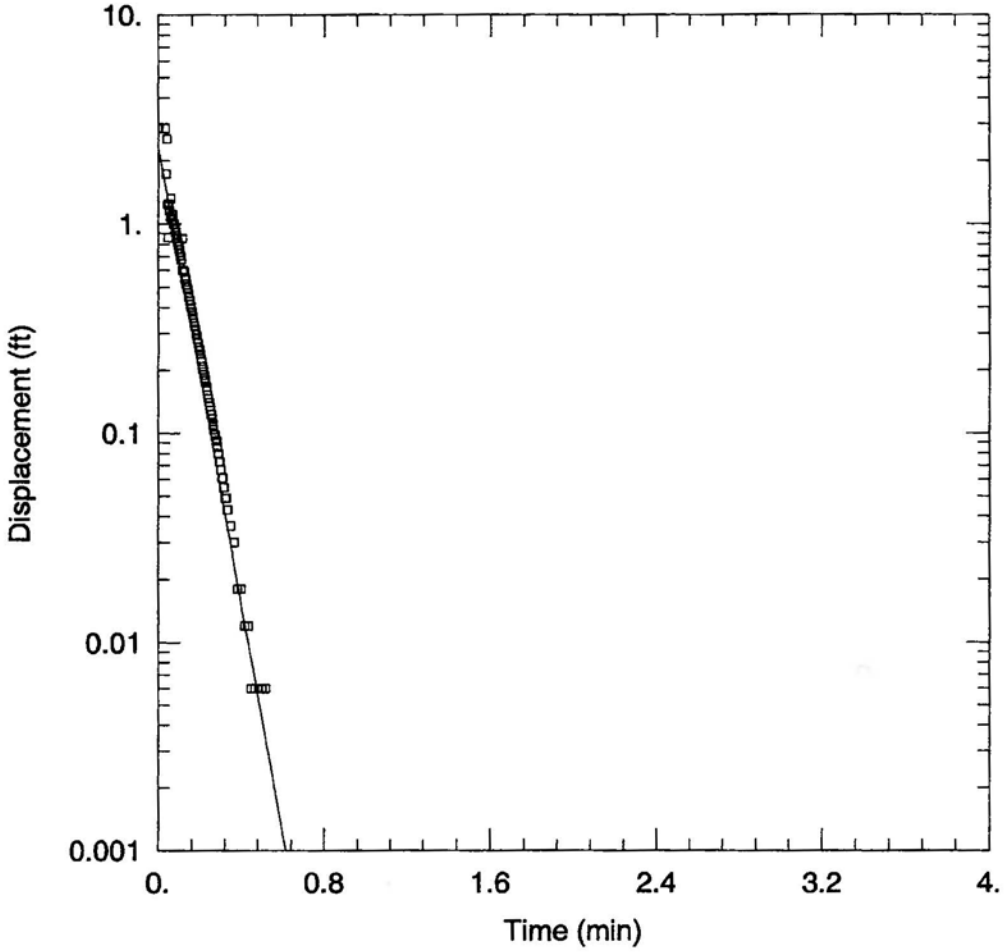
| XD | |
|---|---|
| Model | PTX-161D |
| Serial Number | 276708 |
| Scale | 19.512 |
| Offset | -0.034 |
| Linearity | NA |
| PSI | 20 |

| Test Data | | | |
|---|---|---|---|
| Test Number | T1 | T2 | T3 |
| ID | 32 | 32 | 32 |
| Slug In/Out | IN | OUT | IN |
| XD depth | 50' | 50' | 50' |
| XD install time | 0900 | 0906 | 0900 |
| XD reading | 20.35 | 20.56 | 20.57 |
| slug depth | 35' | 35' | 35' |
| slug install time | 0810 | 0816 | 0845 |
| slug length | 5' | 5' | 5' |
| slug diameter | 1 1/4" | 1 1/4" | 1 1/4" |
| slug volume | | | |
| slug displacement | | | |
| reference setting | 00.00 | 0.00 | 0.00 |
| reference reading | 20.35 | 20.57 | 20.59 |
| start time | 0810 | 0832 | 0850 |
| initial displacement | 2.539 | 2.12 2.150 | 2.83 2.841 |
| end time | 0828 | 0845 | 0900 |
| final XD reading | 20.56 | 20.57 | 20.57 |

3691-655 0581

add ~~0.006~~ 0.030

add 0.006




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW32IN2.AQT
Date: 02/06/03 Time: 11:24:05

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

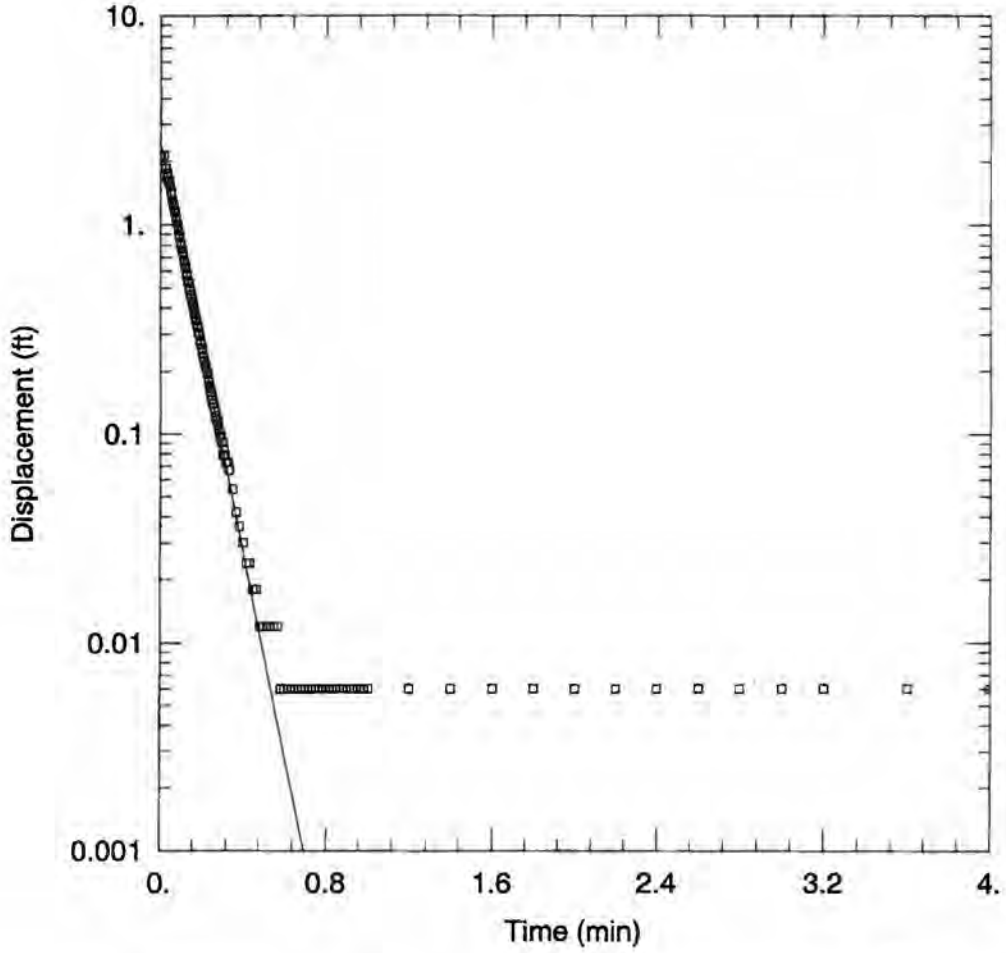
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.841 ft
Water Column Height: 110.8 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.25 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.1141 ft/min
Solution Method: Bouwer-Rice
y0 = 2.302 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW32OU1.AQT
Date: 02/06/03 Time: 11:27:20

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

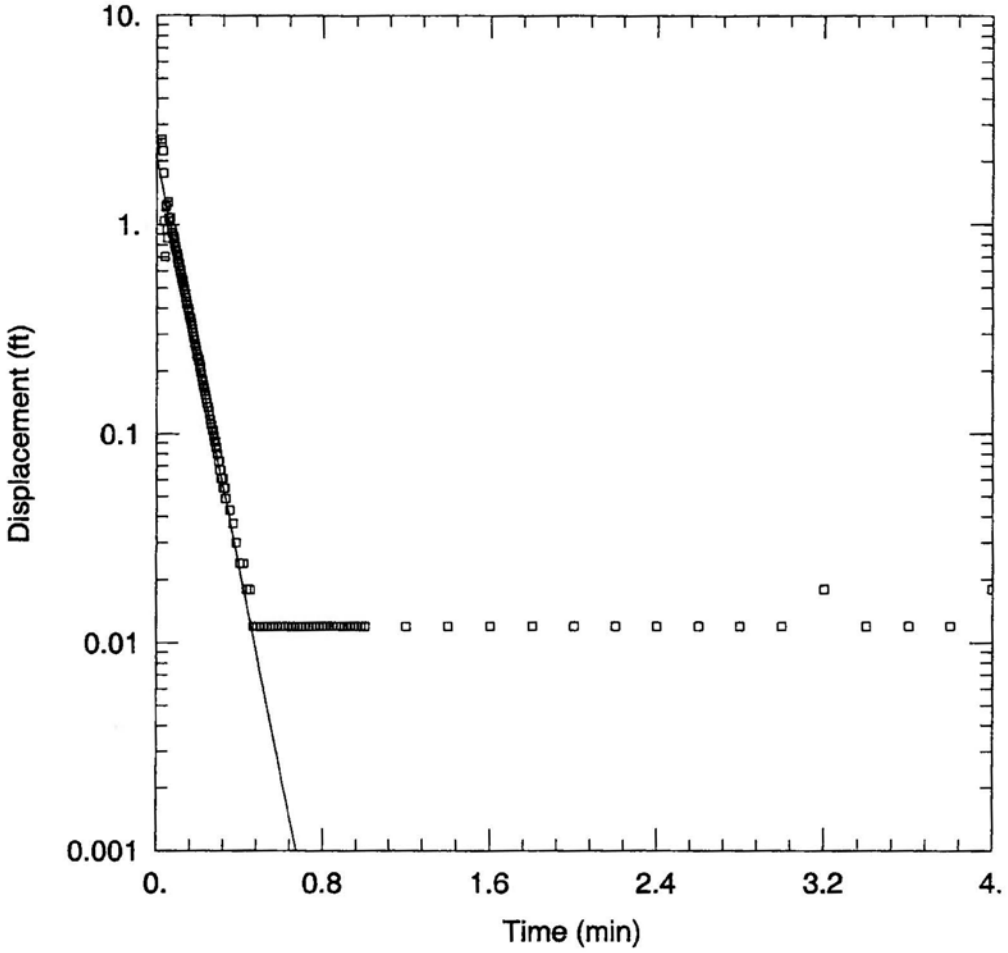
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.15 ft
Water Column Height: 110.8 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.25 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.102 ft/min
Solution Method: Bouwer-Rice
y0 = 2.435 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW32IN1.AQT
Date: 02/06/03 Time: 11:21:31

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.539 ft
Water Column Height: 110.8 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.25 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.1032 ft/min
Solution Method: Bouwer-Rice
y0 = 2.071 ft

| | TD | ∇ | |
|---|---|---|---|
| 26D | 81.37 | 42.44 | marked ✗ |
| 28S | 45.31 | 30.46 | ✗ |
| 34S | 39.60 | 31.41 | ✗ |
| 31S | $39.82 | 30.96 | ✗ |
| 30S | 39.63 | 31.76 | ✗ |
| 29D | 79.85 | 42.61 | ✗ |
| 36S | 39.02 | 29.85 | ✗ |
| 32S | 39.46 | 30.23 | ✗ |
| 35S | 36.12 | 29.32 | ✗ |
| 33S | 39.75 | 29.31 | ✗ |
| 10D | 84.97 | 44.28 | ✗ |
| 11S | 39.82 | 32.73 | ✗ |
| 12S | 45.13 | 35.53 | ✗ |
| 13S | 45.01 | 34.18 | ✗ |
| 21S | 44.79 | 40.69 | ✗ |
| 20S | 44.68 | 40.02 | ✗ |
| 23S | 39.87 | 25.57 | ✗ |
| 22D | 90.39 | 51.21 | ✗ |
| 01D2 | 129.81 | 48.78 | ✗ |
| 02D | 79.49 | 48.01 | ✗ |
| 03S | 59.02 | 46.19 | ✗ |
| 07S | 54.82 | 47.35 | ✗ |
| 05S | 55.02 | 47.51 | ✗ |
| 27S | 54.85 | 48.17 | ✗ |
| 08S | 55.71 | 48.57 | ✗ |
| 04D | 79.03 | 49.26 | ✗ |
| 09S | 51.89 | 47.90 | ✗ |
| 02SS | 55.21 | 46.78 | ✗ |
| 06S | 55.51 | 45.48 | ✗ |
| 14D | 79.85 | 47.10 | ✗ |
| 24S | 55.55 | 48.24 | ✗ |
| 15S | 56.65 | 48.10 | ✗ |
| 16S | 54.7 | 48.09 | ✗ |
| 19S | 55.7 | 47.85 | ✗ |
| 17S | 55.26 | 45.87 | ✗ |
| 18S | 55.00 | 42.42 | ✗ |

Tetra Tech NUS, Inc.

# GROUNDWATER LEVEL MEASUREMENT SHEET

**Project Name:** Sitq 4RI
**Location:** Sudbury Field
**Weather Conditions:** sunny 70's
**Tidally Influenced:** Yes ___ No ___
**Project No.:** 112G00389
**Personnel:** C. Cohen J. Wolfe, II
**Measuring Device:**
**Remarks:**

| Well or Piezometer Number | Date | Time | Elevation of Reference Point (feet)* | Total Well Depth (feet)* | Water Level Indicator Reading (feet)* | Thickness of Free Product (feet)* 6/14/07 | Groundwater Elevation (feet)* | Comments |
|---|---|---|---|---|---|---|---|---|
| MW26 | 6-14-07 | 1407 | | 81.35 | 44.40 | 44.55 | | |
| MW-27 | | ~~1484~~ 1615 | | 54.84 | 49.36 | | | |
| MW-28 | | 1425 | | 45.30 | 32.96 | 33.08 | | |
| MW-29 | | 1354 | | 79.86 | 44.61 | | | |
| MW-30 | | 1347 | | 39.62 | 34.14 | | | |
| MW-31 | | 1345 | | 39.80 | 33.80 | | | |
| MW-32 | | 1352 | | 39.43 | 32.21 | | | |
| MW-33 | | 1350 | | 39.73 | 31.84 | | | |
| MW-34 | | 1343 | | 39.59 | 34.14 | | | |
| MW-35 | | 1443 | | 36.11 | 31.07 | 31.24 | | |
| MW-36 | | 1356 | | 39.01 | ~~39~~ 32.58 | 32.72 | | |
| MW-37 | | 1621 | | 64.51 | 50.84 | | | |
| MW-38 | | 1640 | | 65.09 | 48.72 | | | |
| MW-39 | | 1645 | | 54.89 | 46.49 | | | |
| MW-40 | | 1704 | | 64.86 | 48.79 | | | |
| MW-41 | | 1710 | | 64.95 | 43.05 | | | |
| MW-42 | | 1336 | ~~+3.30~~ | 46.53 | 30.02 | | | |
| MW-43 | | 1402 | | 51.32 | 33.39 | 33.48 | | |
| MW-44 | | 1427 | | 54.82 | 32.80 | 32.92 | | |
| MW-45 | ✓ | 1431 | | 61.05 | 34.11 | 34.21 | | |
| MW-46 | | 1436 | | 55.85 | 32.87 | 33.22 | | |
| 2406 mw 46 | | | | | | | | |
| mw 47 | | | | | | | | |
| mw 26 | | | | | | | | |
| mw 19 | | | | | | | | |

* All measurements to the nearest 0.01 foot

Add .14' to all meas. after 1406

# APPENDIX D

# SLUG TESTS RESULTS UST SITE 2406

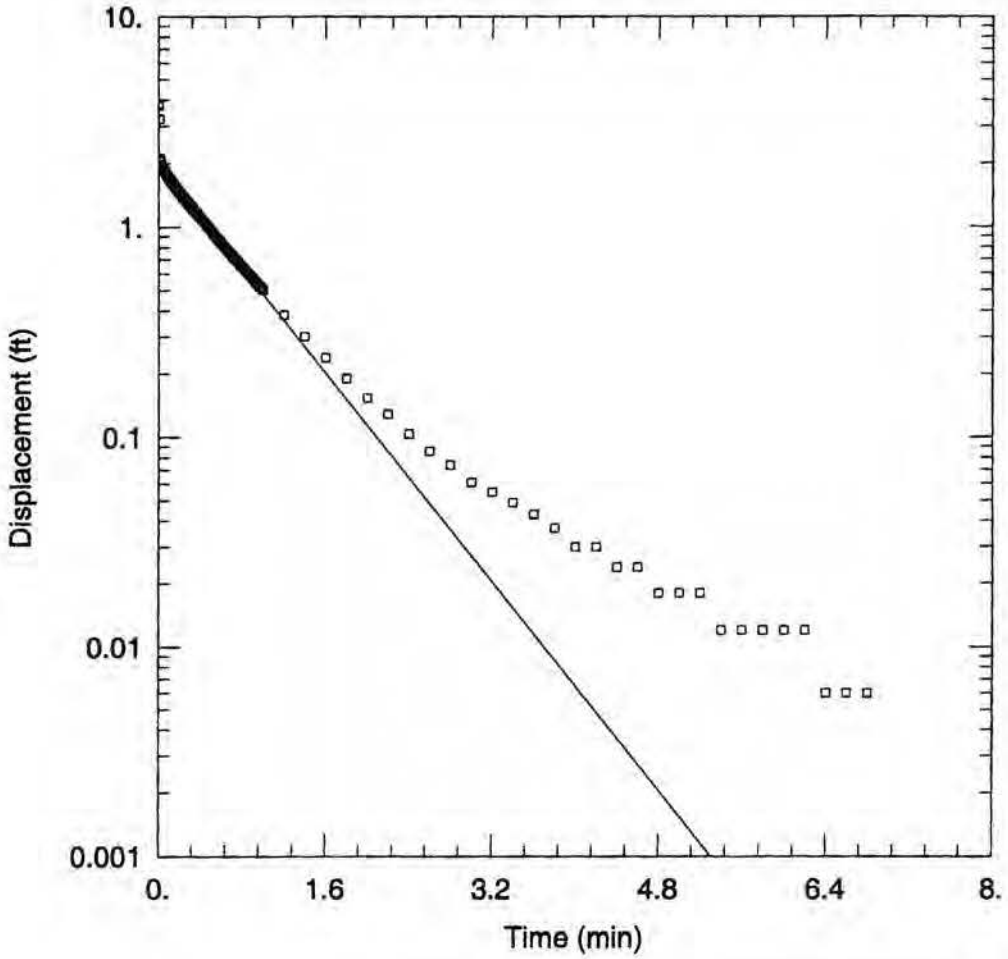
| Site Information | |
|---|---|
| Site Name | UST 2406 |
| Project | OLF SAUFLEY |
| Project Number | N 2042 |
| Date | 1/31/03 |
| Personnel | W. D. Olson / M. Akers |

| Well Information | |
|---|---|
| Name | DMW-30 |
| Inside Diameter | 2" |
| Borehole Diameter | 8" |
| Total Depth | 81.70 |
| Depth to Water | 39.78 |
| Water Column | 41.92 |
| Screen length | 5 |
| TOC Elevation | |

| Data Logger | |
|---|---|
| Model | SE 1000B |
| Serial Number | LKB -761 |
| Test Rate | Log 1 |
| Mode (TOC/SUR) | SUR / TOC / SUR |
| Level/Func. | Level |

| XD | |
|---|---|
| Model | PTX-161D |
| Serial Number | 276708 |
| Scale | 19.512 |
| Offset | -0.034 |
| Linearity | NA |
| PSI | 20 |

| Test Data | | | |
|---|---|---|---|
| Test Number | T7 | T8 | T9 |
| ID | 30 | 30 | 30 |
| Slug In/Out | IN | OUT | IN |
| XD depth | 50' | 50' | 50' |
| XD install time | 1055 | 1055 | 1055 |
| XD reading | 10.00 | 10.08 | 10.06 |
| slug depth | ~~39~~ 39.7 | 39.7 | 39.7 |
| slug install time | 1105 | 1108 | 1140 |
| slug length | 5' | 5' | 5' |
| slug diameter | 1¼" | 1¼" | 1¼" |
| slug volume | | | |
| slug displacement | | | |
| reference setting | 0.00 | 0.00 | 0.00 |
| reference reading | 10.06 | 10.08 | 10.07 |
| start time | 1108 | 1120 | 1140 |
| initial displacement | 2.471 | 3.85 3.833 | 2.736 |
| end time | 1118 | 1130 | 1150 |
| final XD reading | 10.07 | 10.06 | 10.08 |




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW30OU1.AQT
Date: 02/06/03 Time: 10:53:42

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

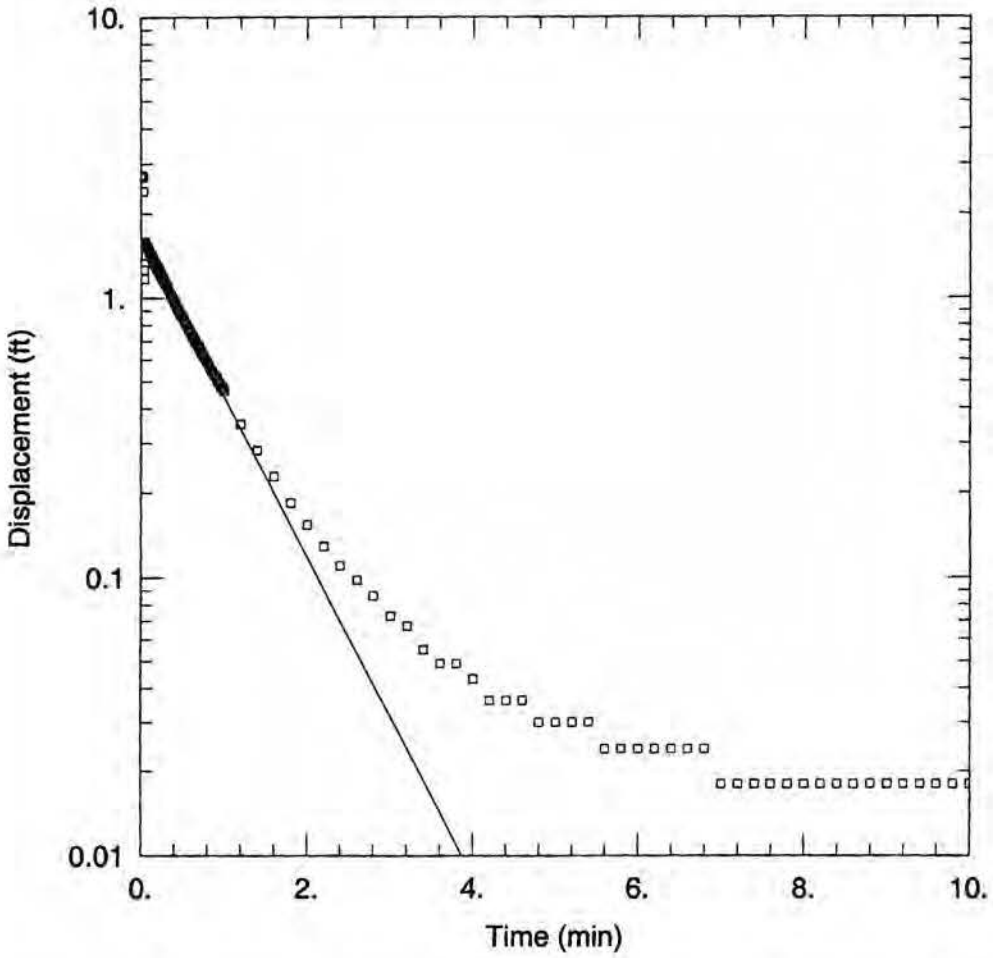
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 3.833 ft
Water Column Height: 41.92 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.01778 ft/min
Solution Method: Bouwer-Rice
y0 = 2.015 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW30IN2.AQT
Date: 02/06/03 Time: 10:47:30

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

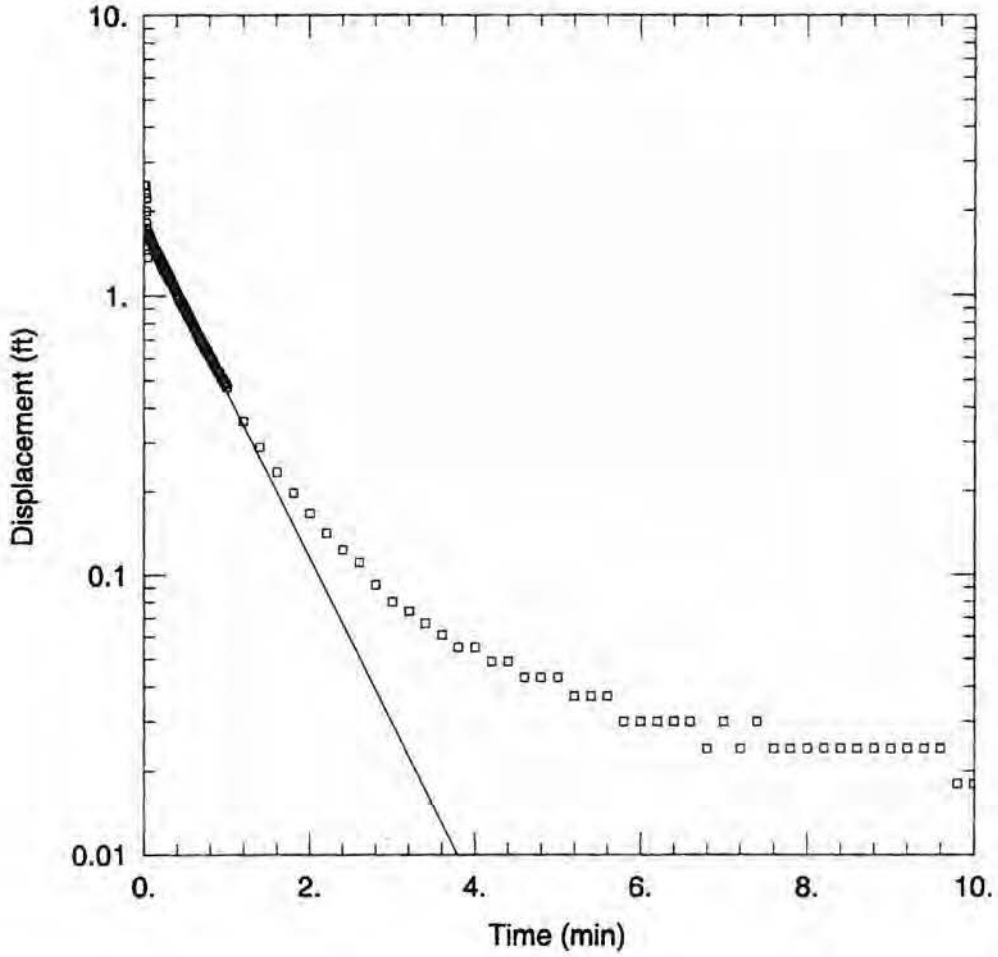
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.736 ft
Water Column Height: 41.92 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.01635 ft/min
Solution Method: Bouwer-Rice
y0 = 1.647 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW30IN1.AQT
Date: 02/06/03 Time: 10:39:49

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.471 ft
Water Column Height: 41.92 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.01694 ft/min
Solution Method: Bouwer-Rice
y0 = 1.777 ft

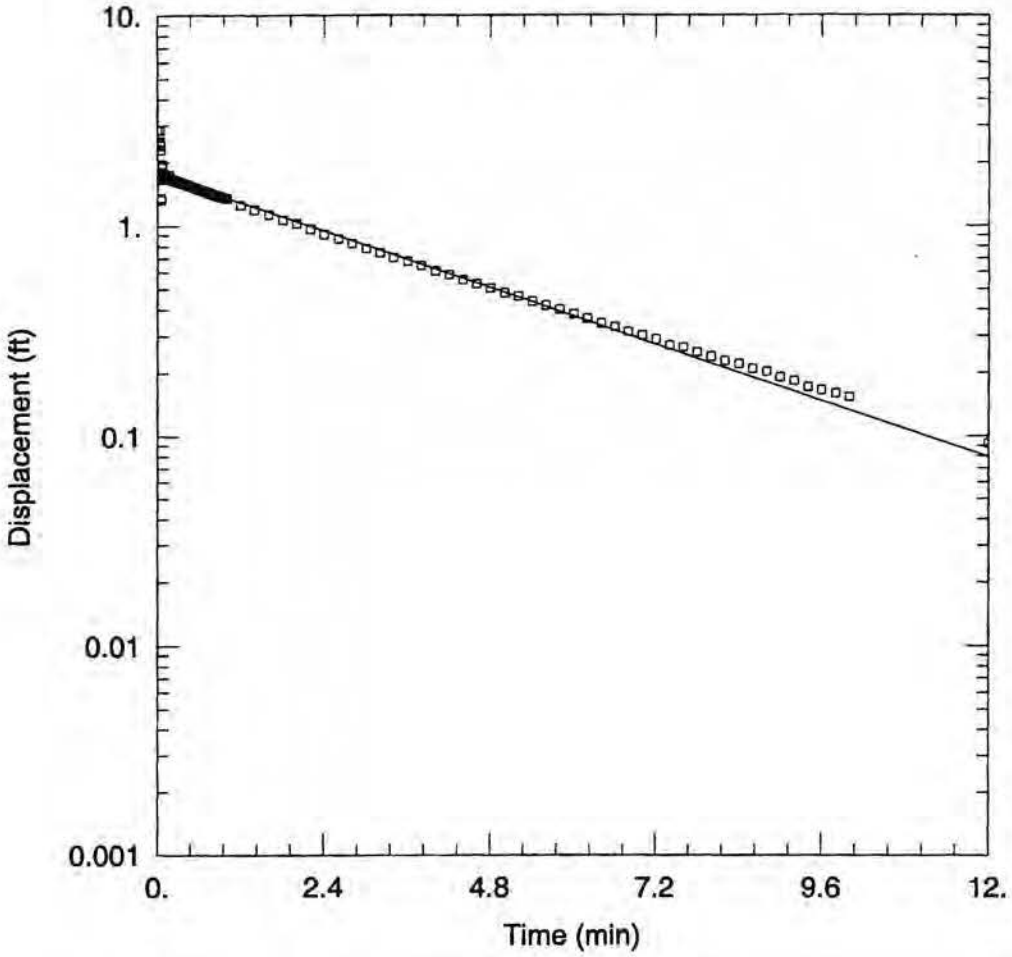
| Site Information | |
|---|---|
| Site Name | UST 2406 |
| Project | Sanford |
| Project Number | N |
| Date | N2642 |
| Personnel | 1/31/03 |
| | W.D. Olson / M. Akers |

| Well Information | |
|---|---|
| Name | DMW-31 |
| Inside Diameter | 2" |
| Borehole Diameter | 8" ? |
| Total Depth | 79.29 |
| Depth to Water | 28.36 |
| Water Column | 50.93 |
| Screen length | 5' |
| TOC Elevation | |

| Data Logger | |
|---|---|
| Model | SE 1000B |
| Serial Number | 1KB-761 |
| Test Rate | Log 1 |
| Mode (TOC/SUR) | SUR / TOC / SUR |
| Level/Func. | Level |

| XD | |
|---|---|
| Model | PTX-161D |
| Serial Number | 276708 |
| Scale | 19.512 |
| Offset | -0.034 |
| Linearity | NA |
| PSI | 20 |

| Test Data | | | |
|---|---|---|---|
| Test Number | T4 | T5 | T6 |
| ID | 31 | 31 | 31 |
| Slug In/Out | IN | OUT | IN |
| XD depth | 50' | 50' | 50' |
| XD install time | 0907 | 0907 | 0907 |
| XD reading | 21.30 | | |
| slug depth | 33.4 | 33.4 | 33.4 |
| slug install time | ~~0~~0920 | 0940 | |
| slug length | 5' | 5' | 5' |
| slug diameter | 1¼" | 1¼" | 1¼" |
| slug volume | | | |
| slug displacement | | | |
| reference setting | 0.00 | 0.00 | 0.00 |
| reference reading | ~~21.20~~ 21.07 | ~~21.08~~ | 21.08 |
| start time | 0940 | 1004 | 1035 |
| initial displacement | 2.724 | 4.814 | 2.880 |
| end time | 1000 | 1024 | 1047 |
| final XD reading | ~~20~~ 21.07 | ~~1024~~ 21.03 | 21.16 |




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW31IN2.AQT
Date: 02/06/03 Time: 11:09:27

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

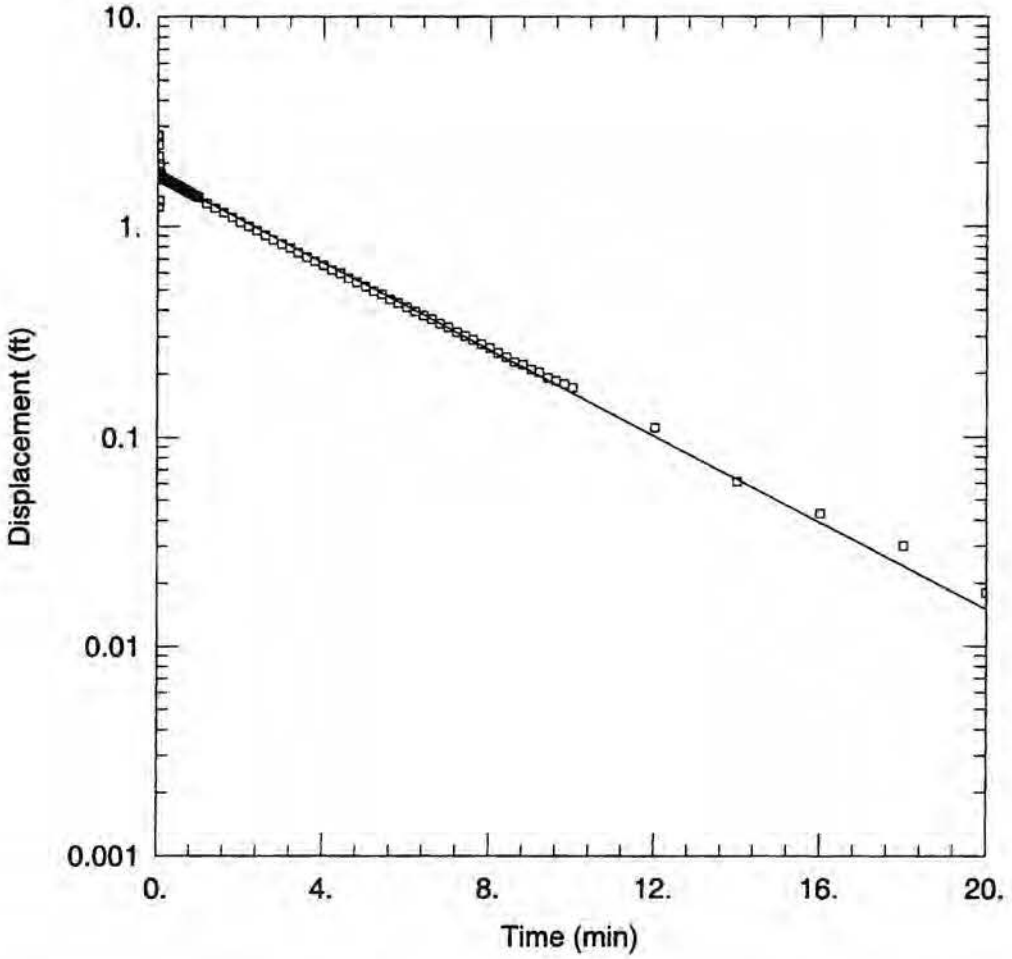
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.86 ft
Water Column Height: 50.93 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.003258 ft/min
Solution Method: Bouwer-Rice
y0 = 1.752 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW31IN1.AQT
Date: 02/06/03 Time: 11:00:51

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

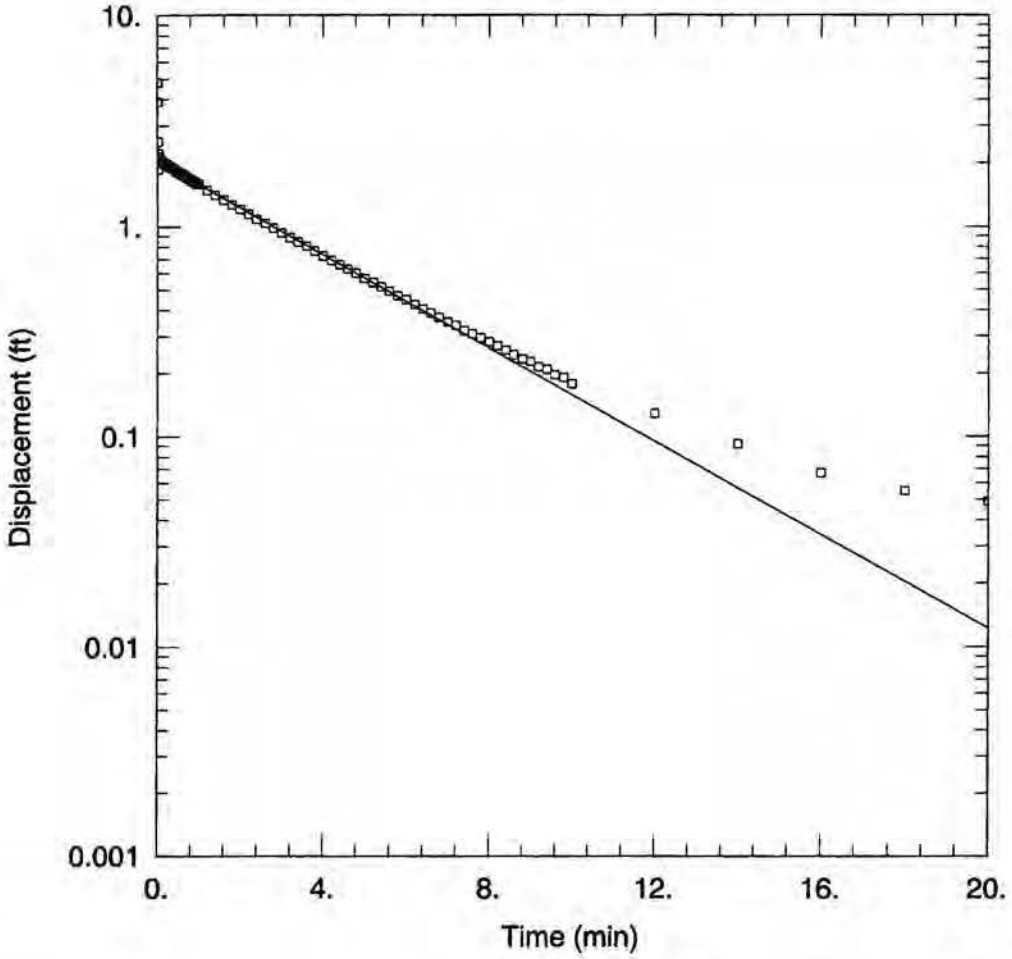
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.724 ft
Water Column Height: 50.93 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.003001 ft/min
Solution Method: Bouwer-Rice
y0 = 1.735 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW31OU1.AQT
Date: 02/06/03 Time: 11:13:30

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 4.814 ft
Water Column Height: 50.93 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.3333 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.003234 ft/min
Solution Method: Bouwer-Rice
y0 = 2.047 ft

| Site Information | |
|---|---|
| Site Name | UST 2406 |
| Project | Sawtelle |
| Project Number | N2642 |
| Date | 1/31/03 |
| Personnel | W.D. OKOW/ M: Akers |

| Well Information | |
|---|---|
| Name | DMW32 |
| Inside Diameter | DMW32 |
| Borehole Diameter | 2" |
| Total Depth | 6" |
| Depth to Water | ~~130'~~ 140' |
| Water Column | 29.20 |
| Screen length | 110.80 |
| TOC Elevation | 5' |

| Data Logger | |
|---|---|
| Model | SE 100aB |
| Serial Number | 1KB-761 |
| Test Rate | Log 1 |
| Mode (TOC/SUR) | SUR (TOC/SUR |
| Level/Func. | Level |

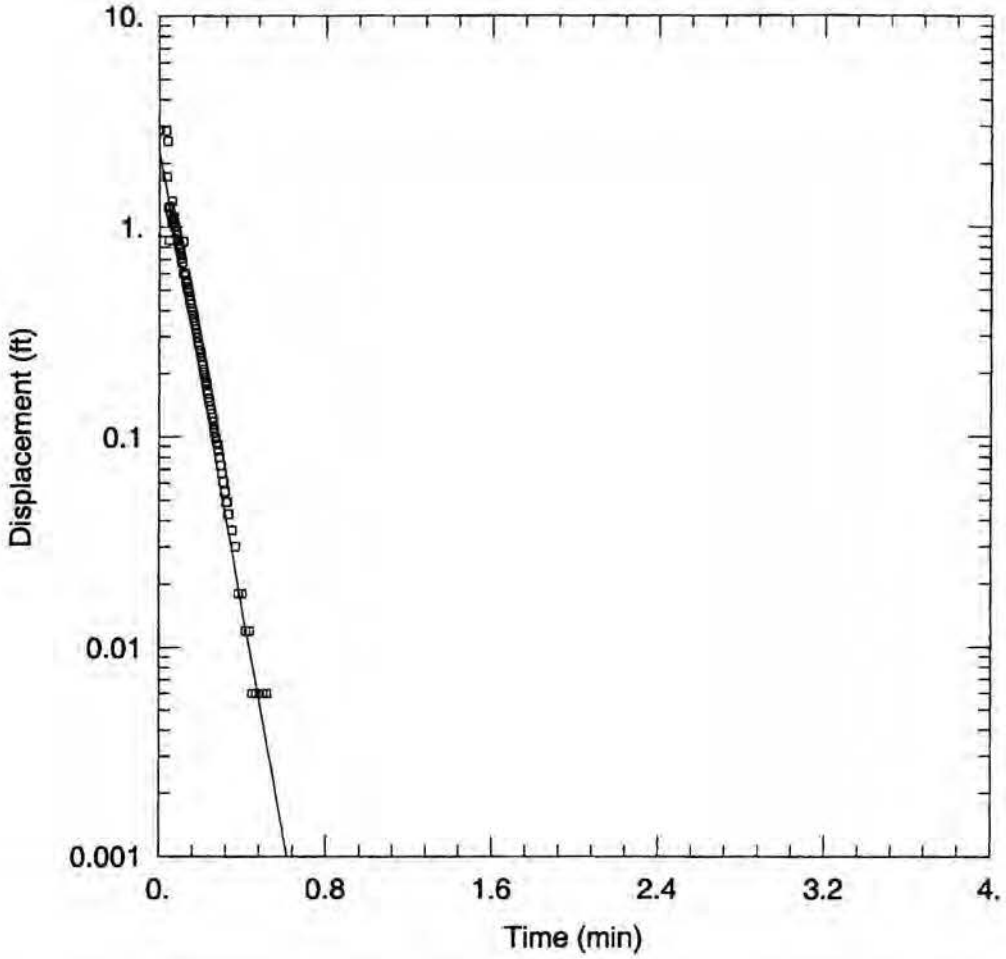
| XD | |
|---|---|
| Model | PTX-161D |
| Serial Number | 276708 |
| Scale | 19.512 |
| Offset | -0.034 |
| Linearity | NA |
| PSI | 20 |

| Test Data | | | |
|---|---|---|---|
| Test Number | T1 | T2 | T3 |
| ID | 32 | 32 | 32 |
| Slug In/Out | IN | OUT | IN |
| XD depth | 50' | 50' | 50' |
| XD install time | 0900 | 0906 | 0900 |
| XD reading | 20.35 | 20.56 | 20.57 |
| slug depth | 35' | 35' | 35' |
| slug install time | 0810 | 0816 | 0845 |
| slug length | 5' | 5' | 5' |
| slug diameter | 1¼" | 1¼" | 1¼" |
| slug volume | | | |
| slug displacement | | | |
| reference setting | 00.00 | 0.00 | 0.00 |
| reference reading | 20.35 | 20.57 | 20.59 |
| start time | 0810 | 0832 | 0850 |
| initial displacement | 2.539 | 2.12 2.150 | 2.83 2.841 |
| end time | 0828 | 0845 | 0900 |
| final XD reading | 20.56 | 20.57 | 20.57 |

3691-655
0581

add
~~0.006~~
0.030

900
0.006




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW32IN2.AQT
Date: 02/06/03 Time: 11:24:05

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

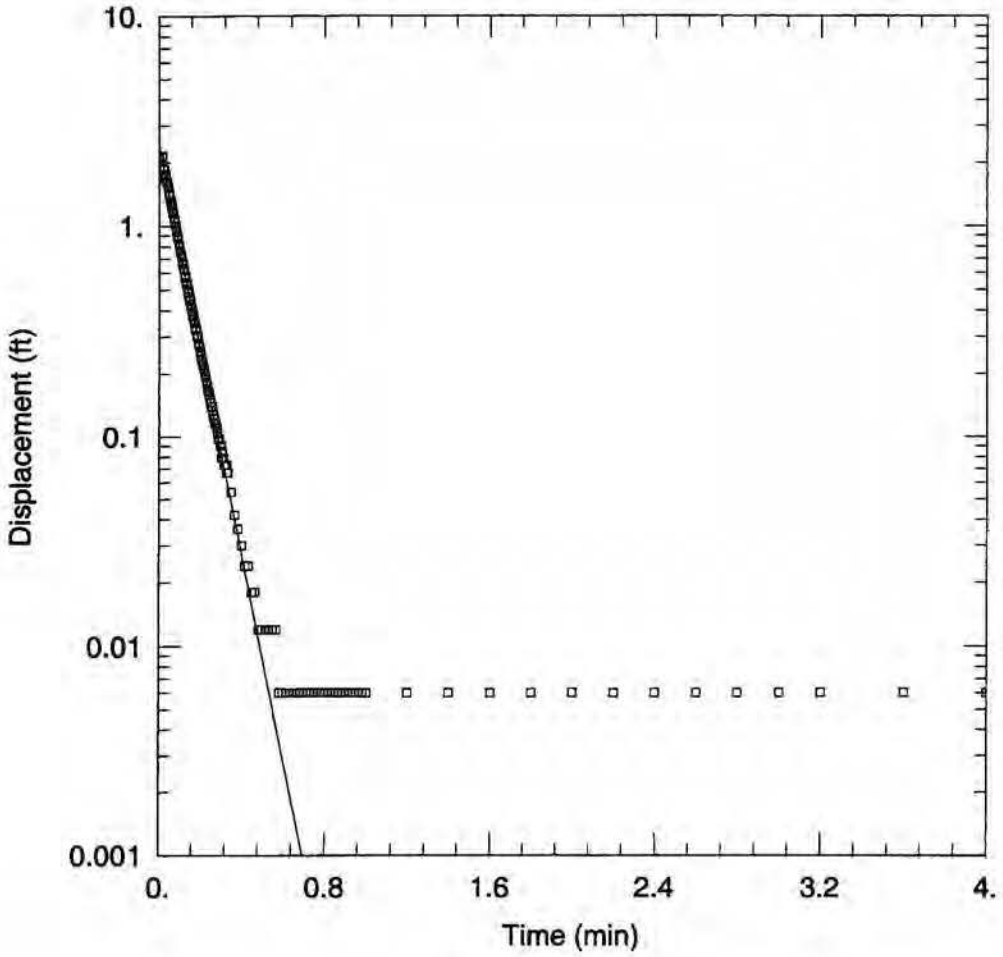
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.841 ft
Water Column Height: 110.8 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.25 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.1141 ft/min
Solution Method: Bouwer-Rice
y0 = 2.302 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW32OU1.AQT
Date: 02/06/03 Time: 11:27:20

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

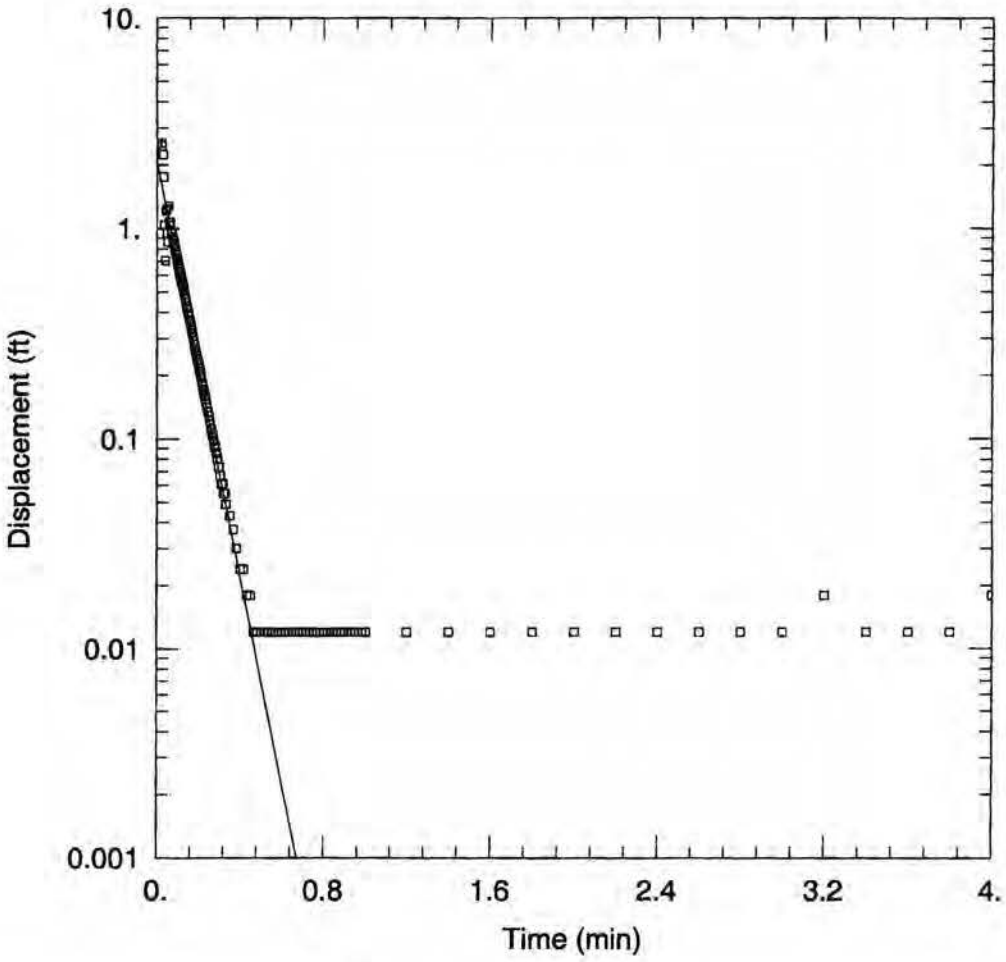
Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.15 ft
Water Column Height: 110.8 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.25 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.102 ft/min
Solution Method: Bouwer-Rice
y0 = 2.435 ft




## WELL TEST ANALYSIS

Data Set: E:\NAVY\NASPEN~1\CTO274~1\FIELDD~1\SLUGTE~1\DMW32IN1.AQT
Date: 02/06/03 Time: 11:21:31

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N2642
Test Location: Bldg 2406 SFY
Test Well: DMW-30
Test Date: 1/31/03

## AQUIFER DATA

Saturated Thickness: 500. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.539 ft
Water Column Height: 110.8 ft
Casing Radius: 0.0833 ft
Wellbore Radius: 0.25 ft
Screen Length: 5. ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
K = 0.1032 ft/min
Solution Method: Bouwer-Rice
y0 = 2.071 ft

# APPENDIX E

# GEOPHYSICAL SURVEY

**Introduction.**
On 2006 June 27-30, a geophysical survey was performed at Hangers 807 and 810 of Saufley Field in Pensacola, Florida. The objective was to identify the presence and location of underground storage tanks (UST) on the east side of the hangers. Tank 807-B (2,000 gal.) contained used oil, 808-C (1,000 gal.) kerosene, and 807-D (1,000 gal.) contained gasoline. The three 807 tanks were reportedly removed in late 1980; no information was available on tanks at Hanger 810.

**Equipment Used.**
Two types of geophysical instruments were used to identify the presence of USTs at the hangers: a high resolution metal detector and ground penetrating radar (GPR). The high resolution metal detector is the Geonics EM61-MK2; the GPR is the GSSI's SIR3000 with a 400 MHz and 270 MHz antennae. Positions of the EM61 readings and surface features were collected with a Trimble PRO-XRS, mapping-grade global positioning system (GPS). At Hanger 807, GPS positions were collected simultaneously with EM61 data via a NMEA stream to the EM data recorder. At Hanger 810, GPS positions were collected separately from the EM data and later merged.

The EM61-MK2 is a high sensitivity high resolution 4 channel time-domain electromagnetic (TDEM) metal detector. It consists of a powerful transmitter that generates a pulsed primary magnetic field, with induces eddy currents in nearby metallic objects. The decay of these currents is measured by two receiver coils (1 m X 0.5 m) mounted on the coil assembly. The responses are recorded and displayed on a digital recorder. The EM61-MK2 detects a single 55 gal drum at a depth of over 3 meters. The EM61 records three time channels measured by the bottom receiver coil (D1, D2, D3) and one channel from the top coil which is used to calculate the differential channel (D) to suppress the response of near surface objects. Thus anomalies identified in the D1 channel are shallower than anomalies identified in the D channel and those in the D2 and D3 channel are at intermediate depths. The EM61 survey was performed by slowly walking the instrument across the project site along a north-south system of parallel transect lines with a 3 foot separation. The EM61 instrument was calibrated and nulled (zeroed) on the reinforced concrete but away from the area of interest and did not contain concrete patches that might indicate the presence of pipes. The clock in the EM data recorder was synchronized with the GPS data recorder.

GPR transmits high frequency EM waves into the ground and records the energy reflected back to the ground surface. An antenna serves as both a transmitter and receiver, and a profiling recorder that both processes the incoming signal and provides a graphic display of the data. The GPR survey provides a graphic cross-sectional profile view of subsurface conditions. The profile is created from the reflections of repetitive short-duration EM waves that are generated as the antenna is pulled across the ground surface. The reflections occur at the subsurface contacts between materials with differing electrical properties. The greater the electrical contrast between the surrounding earth materials and the target of interest, the greater the amplitude of the reflected return signal. Unless the buried object is metal, only part of the signal energy will be reflected back to the antenna with the remaining portion of the signal continuing to propagate downward to

be reflected by deeper features. The GPR signal is absorbed as it passes through earth material. Higher conductive clays and organic materials absorb more of the GPR signal and reduce the signal penetration depth. The depth of penetration of the GPR signal is also reduced as the antenna frequency is increased but the resolution of the data is improved. A 400 MHz antenna was used for most of the profiles. Lower frequency antennae (270 MHz) produce greater depth of penetration but reduced resolution.

**Site Conditions.**
Contour maps of the four TDEM responses were overlain on base maps in US State Plane, NAD83, Florida CS83 North Zone, US survey feet. The surface outside the hanger is concrete with wire mesh reinforcement. North of the hangers, an abandoned steam channel/duct contains water and can be located by flush-mounted metal doors. The doors have small holes cut in them and are open to the surface.

Building contacts are Billy Cominiti (850-380-8022) with DFAS at Hanger 807 and Phil Littrill (850-458-7250) with Saufley Federal Prison at Hanger 810. Parked cars were removed during the survey at Hanger 807 but buses and equipment remained at Hanger 810. The area east of Hanger 807 was surveyed and the area both east and west of Hanger 810 was surveyed. Wire mesh reinforcement wire was visible on the surface in a slab at Hanger 807 East

**Results.**
The EM61 results were contoured and overlain on a base map of Saufley Field. GPR profiles were compiled and annotated. Both north-south and east-west GPR profiles were collected; some GPR profiles were collected west to east.

EM61 at Hanger 807 East.
The contoured EM61 results of the D1 (shallow) response identify two or three linear features or high amplitude (pink and red) anomalies that could indicate pipes. It is unknown why the linear objects do not extend south of the concrete into the grass island. Contoured results of the remaining channels (D2, D3 and differential) at Hanger 807 are all similar to each other and show four or five blocky discontinuous features of high amplitude (pink and red outlined by yellow) may also be associated with mesh reinforcement in concrete slabs. The differential response, however, shows three small high amplitude anomalies that could indicate tanks. The approximate distances of the anomalies from the edges of the hanger are indicated on the revised figure.

South to North GPR Profiles at Hanger 807 East.
GPR profiles 1 through 4 were collected parallel to the eastern edge of the hanger beginning at the south end and ending at the north end of the hanger. The metal reinforcement mesh is visible as repeating white dots at the surface of the GPR profiles. Edges of the individual concrete slabs are also evident as small breaks at the surface of the profile. There are approximately four breaks in each profile and identify five concrete slabs which is the same number of blocky features. A weak anomaly (Anomaly #4 and #8) was identified in Profiles 2 and 3 in the grass island. No EM anomaly was identified in the grass island so the grass island GPR anomaly is probably not metal.

Three GPR anomalies were identified in Profiles 1 and 2 that may coincide with the three large blocky EM anomalies in the center of figures showing D2, D3 and D. On GPR profile #1 (approximately 16 feet from the hangar), there is an anomaly (anomaly #2) that may represent a pipe or utility. This feature is roughly 60 to 70 feet north of the south end of the hangar. It is not apparent on the other GPR profiles, but based on the shape of the GPR anomaly it may be oriented perpendicular to the hangar. While there is a small anomaly with a relatively low amplitude at this location on the EM61 maps, there is no indication of a linear feature associated with a utility. No GPR anomalies are identified beneath the concrete in Profiles 3 and 4.

East to West GPR Profiles at Hanger 807 East
GPR Profiles 5-9 were collected starting in the east and heading west back toward the building. The water lines next to the hanger are bright easily identified GPR anomalies (Anomalies #9, 12-14, and 16). Profile 8 shows results of the 270 MHz antenna and possibly identifies a single deep indistinct GPR anomaly (Anomaly #15). Other than the two water line anomalies, two additional GPR anomalies (Anomalies #10 and 11) were visible only on Profile 5 and not on Profiles 7 and 9 where expected EM blocky features were located.

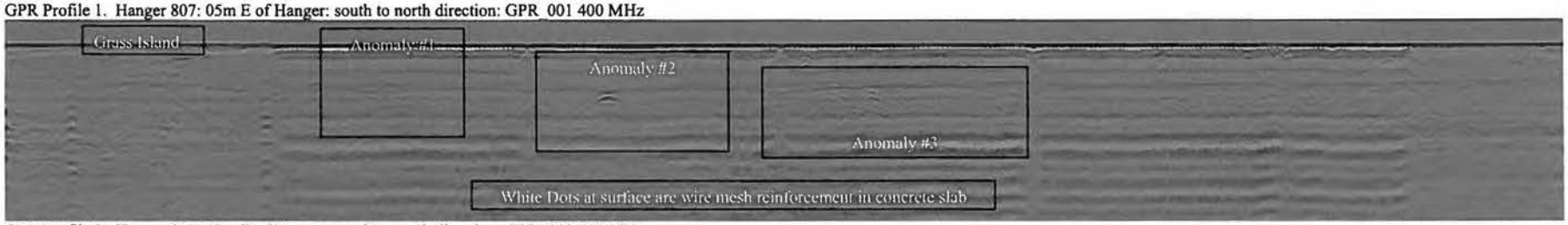
EM61 at Hanger 810 East
The contoured EM61 results of the D1 (shallow) channel show a smearing or a wide area of high amplitude response (pink, red and yellow) that is more indicative of wire reinforcement in concrete. The smeared feature clears in deeper channels and image two or three apparent linear features more clearly. As in 807, the apparent linear features do not extend beneath the grass island in the south of the figure. Blocky features do not appear at Hanger 810 and no USTs are apparent.

South to North GPR Profiles at Hanger 810 East
GPR Profiles 10, 11, and 12 at Hanger 810 east do not indicate any anomalous objects trending east-west which agrees with the EM response. However, a large GPR anomaly (Anomaly #17) in Profile 13 may coincide with the high amplitude (pink) anomaly in the east central area (1074275E, 543725N) of the EM figures.

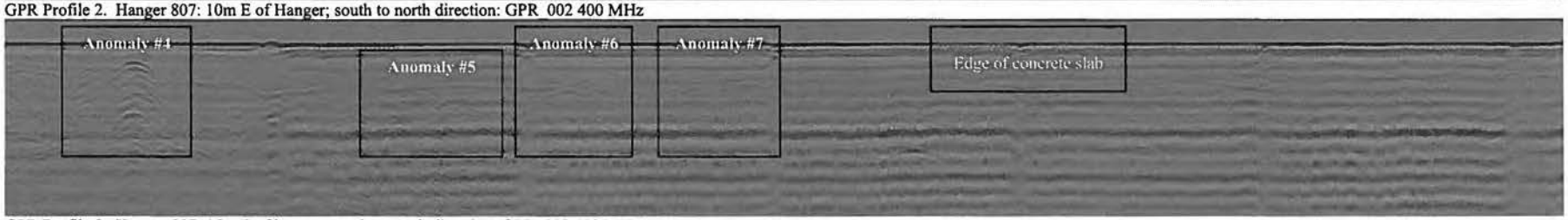
West to East GPR Profiles at Hanger 810 East
GPR Profile 14 shows three anomalies (#18, #19, and #20) that correspond to the three EM anomalies in the differential channel. Anomaly #18 is a couplet of water lines that run north – south next to the building. Profile 15 shows only two GPR anomalies and Profile 16 only one.

**Summary**
Four or five USTs are indicated on the east side of Hanger 807 from the blocky EM anomalies in EM61 channels D2, D3 and D but USTs are not indicated on the east side of Hanger 810 from EM responses. These EM features are not confirmed with GPR profiles. Water lines east of both hangers are identified clearly in east-west (and west-east) GPR profiles but vaguely imaged by the EM results (D1 at Hanger 807 and D at Hanger 810).

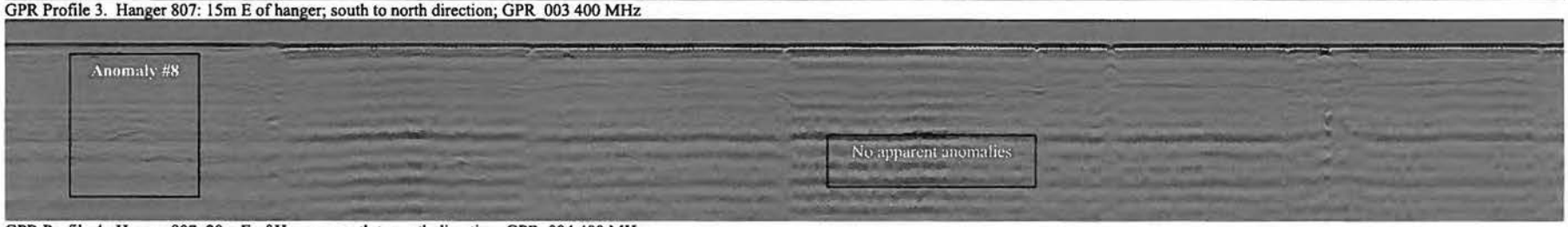
GPR Profile 1. Hanger 807: 05m E of Hanger: south to north direction: GPR_001 400 MHz



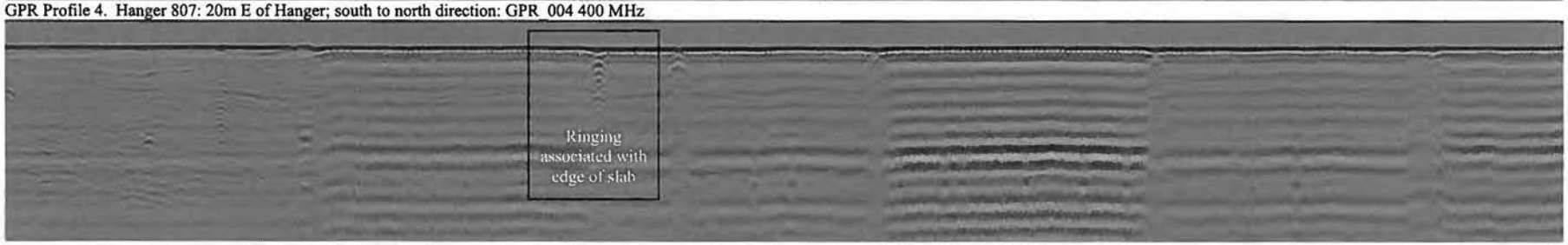

GPR Profile 2. Hanger 807: 10m E of Hanger; south to north direction: GPR_002 400 MHz



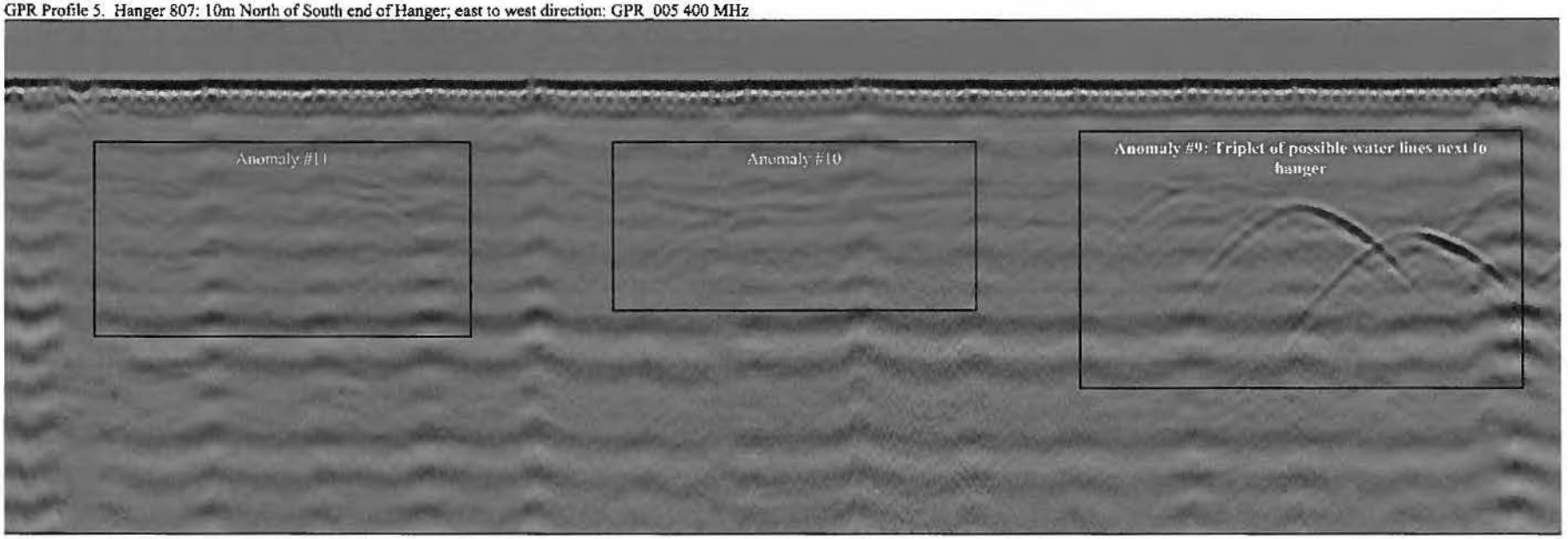

GPR Profile 3. Hanger 807: 15m E of hanger; south to north direction; GPR_003 400 MHz



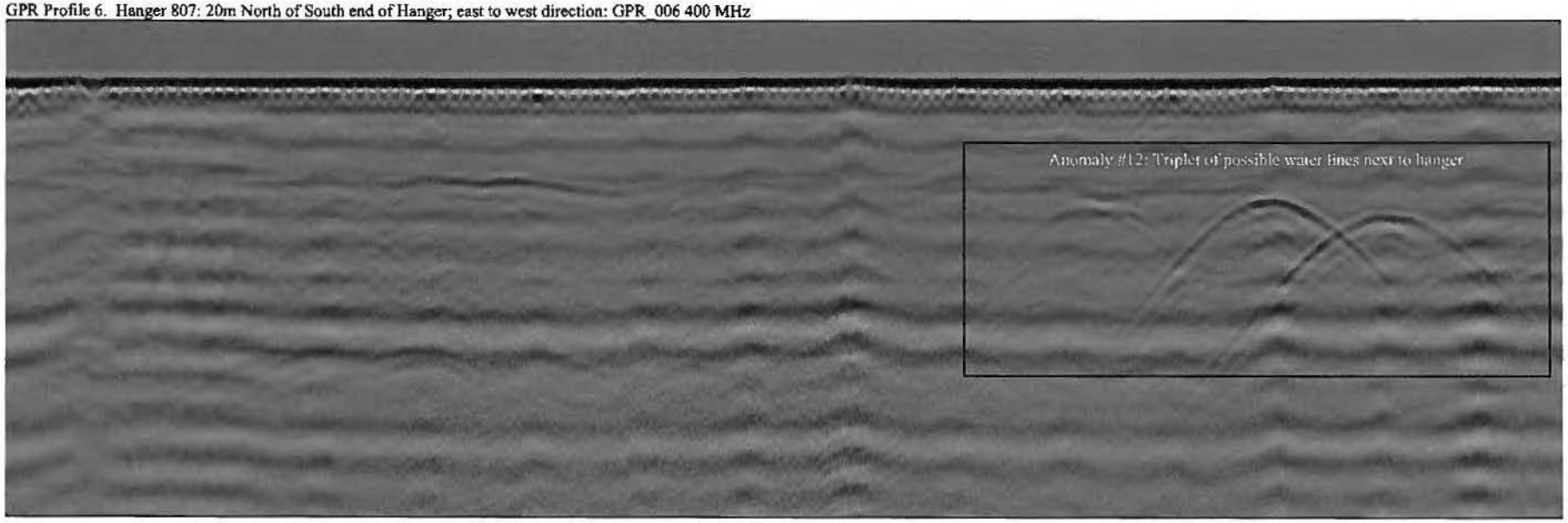

GPR Profile 4. Hanger 807: 20m E of Hanger; south to north direction: GPR_004 400 MHz



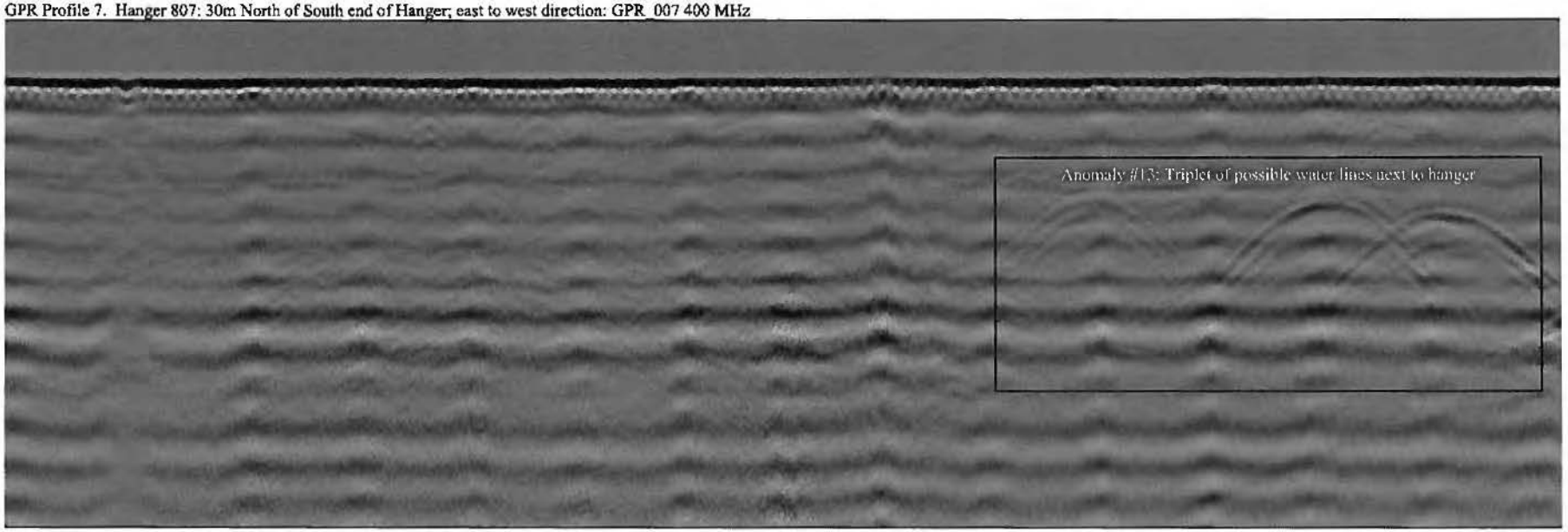
GPR Profile 5. Hanger 807: 10m North of South end of Hanger; east to west direction: GPR_005 400 MHz



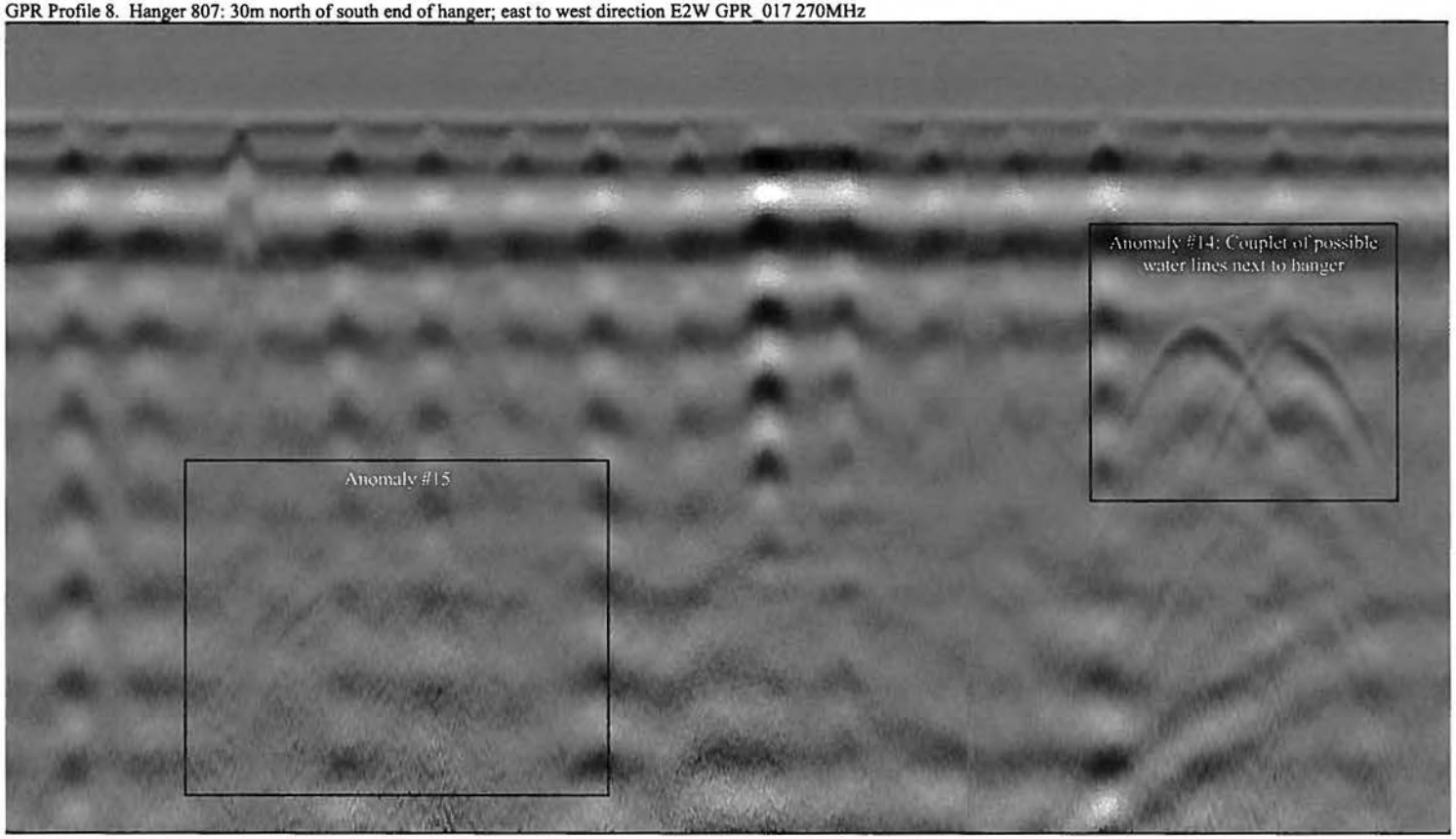
GPR Profile 6. Hanger 807: 20m North of South end of Hanger; east to west direction: GPR_006 400 MHz



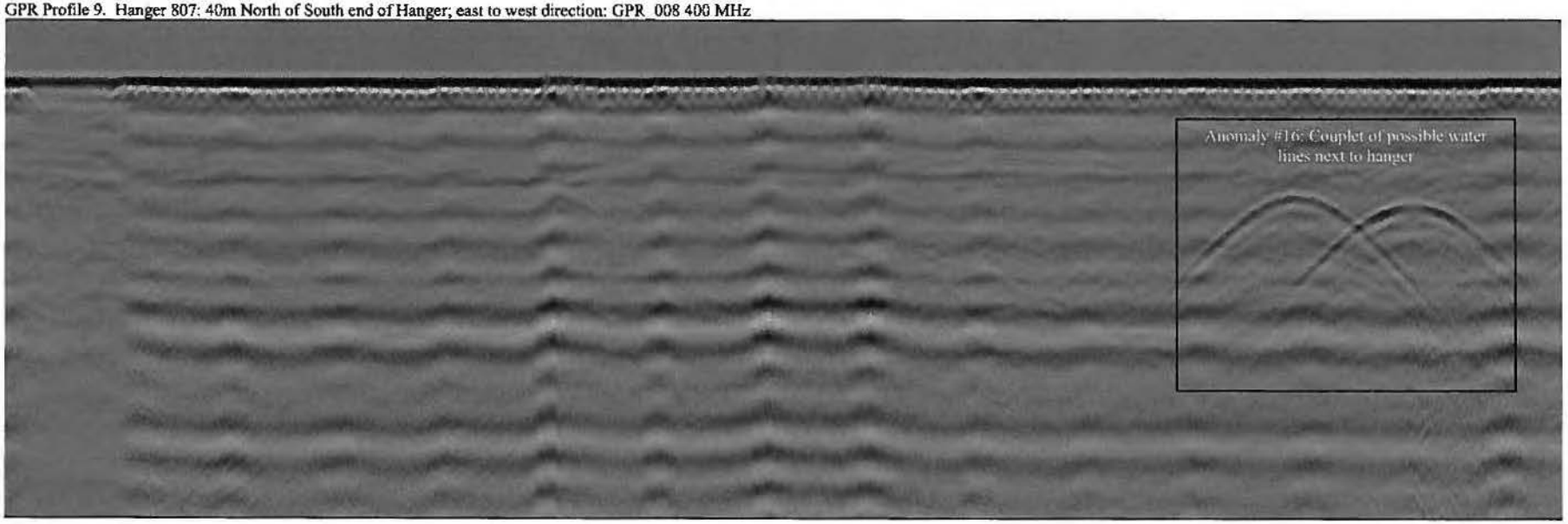
GPR Profile 7. Hanger 807: 30m North of South end of Hanger; east to west direction: GPR_007 400 MHz



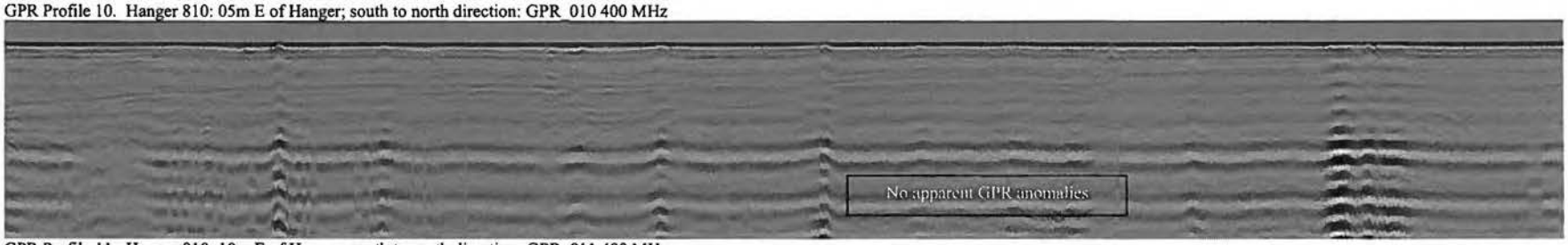
GPR Profile 8. Hanger 807: 30m north of south end of hanger; east to west direction E2W GPR_017 270MHz



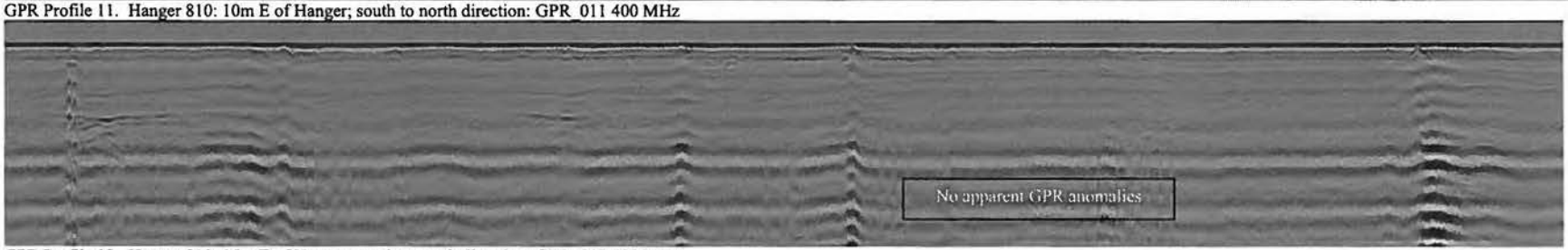
GPR Profile 9. Hanger 807: 40m North of South end of Hanger; east to west direction: GPR_008 400 MHz



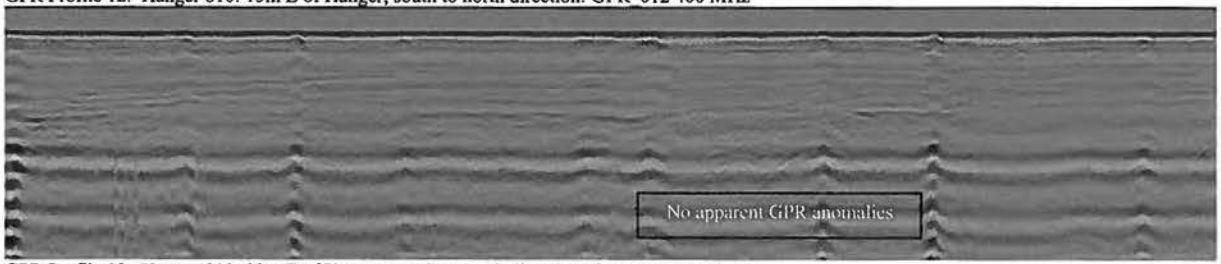
GPR Profile 10. Hanger 810: 05m E of Hanger; south to north direction: GPR_010 400 MHz



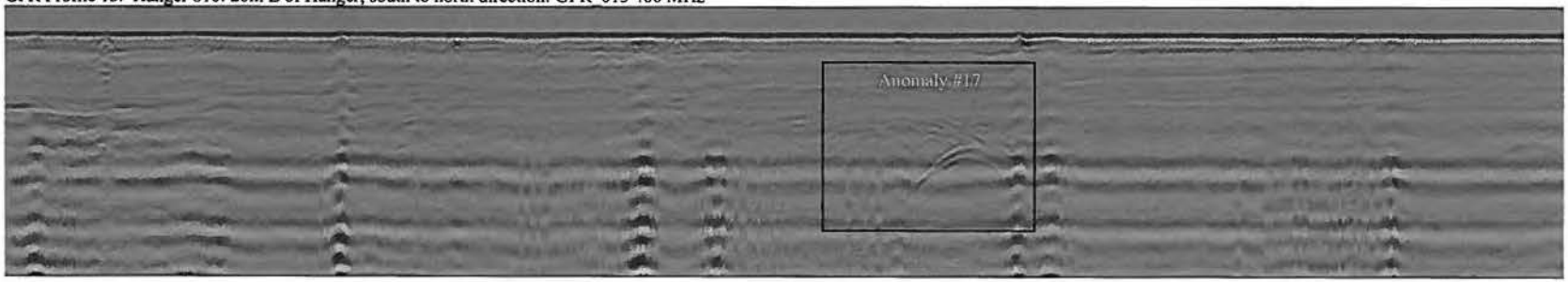

GPR Profile 11. Hanger 810: 10m E of Hanger; south to north direction: GPR_011 400 MHz



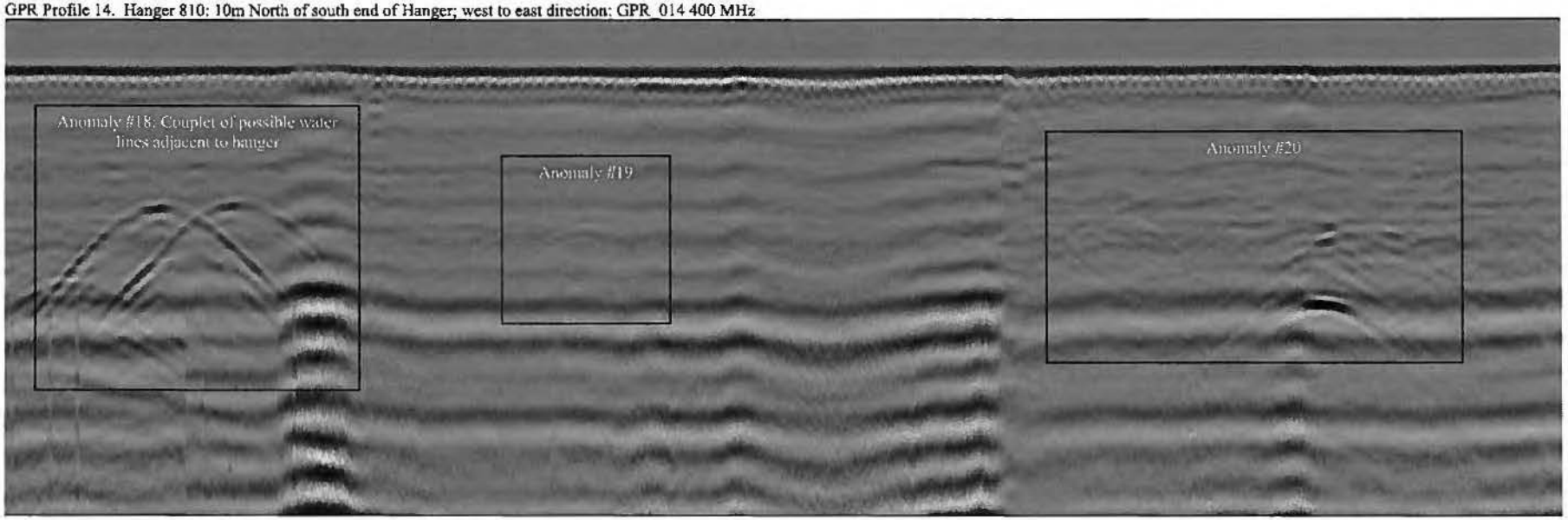

GPR Profile 12. Hanger 810: 15m E of Hanger; south to north direction: GPR_012 400 MHz



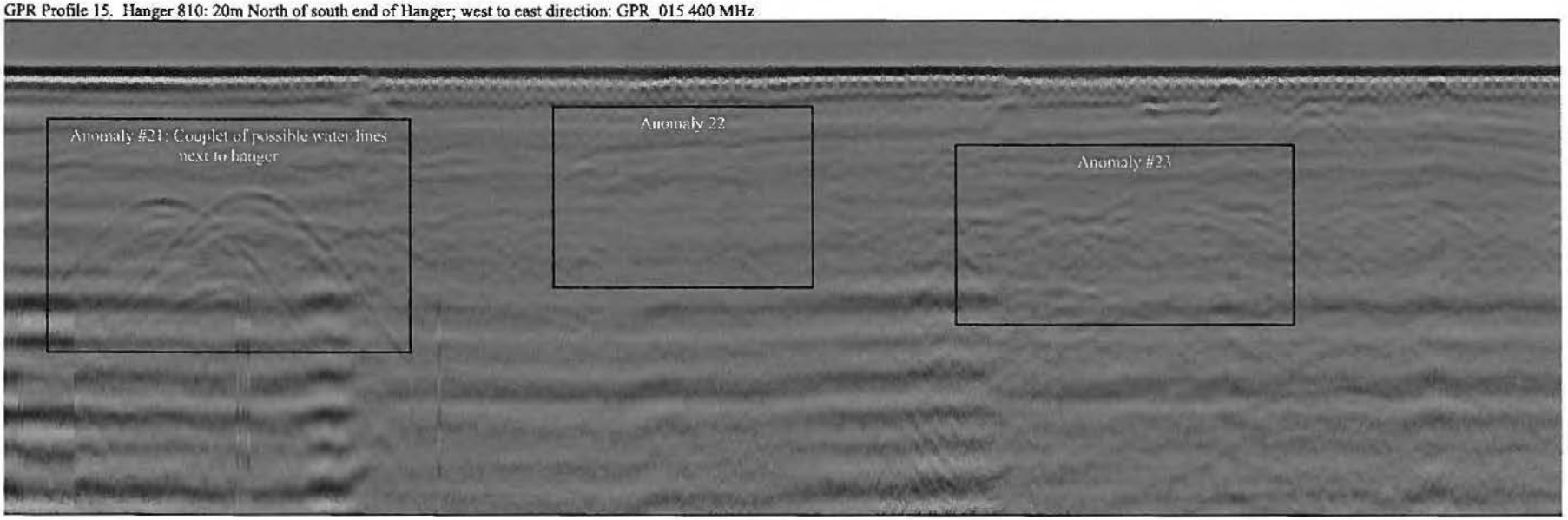

GPR Profile 13. Hanger 810: 20m E of Hanger; south to north direction: GPR_013 400 MHz



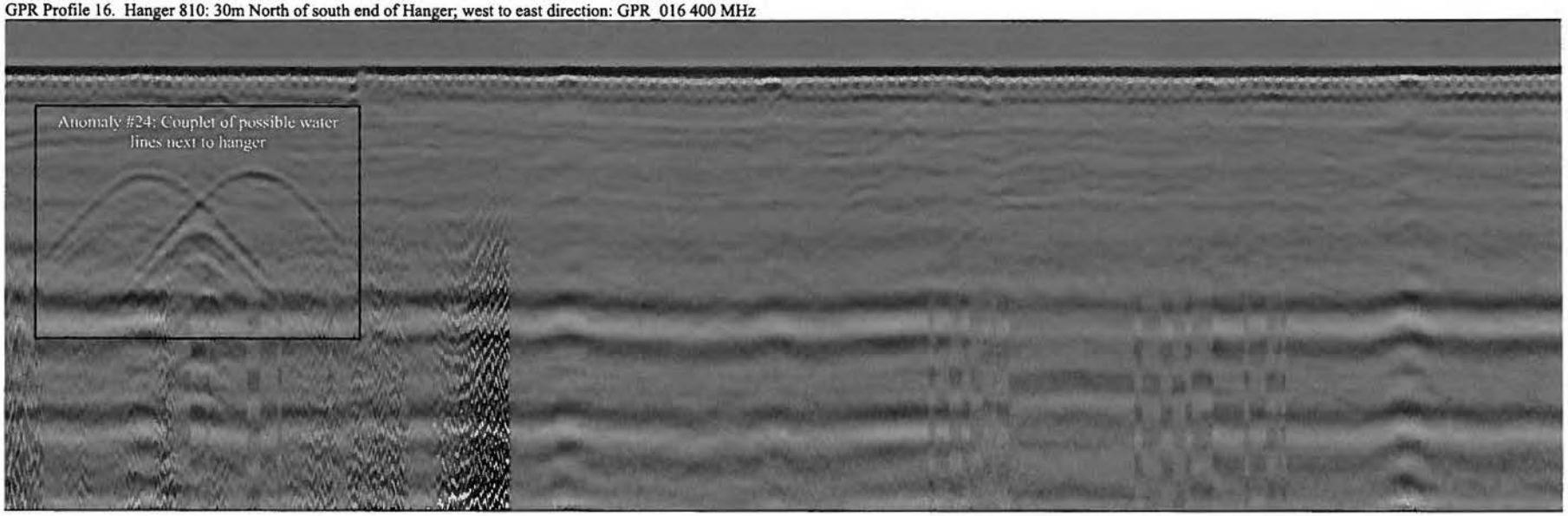
GPR Profile 14. Hanger 810: 10m North of south end of Hanger; west to east direction: GPR_014 400 MHz



GPR Profile 15. Hanger 810: 20m North of south end of Hanger; west to east direction: GPR_015 400 MHz



GPR Profile 16. Hanger 810: 30m North of south end of Hanger; west to east direction: GPR_016 400 MHz



# APPENDIX F

# SPECIES OF CONCERN FOR ESCAMBIA COUNTY

STATE AND FEDERAL THREATENED, ENDANGERED, AND OTHER SPECIES OF CONCERN
LIKELY TO OCCUR IN ESCAMBIA COUNTY FLORIDA
Compiled by U.S. Fish and Wildlife Service April 2007

| Common Name | Scientific Name | Status State | Status FWS | Natural Communities |
|---|---|---|---|---|
| **FISH:** | | | | |
| Gulf sturgeon | *Acipenser oxyrinchus desotoi* | SSC | T CH | ESTUARINE: various MARINE: various habitats RIVERINE: alluvial and blackwater streams |
| Crystal darter | *Ammocrypta asprella* | T | ce | RIVERINE: alluvial stream |
| Harlequin darter | *Etheostoma histrio* | SSC | | RIVERINE: alluvial stream |
| Saltmarsh topminnow | *Fundulus jenkinsi* | SSC | | ESTUARINE: estuarine tidal marsh |
| Bluenose shiner | *Pteronotropis welaka* | SSC | | RIVERINE: blackwater, alluvial, and spring-run streams |
| **AMPHIBIANS & REPTILES:** | | | | |
| Loggerhead turtle | *Caretta caretta* | T | T | TERRESTRIAL: sandy beaches; nesting |
| Green turtle | *Chelonia mydas* | E | E | TERRESTRIAL: sandy beaches; nesting |
| Leatherback turtle | *Dermochelys coriacea* | E | E | TERRESTRIAL: sandy beaches; nesting |
| Eastern indigo snake | *Drymarchon corais couperi* | T | T | ESTUARINE: tidal swamp PALUSTRINE: hydric hammock, wet flatwoods TERRESTRIAL: mesic flatwoods, upland pine forest, sandhills, scrub, scrubby flatwoods, rockland hammock, ruderal |
| Hawksbill turtle | *Eretmochelys imbricata imbricata* | E | E | MARINE: open water; no nesting |
| Gopher tortoise | *Gopherus polyphemus* | SSC | ce | TERRESTRIAL: sandhills, scrub, scrubby flatwoods, xeric hammocks, coastal strand, ruderal |
| Pine barrens treefrog | *Hyla andersonii* | SSC | | PALUSTRINE: seepage slope, baygall RIVERINE: seepage stream |
| Kemp's Ridley turtle | *Lepidochelys kempii* | E | E | TERRESTRIAL: sandy beaches; nesting |
| Alligator snapping turtle | *Macroclemys temminckii* | SSC | ce | ESTUARINE: tidal marsh LACUSTRINE: river floodplain lake, swamp lake RIVERINE: alluvial stream, blackwater stream |
| Gulf salt marsh snake | *Nerodia clarkii clarkii* | | ce | ESTUARINE: tidal marsh, tidal swamp MARINE: tidal marsh, tidal swamp |
| Florida pine snake | *Pituophis melanoleucus mugitus* | SSC | ce | LACUSTRINE: ruderal, sandhill upland lake TERRESTRIAL: sandhill, scrubby flatwoods, xeric hammock, ruderal |
| **BIRDS:** | | | | |
| Bachman's sparrow | *Aimophila aestivalis* | | ce | TERRESTRIAL: various, ruderal |
| Southeastern snowy plover | *Charadrius alexandrinus tenuirostris* | T | ce | ESTUARINE: exposed unconsolidated substrate MARINE: exposed unconsolidated substrate TERRESTRIAL: dunes, sandy beaches, and inlet areas |

E=endangered, T=threatened, P=proposed, C=candidate, s/a=similar appearance, SSC=species of special concern, ce=consideration encouraged, CH=Critical Habitat

This is not an exhaustive list of where species do occur, but a guide to indicate areas that might require surveys if appropriate habitat exists. Please contact Florida Natural Areas Inventory (850-224-8207) for additional species location information.

STATE AND FEDERAL THREATENED, ENDANGERED, AND OTHER SPECIES OF CONCERN
LIKELY TO OCCUR IN ESCAMBIA COUNTY FLORIDA
Compiled by U.S. Fish and Wildlife Service April 2007

| Common Name | Scientific Name | Status State | Status FWS | Natural Communities |
|---|---|---|---|---|
| Piping plover | *Charadrius melodus* | T | T CH | ESTUARINE: exposed unconsolidated substrate MARINE: exposed unconsolidated substrate TERRESTRIAL: dunes, sandy beaches, and inlet areas. Mostly wintering and migrants. |
| Stoddard's yellow-throated warbler | *Dendroica dominica stoddardi* | | ce | TERRESTRIAL: wooded habitats with spanish moss, various |
| Little blue heron | *Egretta caerulea* | SSC | | ESTUARINE: marshes, shoreline PALUSTRINE: floodplains, swamps RIVERINE: shoreline |
| Snowy egret | *Egretta thula* | SSC | | ESTUARINE: marshes, tidal swamps, shoreline LACUSTRINE: lake edges PALUSTRINE: swamp, floodplain, ruderal RIVERINE: shoreline |
| Tricolored heron | *Egretta tricolor* | SSC | | ESTUARINE: marshes, tidal swamps, shoreline LACUSTRINE: lake edges PALUSTRINE: swamp, floodplain, ruderal RIVERINE: shoreline |
| Arctic peregrine falcon | *Falco peregrinus tundrius* | E | ce | ESTUARINE: winters along coasts LACUSTRINE: various PALUSTRINE: various TERRESTRIAL: various, ruderal |
| Southeastern kestrel | *Falco sparverius paulus* | T | ce | ESTUARINE: various habitats PALUSTRINE: various habitats TERRESTRIAL: open pine forests, clearings, ruderal, various |
| American oystercatcher | *Haematopus palliatus* | SSC | | ESTUARINE: exposed unconsolidated substrate, exposed mollusk reef MARINE: exposed unconsolidated substrate, exposed mollusk reef TERRESTRIAL: beaches, ruderal areas |
| Bald eagle | *Haliaeetus leucocephalus* | T | T | ESTUARINE: marsh edges, tidal swamp, open water LACUSTRINE: swamp lakes, edges PALUSTRINE: swamp, floodplain RIVERINE: shoreline, open water TERRESTRIAL: pine and hardwood forests, clearings |
| Wood stork | *Mycteria americana* | E | E | ESTUARINE: marshes LACUSTRINE: floodplain lakes, marshes (feeding), various PALUSTRINE: marshes, swamps, various |
| Brown pelican | *Pelecanus occidentalis* | SSC | | ESTUARINE: islands for nesting, open water MARINE: open water |
| Red-cockaded woodpecker | *Picoides borealis* | SSC | E | TERRESTRIAL: mature pine forests |

E=endangered, T=threatened, P=proposed, C=candidate, s/a=similar appearance, SSC=species of special concern, ce=consideration encouraged, CH=Critical Habitat

This is not an exhaustive list of where species do occur, but a guide to indicate areas that might require surveys if appropriate habitat exists. Please contact Florida Natural Areas Inventory (850-224-8207) for additional species location information.

STATE AND FEDERAL THREATENED, ENDANGERED, AND OTHER SPECIES OF CONCERN
LIKELY TO OCCUR IN ESCAMBIA COUNTY FLORIDA
Compiled by U.S. Fish and Wildlife Service April 2007

| Common Name | Scientific Name | Status State | Status FWS | Natural Communities |
|---|---|---|---|---|
| Black Skimmer | *Rynchops niger* | SSC | | ESTUARINE: various LACUSTRINE: various RIVERINE: various TERRESTRIAL: ocean beaches, beach dune, ruderal. Nests common on rooftops. |
| Least tern | *Sterna antillarum* | T | | ESTUARINE: various LACUSTRINE: various RIVERINE: various TERRESTRIAL: beach dune, ruderal. Nests common on rooftops. |
| **MAMMALS:** | | | | |
| Santa Rosa beach mouse | *Peromyscus polionotus leucocephalus* | | ce | TERRESTRIAL: beach dune, coastal scrub |
| Perdido Key beach mouse | *Peromyscus polionotus trissyllepsis* | E | E CH | TERRESTRIAL: beach dune, coastal scrub. Sites: Perdido Key State Rec. Area (CH), Gulf Islands National Seashore (CH). |
| Southeastern big-eared bat | *Plecotus rafinesquii* | | ce | PALUSTRINE: various, floodplains TERRESTRIAL: pine and hardwood forests, ruderal, various |
| Eastern chipmunk | *Tamias striatus* | SSC | | TERRESTRIAL: slope forest, upland hardwood forest, upland pine forest |
| West Indian manatee | *Trichechus manatus latirostris* | E | E | ESTUARINE: submerged vegetation, open water MARINE: open water, submerged vegetation RIVERINE: alluvial stream, blackwater stream, spring-run stream |
| Florida black bear | *Ursus americanus floridanus* | T | ce | PALUSTRINE: titi swamps, floodplains TERRESTRIAL: pine and hardwood forests |
| **INVERTEBRATES:** | | | | |
| Narrow pigtoe | *Fusconaia escambia* | | C (E) | Riverine: small to medium-sized creeks and rivers with slow to moderate current over gravel, and gravel mixed with sand or some silt. Endemic to the Escambia and Yellow River drainages of Alabama and Florida |
| Round ebonyshell | *Fusconaia rotulata* | | C (E) | Riverine: Endemic and restricted to the main channel of the Conecuh River AL, and Escambia River, FL |
| Fuzzy pigtoe | *Pleurobema strodeanum* | | C (E) | Riverine: small to medium-sized creeks and rivers with slow to moderate currents in sand and sand with some silt. Endemic to the Escambia, Yellow, and Choctawhatchee River drainages of Alabama and Florida. |
| Choctaw bean | *Villosa choctawensis* | | C (E) | Riverine: Small to large creeks and rivers with moderate current over sand to silty-sand substrates. Endemic to the Escambia, Yellow, and Choctawhatchee River drainages of Alabama and Florida. |

E=endangered, T=threatened, P=proposed, C=candidate, s/a=similar appearance, SSC=species of special concern, ce=consideration encouraged, CH=Critical Habitat

This is not an exhaustive list of where species do occur, but a guide to indicate areas that might require surveys if appropriate habitat exists. Please contact Florida Natural Areas Inventory (850-224-8207) for additional species location information.

STATE AND FEDERAL THREATENED, ENDANGERED, AND OTHER SPECIES OF CONCERN
LIKELY TO OCCUR IN ESCAMBIA COUNTY FLORIDA
Compiled by U.S. Fish and Wildlife Service April 2007

| Common Name | Scientific Name | Status State | Status FWS | Natural Communities |
|---|---|---|---|---|
| Downy rainbow (mussel) | *Villosa villosa* | | ce | RIVERINE: small streams to large rivers in sand or muddy sand substrates (Panhandle watersheds: Apalachicola, Chipola, Escambia, Choctawhatchee, Ochlockonee, Suwannee) |
| **PLANTS:** | | | | |
| Aster | *Aster hemisphericus* | E | ce | TERRESTRIAL: upland mixed forest, on sandstone outcrop |
| Buckthorn | *Bumelia thornei* | E | ce | PALUSTRINE: hydric hammock, floodplain swamp |
| Curtiss' sandgrass | *Calamovilfa curtissii* | T | ce | PALUSTRINE: mesic and wet flatwoods, wet prairie, depression marsh TERRESTRIAL: mesic flatwoods |
| Sweet shrub | *Calycanthus floridus* | E | | TERRESTRIAL: upland hardwood forest, slope forest, bluffs PALUSTRINE: bottomland forest, stream banks, floodplains |
| Baltzell's sedge | *Carex baltzellii* | T | ce | TERRESTRIAL: slope forest, moist sandy loam; moist sandy loam |
| Cruise's golden-aster | *Chrysopsis gossypina cruiseana* | E | ce | TERRESTRIAL: coastal dunes, coastal strand, coastal grassland; openings and blowouts |
| Spoon-leaved sundew | *Drosera intermedia* | T | | LACUSTRINE: sinkhole lake edges PALUSTRINE: seepage slope, wet flatwoods, depression marsh RIVERINE: seepage stream banks, drainage ditches |
| Trailing arbutus | *Epigaea repens* | E | | TERRESTRIAL: bluff, slope forest, mixed hardwood forest |
| Heartleaf | *Hexastylis arifolia* | T | | RIVERINE: seepage stream bank TERRESTRIAL: slope forest |
| Florida anise | *Illicium floridanum* | T | | PALUSTRINE: floodplain forest, baygall RIVERINE: seepage stream bank TERRESTRIAL: slope forest, seepage slope |
| Mountain laurel | *Kalmia latifolia* | T | | RIVERINE: seepage stream bank TERRESTRIAL: slope forest, seepage stream banks |
| Southern red lily | *Lilium catesbaei* | T | | PALUSTRINE: wet prairie, wet flatwoods, seepage slope TERRESTRIAL: mesic flatwoods, seepage slope; usually with grasses |
| Panhandle lily | *Lilium iridollae* | E | ce | PALUSTRINE: baygall, dome swamp edges, mucky soil, seepage slope, edges of titi bogs, RIVERINE: blackwater stream banks |
| Gulf coast lupine | *Lupinus westianus* | T | ce | TERRESTRIAL: beach dune, scrub, disturbed areas, roadsides, blowouts in dunes |

E=endangered, T=threatened, P=proposed, C=candidate, s/a=similar appearance, SSC=species of special concern, ce=consideration encouraged, CH=Critical Habitat

This is not an exhaustive list of where species do occur, but a guide to indicate areas that might require surveys if appropriate habitat exists. Please contact Florida Natural Areas Inventory (850-224-8207) for additional species location information.

STATE AND FEDERAL THREATENED, ENDANGERED, AND OTHER SPECIES OF CONCERN
LIKELY TO OCCUR IN ESCAMBIA COUNTY FLORIDA
Compiled by U.S. Fish and Wildlife Service April 2007

| Common Name | Scientific Name | Status State | Status FWS | Natural Communities |
|---|---|---|---|---|
| Hummingbird flower | *Macranthera flammea* | E | | PALUSTRINE: seepage slope, dome swamp edges, floodplain swamps RIVERINE: seepage stream banks TERRESTRIAL: seepage slopes |
| Chapman's butterwort | *Pinguicula planifolia* | T | ce | PALUSTRINE: wet flatwoods, seepage slopes, bog, dome swamp, ditches; in water |
| Primrose-flower butterwort | *Pinguicula primulifolia* | E | | PALUSTRINE: bogs, pond margins, margins of spring runs |
| Yellow fringed orchid | *Platanthera ciliaris* | T | | PALUSTRINE: bogs, wet flatwoods TERRESTRIAL: Bluff |
| Yellow fringeless orchid | *Platanthera integra* | E | ce | PALUSTRINE: wet prairie, seepage slope TERRESTRIAL: mesic flatwoods |
| Large-leaved jointweed | *Polygonella macrophylla* | T | ce | TERRESTRIAL: scrub, sand pine/oak scrub ridges |
| Florida pondweed | *Potamogeton floridanus* | | ce | RIVERINE: blackwater stream |
| Orange azalea | *Rhododendron austrinum* | E | | PALUSTRINE: bottomland forest RIVERINE: seepage stream bank TERRESTRIAL: slope forest, upland mixed forest |
| White-top pitcher plant | *Sarracenia leucophylla* | E | ce | PALUSTRINE: wet prairie, seepage slope, baygall edges, ditches |
| Parrot pitcher plant | *Sarracenia psittacina* | T | | PALUSTRINE: wet flatwoods, wet prairie, seepage slope |
| Decumbant pitcher plant | *Sarracenia purpurea* | T | | PALUSTRINE: Bogs |
| Red-flowered pitcher plant | *Sarracenia rubra* | T | | PALUSTRINE: bog, wet prairie, seepage slope, wet flatwoods RIVERINE: seepage stream banks |
| Silky camellia | *Stewartia malacodendron* | E | | PALUSTRINE: baygall PALUSTRINE: slope forest, upland mixed forest, TERRESTRIAL: slope forest, upland mixed forest; acid soils |
| Drummond's yellow-eyed grass | *Xyris drummondii* | | ce | PALUSTRINE: wet flatwoods, bog, seepage slopes, ditches |
| Harper's yellow-eyed grass | *Xyris scabrifolia* | T | ce | PALUSTRINE: seepage slope, wet prairie, bogs |

E=endangered, T=threatened, P=proposed, C=candidate, s/a=similar appearance, SSC=species of special concern, ce=consideration encouraged, CH=Critical Habitat

This is not an exhaustive list of where species do occur, but a guide to indicate areas that might require surveys if appropriate habitat exists. Please contact Florida Natural Areas Inventory (850-224-8207) for additional species location information.

# APPENDIX G

# DATA VALIDATION REPORTS

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **NOVEMBER 9, 2006** |
| **FROM:** | **KELLY CARPER** | **COPIES:** | **DV FILE** |

**SUBJECT:** **ORGANIC DATA VALIDATION- VOC/BTEX/PAHS/SVOC/PCB/TPH**
**SAUFLEY**
**CTO 029 SDG 0609057**

**SAMPLES:**

2/Aqueous/Appendix IX VOC

| | |
|---|---|
| OLFS4-DPW-G53-55 | OLFS4-TB03-2000908 |

1/Aqueous/BTEX

| |
|---|
| OLFS4-FB01 |

10/Soil/ BTEX

| | | |
|---|---|---|
| OLFS4-DP13-S20 | OLFS4-DP15-S20 | OLFS4-DP25-S10 |
| OLFS4-DP26-S6 | OLFS4-DP27-S4 | OLFS4-DP28-S4 |
| OLFS4-DP29-S4 | OLFS4-DP30-S8 | OLFS4-DUP01S |
| OLFS4-DUP02S | | |

2/Soil/VOC

| | |
|---|---|
| OLFS4-DP14-S20 | OLFS4-DPW1-S45 |

11/Soil/PAHS/TPH

| | | |
|---|---|---|
| OLFS4-DP13-S20 | OLFS4-DP14-S20 | OLFS4-DP15-S20 |
| OLFS4-DP25-S10 | OLFS4-DP26-S6 | OLFS4-DP27-S4 |
| OLFS4-DP28-S8 | OLFS4-DP29-S4 | OLFS4-DP30-S8 |
| OLFS4-DUP01S | OLFS4-DUP02S | |

1/Soil/Appendix IX SVOC/TPH

| |
|---|
| OLFS4-DPW1-S45 |

7/Soil/ PCB

| | | |
|---|---|---|
| OLFS4-DP14-S20 | OLFS4-DP27-S4 | OLFS4-DP29-S4 |
| OLFS4-DP30-S8 | OLFS4-DPW1-S45 | OLFS4-DUP01S |
| OLFS4-DUP02S | | |

OVERVIEW

The sample set for Saufley CTO 029, SDG 0609057 consists of one (1) field blank, one (1) trip blank, twelve (12) environmental soil samples, and one (1) environmental aqueous sample. All samples were analyzed as indicated above. The trip blank and field blanks were analyzed for VOCs only. Two (2) field duplicate pairs were included with this SDG: OLFS4-DUP01S/OLFS4-DP27-S4 and OLFS4-DUP02S/OLFS4-DP29-S4.

The samples were collected by TetraTech NUS on September 8, 2006 and analyzed by Empirical Laboratory. All analyses were conducted in accordance with SW-846 Methods 8260B, 8270C, 8082 and FL-PRO analysis and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

| | |
|---|---|
| * | • Data completeness |
| | • Holding times |
| * | • GC/MS Tuning |
| | • Initial and continuing calibration |
| * | • Blank results |
| * | • Surrogate spike recoveries |
| * | • Internal standard recoveries |
| | • Blank Spike/Blank Spike Duplicate Results |
| * | • Matrix Spike/Matrix Spike Duplicate Results |
| * | • Field Duplicate Precision |
| * | • Detection Limits |
| * | • Compound Quantitation |
| * | • Compound Identification |

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles and BTEX

The initial calibration relative response factor (RRFs) were less than the 0.05 quality control limit for isobutyl alcohol and 1,4-dioxane on instrument VOA1, on 9/12/06. All related continuing calibration RRFs were also less than 0.05. The nondetected results reported for these compounds in OLFS4-DPW1-S45 were rejected, qualified (UR).

The continuing calibration percent differences (%Ds) for acetone, bromomethane, chloromethane, dichlorodifluoromethane, iodomethane, and 1,2,4-trichlorobenzene were greater than the 25% quality control limit on instrument VOA1, on 9/15/06 at 6:32. The nondetected results reported for these compounds in samples OLFS4-DPW1-S45 were qualified as estimated (UJ). Positive acetone results were qualified as estimated (J).

The continuing calibration %D for isobutylalcohol was greater than the 25% quality control limit on instrument VOA1, on 9/15/06 at 7:44. No action was taken based on the noncompliant %D as the nondetcted reported for this compound was rejected due to a more severe noncompliance. Only sample OLFS4-DPW1-S45 is affected.

The continuing calibration %D for acrolein, bromomethane, methylacetate, and isobutylalcohol was greater than the 25% quality control limit on instrument VOA1, on 9/15/06 at 19:36. No actions were necessary as the affected samples OLFS4-DP27-S4, OLFS4-DP28-S8, OLFS4-DUP01S, OLFS4-DUP02S, OLFS4-DP29-S4, OLFS4-DP30-S8, and OLFS4-DP15-S20 were analyzed for BTEX.

The continuing calibration %D for acrolein and 2-chloroethylvinylether was greater than the 25% quality control limit on instrument VOA1, on 9/21/06 at 7:31. The nondetected results reported for these compounds were qualified as estimated (UJ) in sample OLFS4-DP14-S20.

The initial calibration RRF was less than the 0.05 quality control limit for acrolein on instrument VOA4, on 9/13/06. All related continuing calibration RRFs were also less than 0.05. The nondetected results reported for acrolein in the affected samples (all aqueous samples) were rejected, qualified (UR).

The initial calibration RRF was less than the 0.05 quality control limit for 1,4-dioxane, isobutyl alcohol, and propionitrile on instrument VOA4, on 9/21/06. The nondetected results reported for these compounds in the affected samples (all aqueous samples) were rejected, qualified (UR).

The continuing calibration %D for acrolein was greater than the 25% quality control limit on instrument VOA4, on 9/21/06 at 13:34. No action was taken based on the noncompliant %D as the nondetcted reported for this compound was rejected due to a more severe noncompliance.

The Laboratory Control Sample (LCS) V1PBLK0915 had a Percent Recovery (%R) for methyl methacrylate that was lower than the respective lower quality control limit. No actions were taken based on this noncompliance.

Sample OLFS4-DPW-G53-55 was analyzed at a 5-fold dilution, the sample was not analyzed undiluted hence the reporting limits are elevated.

SVOCs and PAHs

The initial calibrations run on 8/11 and 12/06 on instrument BNA1 yielded a relative response factor (RRF) for 4-nitroquinoline-1-oxide that was less than the 0.05 quality control limit. The nondetected result reported for this compound was rejected, qualified (UR).

The continuing calibration run on 10/06/06 at 09:09 on instrument BNA1 yielded %Ds for aniline, benzaldehyde, carbazole, 4-nitroaniline, and 4-nitroquinoline-1-oxide that were greater than the 25% quality control limit. These compounds were not detected in the affected sample OLFS4-DPW1-S45 and these nondetects were qualified as estimated (UJ), except 4-nitroquinoline-1-oxide which was reject due to a more severe calibration noncompliance.

PCBs

The continuing calibration performed on 9/25/06 at 17:36 on instrument ecd4.i yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1260 on columns 1 and 2. The nondetected Aroclor-1260 results reported in all samples except OLFS4-DPW1-S45 were qualified as estimated (UJ).

The continuing calibration performed on 9/25/06 at 23:48 on instrument ecd4.i yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1260 on columns 1 and 2. The nondetected Aroclor-1260 results reported in all samples were qualified as estimated (UJ).

The continuing calibration performed on 9/26/06 at 8:50 on instrument ecd4.i yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1016 and Aroclor-1260 on column 1. The nondetected results reported for Aroclor-1016 and Aroclor-1260 in sample OLFS4-DPW1-S45 were qualified as estimated (UJ), no positive results were reported in these samples.

Total Petroleum Hydrocarbons

According to the case narrative the surrogate nonatriacontane had continuing calibration %Ds that were well in excess of 25%. The surrogate recoveries were evaluated and have been determined to be potentially biased into control by the exceedances. This surrogate has not historically been a good indication of PRO recovery as indicated by the LCS recovery of 107% with a surrogate recovery potentially biased into control. No actions were taken as a result of this because the surrogate %Rs and continuing calibration %Rs for the other surrogate ortho-terphenyl were compliant.

The continuing calibration performed on 9/23/06 at 15:54 on instrument gctcdfid.i yielded a %D that exceeded the 15% quality control criterion for TPH. The positive and nondetected results reported TPH in samples all samples were qualified as estimated (J) and (UJ), respectively.

Field duplicate imprecision was noted in the sample pairs OLFS4-DUP01S/OLFS4-DP27-S4 and OLFS4-DUP02S/OLFS4-DP29-S4 as TPH was detected at concentrations below the reporting limit in one sample but not the duplicate. No actions were taken as positive results were less than the reporting limit.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated (J), due to uncertainty near the detection limit.

The sample identification for OLFS4-DP26-S6 was misinterpreted by the lab as OLFS4-DP26-56. The EDD was corrected to reflect the correct sample identification.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Qualifications were made based on initial and continuing calibrations of acrolein, acetonitrile, 1,4-dioxane, isobutyl alcohol, propionitrile, and 4-nitroquinoline-1-oxide which failed to comply with RRF or percent difference quality control criterion. Several VOC, SVOC, PCB, and TPH compounds had noncompliant calibration %Ds. Minor LCS noncompliances that did not warrant qualification.

**Other Factors Affecting Data Quality:** None were noted.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS

Kelly A. Carper
Environmental Scientist

Tetra Tech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

## PROJ_NO: 00389

SDG: 0609057 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW-G53-55 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-15 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.95 | U | |
| 1,1,1-TRICHLOROETHANE | 0.75 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 1.1 | U | |
| 1,1,2-TRICHLOROETHANE | 0.85 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 | U | |
| 1,1-DICHLOROETHANE | 27 | | |
| 1,1-DICHLOROETHENE | 2.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.8 | U | |
| 1,2,3-TRICHLOROPROPANE | 1.6 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.7 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.4 | U | |
| 1,2-DIBROMOETHANE | 0.7 | U | |
| 1,2-DICHLOROBENZENE | 0.85 | U | |
| 1,2-DICHLOROETHANE | 0.75 | U | |
| 1,2-DICHLOROPROPANE | 0.9 | U | |
| 1,3-DICHLOROBENZENE | 1 | U | |
| 1,4-DICHLOROBENZENE | 0.6 | U | |
| 1,4-DIOXANE | 1 | UR | C |
| 2-BUTANONE | 6.2 | U | |
| 2-HEXANONE | 4.2 | U | |
| 3-CHLOROPROPENE | 1 | U | |
| 4-METHYL-2-PENTANONE | 7.2 | U | |
| ACETONE | 5.4 | U | |
| ACETONITRILE | 1 | U | |
| ACROLEIN | 20 | UR | C |
| ACRYLONITRILE | 4.8 | U | |
| BENZENE | 26 | | |
| BROMODICHLOROMETHANE | 1.2 | U | |
| BROMOFORM | 1.2 | U | |
| BROMOMETHANE | 1.6 | U | |
| CARBON DISULFIDE | 0.65 | U | |
| CARBON TETRACHLORIDE | 0.7 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW-G53-55 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-15 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 1.4 | U | |
| CHLORODIBROMOMETHANE | 1 | U | |
| CHLOROETHANE | 1.9 | U | |
| CHLOROFORM | 0.75 | U | |
| CHLOROMETHANE | 0.9 | U | |
| CHLOROPRENE | 1 | U | |
| CIS-1,2-DICHLOROETHENE | 350 | | |
| CIS-1,3-DICHLOROPROPENE | 0.65 | U | |
| CYCLOHEXANE | 1.3 | J | P |
| DIBROMOMETHANE | 0.7 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 1 | U | |
| ETHYLBENZENE | 8.2 | | |
| ISOBUTANOL | 1 | UR | C |
| ISOPROPYLBENZENE | 1.9 | J | P |
| M+P-XYLENES | 39 | | |
| METHACRYLONITRILE | 1 | U | |
| METHYL ACETATE | 4.4 | U | |
| METHYL CYCLOHEXANE | 1 | U | |
| METHYL IODIDE | 0.95 | U | |
| METHYL METHACRYLATE | 1.8 | U | |
| METHYL TERT-BUTYL ETHER | 0.85 | U | |
| METHYLENE CHLORIDE | 1.3 | U | |
| O-XYLENE | 2.1 | J | P |
| PROPIONITRILE | 1 | UR | C |
| STYRENE | 1.1 | U | |
| TETRACHLOROETHENE | 0.7 | U | |
| TOLUENE | 2.7 | J | P |
| TOTAL XYLENES | 39 | | |
| TRANS-1,2-DICHLOROETHENE | 2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 1.1 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 3 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW-G53-55 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-15 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 1.4 | U | |
| TRICHLOROFLUOROMETHANE | 0.75 | U | |
| VINYL ACETATE | 6.5 | U | |
| VINYL CHLORIDE | 0.95 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-FB01 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.11 | U | |
| ETHYLBENZENE | 0.14 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| O-XYLENE | 0.21 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |

| | |
|---|---|
| nsample | OLFS4-TB03-20060908 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.53 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | U | |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |

| | |
|---|---|
| nsample | OLFS4-TB03-20060908 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-TB03-20060908 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DP13-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-11 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.48 | U | |
| ETHYLBENZENE | 0.76 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| O-XYLENE | 0.71 | U | |
| TOLUENE | 0.88 | U | |
| TOTAL XYLENES | 0.71 | U | |

| | |
|---|---|
| nsample | OLFS4-DP14-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.84 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROETHANE | 0.33 | U | |
| 1,1-DICHLOROETHANE | 0.5 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2-DICHLOROBENZENE | 0.34 | U | |
| 1,2-DICHLOROETHANE | 0.43 | U | |
| 1,2-DICHLOROPROPANE | 0.43 | U | |
| 1,3-DICHLOROBENZENE | 0.78 | U | |
| 1,4-DICHLOROBENZENE | 0.51 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.77 | UJ | C |
| ACROLEIN | 4.8 | UJ | C |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.44 | U | |
| BROMODICHLOROMETHANE | 0.28 | U | |
| BROMOFORM | 0.93 | U | |
| BROMOMETHANE | 0.67 | U | |
| CARBON TETRACHLORIDE | 0.82 | U | |
| CHLOROBENZENE | 2.3 | U | |
| CHLORODIBROMOMETHANE | 0.32 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.51 | U | |
| CHLOROMETHANE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.47 | U | |
| ETHYLBENZENE | 0.7 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.58 | U | |
| O-XYLENE | 0.65 | U | |
| TETRACHLOROETHENE | 0.91 | U | |
| TOLUENE | 0.8 | U | |

| | |
|---|---|
| nsample | OLFS4-DP14-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TOTAL XYLENES | 0.65 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRICHLOROETHENE | 0.79 | U | |
| TRICHLOROFLUOROMETHANE | 0.89 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP15-S20 | nsample | OLFS4-DP25-S10 | nsample | OLFS4-DP26-S6 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-13 | lab_id | 0609057-01 | lab_id | 0609057-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.48 | U | |
| ETHYLBENZENE | 0.76 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| O-XYLENE | 0.71 | U | |
| TOLUENE | 0.87 | U | |
| TOTAL XYLENES | 0.71 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.57 | U | |
| ETHYLBENZENE | 0.91 | U | |
| M+P-XYLENES | 1.8 | U | |
| METHYL TERT-BUTYL ETHER | 0.39 | U | |
| O-XYLENE | 0.85 | U | |
| TOLUENE | 1 | U | |
| TOTAL XYLENES | 0.85 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.47 | U | |
| ETHYLBENZENE | 0.75 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| O-XYLENE | 0.7 | U | |
| TOLUENE | 0.86 | U | |
| TOTAL XYLENES | 0.7 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP27-S4 | nsample | OLFS4-DP28-S8 | nsample | OLFS4-DP29-S4 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-05 | lab_id | 0609057-06 | lab_id | 0609057-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.49 | U | |
| ETHYLBENZENE | 0.78 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| O-XYLENE | 0.73 | U | |
| TOLUENE | 0.89 | U | |
| TOTAL XYLENES | 0.73 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.52 | U | |
| ETHYLBENZENE | 0.83 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHYL TERT-BUTYL ETHER | 0.35 | U | |
| O-XYLENE | 0.77 | U | |
| TOLUENE | 0.95 | U | |
| TOTAL XYLENES | 0.77 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.55 | U | |
| ETHYLBENZENE | 0.88 | U | |
| M+P-XYLENES | 1.8 | U | |
| METHYL TERT-BUTYL ETHER | 0.38 | U | |
| O-XYLENE | 0.82 | U | |
| TOLUENE | 1 | U | |
| TOTAL XYLENES | 0.82 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DP30-S8 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-10 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.46 | U | |
| ETHYLBENZENE | 0.74 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| O-XYLENE | 0.69 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.69 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW1-S45 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-14 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.9 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.7 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | UJ | C |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.43 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.84 | U | |
| 1,4-DICHLOROBENZENE | 0.55 | U | |
| 1,4-DIOXANE | 0.5 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 0.58 | U | |
| ACETONE | 2.4 | J | CP |
| ACETONITRILE | 0.5 | U | |
| ACROLEIN | 5.2 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.72 | UJ | C |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.88 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW1-S45 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-14 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.55 | U | |
| CHLOROMETHANE | 0.52 | UJ | C |
| CHLOROPRENE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| CYCLOHEXANE | 0.54 | U | |
| DIBROMOMETHANE | 0.41 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | UJ | C |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.75 | U | |
| ISOBUTANOL | 0.5 | UR | C |
| ISOPROPYLBENZENE | 0.88 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.5 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.83 | UJ | C |
| METHYL METHACRYLATE | 0.45 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.62 | U | |
| O-XYLENE | 0.7 | U | |
| PROPIONITRILE | 0.5 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.98 | U | |
| TOLUENE | 0.86 | U | |
| TOTAL XYLENES | 0.7 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8 | U | |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW1-S45 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-14 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.85 | U | |
| TRICHLOROFLUOROMETHANE | 0.96 | U | |
| VINYL ACETATE | 0.55 | U | |
| VINYL CHLORIDE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-DUP01S |
| samp_date | 9/8/2006 |
| lab_id | 0609057-07 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DP27-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.48 | U | |
| ETHYLBENZENE | 0.76 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| O-XYLENE | 0.71 | U | |
| TOLUENE | 0.87 | U | |
| TOTAL XYLENES | 0.71 | U | |

| | |
|---|---|
| nsample | OLFS4-DUP02S |
| samp_date | 9/8/2006 |
| lab_id | 0609057-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DP29-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.51 | U | |
| ETHYLBENZENE | 0.81 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| O-XYLENE | 0.75 | U | |
| TOLUENE | 0.93 | U | |
| TOTAL XYLENES | 0.75 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DP13-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-11 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 55 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

| | |
|---|---|
| nsample | OLFS4-DP14-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| | |
|---|---|
| nsample | OLFS4-DP15-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-13 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 54 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DP25-S10 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 62 | U | |
| 2-METHYLNAPHTHALENE | 25 | U | |
| ACENAPHTHENE | 25 | U | |
| ACENAPHTHYLENE | 25 | U | |
| ANTHRACENE | 25 | U | |
| BENZO(A)ANTHRACENE | 25 | U | |
| BENZO(A)PYRENE | 25 | U | |
| BENZO(B)FLUORANTHENE | 25 | U | |
| BENZO(G,H,I)PERYLENE | 25 | U | |
| BENZO(K)FLUORANTHENE | 25 | U | |
| CHRYSENE | 25 | U | |
| DIBENZO(A,H)ANTHRACENE | 25 | U | |
| FLUORANTHENE | 25 | U | |
| FLUORENE | 25 | U | |
| INDENO(1,2,3-CD)PYRENE | 25 | U | |
| NAPHTHALENE | 25 | U | |
| PHENANTHRENE | 25 | U | |
| PYRENE | 25 | U | |

| | |
|---|---|
| nsample | OLFS4-DP26-S6 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| | |
|---|---|
| nsample | OLFS4-DP27-S4 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP28-S8 | nsample | OLFS4-DP29-S4 | nsample | OLFS4-DP30-S8 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-06 | lab_id | 0609057-08 | lab_id | 0609057-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 53 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW1-S45 | nsample | OLFS4-DPW1-S45 | nsample | OLFS4-DPW1-S45 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-14 | lab_id | 0609057-14 | lab_id | 0609057-14 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 55 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 55 | U | |
| 1,3,5-TRINITROBENZENE | 55 | U | |
| 1,3-DINITROBENZENE | 55 | U | |
| 1,4-NAPHTHOQUINONE | 55 | U | |
| 1,4-PHENYLENEDIAMINE | 55 | U | |
| 1-NAPHTHYLAMINE | 55 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 55 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 55 | U | |
| 2,4,5-TRICHLOROPHENOL | 55 | U | |
| 2,4,6-TRICHLOROPHENOL | 55 | U | |
| 2,4-DICHLOROPHENOL | 55 | U | |
| 2,4-DIMETHYLPHENOL | 55 | U | |
| 2,4-DINITROPHENOL | 55 | U | |
| 2,4-DINITROTOLUENE | 55 | U | |
| 2,6-DICHLOROPHENOL | 55 | U | |
| 2,6-DINITROTOLUENE | 55 | U | |
| 2-ACETYLAMINOFLUORENE | 55 | U | |
| 2-CHLORONAPHTHALENE | 55 | U | |
| 2-CHLOROPHENOL | 55 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| 2-METHYLPHENOL | 55 | U | |
| 2-NAPHTHYLAMINE | 55 | U | |
| 2-NITROANILINE | 55 | U | |
| 2-NITROPHENOL | 55 | U | |
| 2-PICOLINE | 55 | U | |
| 3&4-METHYLPHENOL | 55 | U | |
| 3,3'-DICHLOROBENZIDINE | 82 | U | |
| 3,3'-DIMETHYLBENZIDINE | 55 | U | |
| 3-METHYLCHOLANTHRENE | 55 | U | |
| 3-NITROANILINE | 55 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 55 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-AMINOBIPHENYL | 55 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 55 | U | |
| 4-CHLORO-3-METHYLPHENOL | 55 | U | |
| 4-CHLOROANILINE | 55 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 55 | U | |
| 4-NITROANILINE | 55 | UJ | C |
| 4-NITROPHENOL | 55 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 55 | UR | C |
| 5-NITRO-O-TOLUIDINE | 55 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 55 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 55 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ACETOPHENONE | 55 | U | |
| ANILINE | 55 | UJ | C |
| ANTHRACENE | 22 | U | |
| ARAMITE | 55 | U | |
| ATRAZINE | 55 | U | |
| BENZALDEHYDE | 55 | UJ | C |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| BENZYL ALCOHOL | 55 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 55 | U | |
| BIS(2-CHLOROETHYL)ETHER | 55 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 55 | U | |
| BUTYL BENZYL PHTHALATE | 55 | U | |
| CAPROLACTAM | 55 | U | |
| CARBAZOLE | 22 | UJ | C |
| CHLOROBENZILATE | 55 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 22 | U | |
| DIALLATE | 55 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| DIBENZOFURAN | 55 | U | |
| DIETHYL PHTHALATE | 55 | U | |
| DIMETHOATE | 55 | U | |
| DIMETHYL PHTHALATE | 55 | U | |
| DI-N-BUTYL PHTHALATE | 55 | U | |
| DI-N-OCTYL PHTHALATE | 55 | U | |
| DIPHENYLAMINE | 55 | U | |
| ETHYL METHANE SULFONATE | 55 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| HEXACHLOROBENZENE | 55 | U | |
| HEXACHLOROBUTADIENE | 55 | U | |
| HEXACHLOROCYCLOPENTADIENE | 55 | U | |
| HEXACHLOROETHANE | 55 | U | |
| HEXACHLOROPHENE | 55 | U | |
| HEXACHLOROPROPENE | 55 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| ISODRIN | 55 | U | |
| ISOPHORONE | 55 | U | |
| ISOSAFROLE | 55 | U | |
| KEPONE | 55 | U | |
| METHAPYRILENE | 55 | U | |
| METHYL METHANE SULFONATE | 55 | U | |
| NAPHTHALENE | 22 | U | |
| NITROBENZENE | 55 | U | |
| N-NITROSODIETHYLAMINE | 55 | U | |
| N-NITROSODIMETHYLAMINE | 55 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 55 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 55 | U | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW1-S45 | nsample | OLFS4-DUP01S | nsample | OLFS4-DUP02S |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-14 | lab_id | 0609057-07 | lab_id | 0609057-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | OLFS4-DP27-S4 | DUP_OF: | OLFS4-DP29-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 55 | U | |
| N-NITROSOMETHYLETHYLAMINE | 55 | U | |
| N-NITROSOMORPHOLINE | 55 | U | |
| N-NITROSOPIPERIDINE | 55 | U | |
| N-NITROSOPYRROLIDINE | 55 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 55 | U | |
| O-TOLUIDINE | 55 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 55 | U | |
| PENTACHLOROBENZENE | 55 | U | |
| PENTACHLOROETHANE | 55 | U | |
| PENTACHLORONITROBENZENE | 55 | U | |
| PENTACHLOROPHENOL | 55 | U | |
| PHENACETIN | 55 | U | |
| PHENANTHRENE | 22 | U | |
| PHENOL | 55 | U | |
| PRONAMIDE | 55 | U | |
| PYRENE | 22 | U | |
| PYRIDINE | 55 | U | |
| SAFROLE | 55 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP14-S20 | nsample | OLFS4-DP27-S4 | nsample | OLFS4-DP29-S4 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-12 | lab_id | 0609057-05 | lab_id | 0609057-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.3 | U | |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP30-S8 | nsample | OLFS4-DPW1-S45 | nsample | OLFS4-DUP01S |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-10 | lab_id | 0609057-14 | lab_id | 0609057-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | OLFS4-DP27-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.3 | U | |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.5 | UJ | C |
| AROCLOR-1221 | 4.5 | U | |
| AROCLOR-1232 | 4.5 | U | |
| AROCLOR-1242 | 4.5 | U | |
| AROCLOR-1248 | 4.5 | U | |
| AROCLOR-1254 | 4.5 | U | |
| AROCLOR-1260 | 4.5 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | |
|---|---|
| nsample | OLFS4-DUP02S |
| samp_date | 9/8/2006 |
| lab_id | 0609057-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DP29-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP13-S20 | nsample | OLFS4-DP14-S20 | nsample | OLFS4-DP15-S20 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-11 | lab_id | 0609057-12 | lab_id | 0609057-13 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | UJ | C |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP25-S10 | nsample | OLFS4-DP26-S6 | nsample | OLFS4-DP27-S4 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-01 | lab_id | 0609057-04 | lab_id | 0609057-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | J | CP |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP28-S8 | nsample | OLFS4-DP29-S4 | nsample | OLFS4-DP30-S8 |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-06 | lab_id | 0609057-08 | lab_id | 0609057-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW1-S45 | nsample | OLFS4-DUP01S | nsample | OLFS4-DUP02S |
| samp_date | 9/8/2006 | samp_date | 9/8/2006 | samp_date | 9/8/2006 |
| lab_id | 0609057-14 | lab_id | 0609057-07 | lab_id | 0609057-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | OLFS4-DP27-S4 | DUP_OF: | OLFS4-DP29-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | J | CP |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | J | CP |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **G. WALKER** **DATE:** **NOVEMBER 10, 2006**

**FROM:** **MATTHEW D. KRAUS** **COPIES:** **DV FILE**

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS & CYANIDE**
**SAUFLEY – CTO 029**
**SAMPLE DELIVERY GROUP (SDG) – 0609069**

**SAMPLES:** 24/SOIL/

| | | |
|---|---|---|
| OLFS4-DPB10-S10 | OLFS4-DPB1-S10 | OLFS4-DPB2-S10 |
| OLFS4-DPB3-S10 | OLFS4-DPB4-S10 | OLFS4-DPB4-S10-D |
| OLFS4-DPB5-S10 | OLFS4-DPB6-S10 | OLFS4-DPB7-S10 |
| OLFS4-DPB8-S10 | OLFS4-DPB9-S10 | OLFS4-DPW18-S12 |
| OLFS4-DPW19-S12 | OLFS4-DPW20-S12 | OLFS4-DPW21-S12 |
| OLFS4-DPW23-S26 | OLFS4-DPW24-S26 | OLFS4-DPW2-S10 |
| OLFS4-DPW3-S10 | OLFS4-DPW4-S10 | OLFS4-DPW5-S10 |
| OLFS4-DPW6-S10 | OLFS4-DPW8-S10 | OLFS4-DPW9-S10 |

Overview

The sample set for Saufley, CTO 029, SDG 0609069, consists of twenty-four soil environmental samples. One field duplicate pair (OLFS4-DPB4-S10 / OLFS4-DPB4-S10-D) is included in this SDG.

Each sample was analyzed for all target analyte list (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on September 12, 2006 and analyzed by Empirical Laboratories, LLC. Metals analyses (expect mercury) were conducted using SW846 method 6010B. Mercury analyses were conducted using SW846 method 7471A and cyanide analyses were conducted using SW846 method 9012A.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
• ICP Interference Check Sample Results
• Matrix Spike Recoveries
* • Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
* • Field Duplicate Precision
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentration:

| Analyte | Maximum Concentration | Action Level |
|---|---|---|
| Chromium [1] | 0.105 mg/kg | 0.52 mg/kg |
| Lead [1] | 0.082 mg/kg | 0.41 mg/kg |
| Thallium | 3.10 ug/L | 0.78 mg/kg |

[1] Maximum concentration of the contaminant was discovered in the laboratory method/preparation blank.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No data was qualified due to blank contamination. No samples were qualified due to laboratory blank contamination.

ICP Interference Results

The interfering analytes aluminum and iron were present in samples OLFS4-DPW18-S12, OLFS4-DPW19-S12, OLFS4-DPW20-S12, OLFS4-DPW21-S12, OLFS4-DPW2-S10,and OLFS4-DPW8-S10 at a concentration > 50% of their respective concentrations in the Interference Check Sample (ICS) solution. Several analytes, namely, cadmium, chromium, lead, selenium, silver, and thallium were present in the ICS solution at a concentration that exceeded the absolute value of the Method Detection Limit (MDL). Interference effects exist for selenium and thallium in the affected samples. The non-detected results reported for selenium and thallium in the affected samples were qualified as estimated, "UJ".

The interfering analyte iron was present in samples OLFS4-DPW5-S10, OLFS4-DPW4-S10, and OLFS4-DPW9-S10 at a concentration > 50% of the iron concentration present in the Interference Check Sample (ICS) solution. Several analytes, namely, cadmium, chromium, lead, selenium, silver, and thallium were present in the ICS solution at a concentration that exceeded the absolute value of the Method Detection Limit (MDL). Interference effects exist for selenium and thallium in the affected samples. The non-detected results reported for selenium and thallium in the affected samples were qualified as estimated, "UJ".

Matrix Spike Recoveries

The matrix spike (MS) percent recoveries (%Rs) for potassium were > 125% quality control limit in samples OLFS4-DPB3-S10 and OLFS4-DPW21-S12. The positive results reported for potassium in all samples except OLFS4-DW9-S10 were qualified as estimated, "J".

The MS %Rs for antimony were < 75% quality control limit in the MS and matrix spike duplicates (MSDs) of samples OLFS4-DPW21-S12 and OLFS4-DPW9-S10 affecting all soil samples. The positive and non-detected results reported for antimony in all samples except OLFS4-DW3-S10 were qualified as estimated, "J" and "UJ", respectively.

Notes

The MS %R for chromium was slightly > 125% quality control limit in sample OLFS4-DPW21-S12 at 125.8 %R. However, the MS %R for chromium was within quality control limits for the MS duplicate OLFS4-DPW21-S12; therefore, no validation action was taken on chromium for matrix spike non-compliance.

Percent solids were not reported on the EDD. Percent solid results were populated into the EDD by the data validator from the form ones.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** Selenium and thallium were qualified due to ICP interference. Antimony and potassium were qualified due to matrix spike recovery non-compliance.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Chemist / Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-DPB10-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-11 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 97.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 5200 | | |
| ANTIMONY | 0.25 | UJ | D |
| ARSENIC | 0.86 | | |
| BARIUM | 8.1 | | |
| BERYLLIUM | 0.2 | U | |
| CADMIUM | 0.05 | U | |
| CALCIUM | 86.3 | | |
| CHROMIUM | 3.9 | | |
| COBALT | 0.61 | | |
| COPPER | 1.9 | | |
| IRON | 3100 | | |
| LEAD | 2.1 | | |
| MAGNESIUM | 148 | | |
| MANGANESE | 29 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.9 | | |
| POTASSIUM | 115 | J | D |
| SELENIUM | 0.25 | U | |
| SILVER | 0.05 | U | |
| SODIUM | 50 | U | |
| THALLIUM | 0.15 | U | |
| VANADIUM | 7.3 | | |
| ZINC | 4.7 | | |

| | |
|---|---|
| nsample | OLFS4-DPB1-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-01 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 96.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 5270 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 0.81 | | |
| BARIUM | 6.5 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.055 | U | |
| CALCIUM | 54.8 | U | |
| CHROMIUM | 6.3 | | |
| COBALT | 0.32 | | |
| COPPER | 2.5 | | |
| IRON | 3670 | | |
| LEAD | 1.9 | | |
| MAGNESIUM | 135 | | |
| MANGANESE | 12.2 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 2.2 | | |
| POTASSIUM | 99.5 | J | D |
| SELENIUM | 0.27 | U | |
| SILVER | 0.055 | U | |
| SODIUM | 54.8 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 7.2 | | |
| ZINC | 8.2 | | |

| | |
|---|---|
| nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-02 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 98.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3890 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 0.52 | | |
| BARIUM | 5.3 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 75.1 | | |
| CHROMIUM | 3.2 | | |
| COBALT | 0.33 | | |
| COPPER | 1.7 | | |
| IRON | 2280 | | |
| LEAD | 1.5 | | |
| MAGNESIUM | 105 | | |
| MANGANESE | 13.7 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.2 | | |
| POTASSIUM | 79.3 | J | D |
| SELENIUM | 0.27 | U | |
| SILVER | 0.054 | U | |
| SODIUM | 53.7 | U | |
| THALLIUM | 0.27 | U | |
| VANADIUM | 5.2 | | |
| ZINC | 3.7 | | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB3-S10 | nsample | OLFS4-DPB4-S10 | nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-03 | lab_id | 0609069-04 | lab_id | 0609069-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 96.0 | Pct_Solids | 97.0 | Pct_Solids | 97.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 2760 | | |
| ANTIMONY | 0.26 | U | |
| ARSENIC | 0.46 | | |
| BARIUM | 3.6 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.052 | U | |
| CALCIUM | 52.1 | U | |
| CHROMIUM | 2.1 | | |
| COBALT | 0.26 | U | |
| COPPER | 1.2 | | |
| IRON | 1660 | | |
| LEAD | 1.2 | | |
| MAGNESIUM | 66.2 | | |
| MANGANESE | 13.8 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 0.78 | | |
| POTASSIUM | 52.1 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.052 | U | |
| SODIUM | 52.1 | U | |
| THALLIUM | 0.26 | U | |
| VANADIUM | 3.8 | | |
| ZINC | 2.7 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 2560 | | |
| ANTIMONY | 0.25 | UJ | D |
| ARSENIC | 0.38 | | |
| BARIUM | 3.8 | | |
| BERYLLIUM | 0.2 | U | |
| CADMIUM | 0.05 | U | |
| CALCIUM | 50.3 | U | |
| CHROMIUM | 1.9 | | |
| COBALT | 0.25 | U | |
| COPPER | 0.87 | | |
| IRON | 1460 | | |
| LEAD | 1.1 | | |
| MAGNESIUM | 64 | | |
| MANGANESE | 15.2 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.84 | | |
| POTASSIUM | 50.3 | U | |
| SELENIUM | 0.25 | U | |
| SILVER | 0.05 | U | |
| SODIUM | 50.3 | U | |
| THALLIUM | 0.25 | U | |
| VANADIUM | 3.5 | | |
| ZINC | 3.2 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 2440 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 0.34 | | |
| BARIUM | 3.4 | | |
| BERYLLIUM | 0.2 | U | |
| CADMIUM | 0.051 | U | |
| CALCIUM | 51 | U | |
| CHROMIUM | 1.9 | | |
| COBALT | 0.26 | U | |
| COPPER | 0.87 | | |
| IRON | 1400 | | |
| LEAD | 1.2 | | |
| MAGNESIUM | 58.1 | | |
| MANGANESE | 15.7 | | |
| MERCURY | 0.012 | U | |
| NICKEL | 0.69 | | |
| POTASSIUM | 51 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.051 | U | |
| SODIUM | 51 | U | |
| THALLIUM | 0.26 | U | |
| VANADIUM | 3.4 | | |
| ZINC | 3 | | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB5-S10 | nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-06 | lab_id | 0609069-07 | lab_id | 0609069-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 97.0 | Pct_Solids | 97.0 | Pct_Solids | 98.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3800 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 0.55 | | |
| BARIUM | 5.4 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 53.4 | U | |
| CHROMIUM | 2.7 | | |
| COBALT | 0.29 | | |
| COPPER | 1.5 | | |
| IRON | 2080 | | |
| LEAD | 1.5 | | |
| MAGNESIUM | 93.9 | | |
| MANGANESE | 17 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.2 | | |
| POTASSIUM | 73.9 | J | D |
| SELENIUM | 0.27 | U | |
| SILVER | 0.053 | U | |
| SODIUM | 53.4 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 4.9 | | |
| ZINC | 3.4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 4060 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 0.63 | | |
| BARIUM | 7 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 52.6 | U | |
| CHROMIUM | 2.9 | | |
| COBALT | 0.35 | | |
| COPPER | 1.5 | | |
| IRON | 2320 | | |
| LEAD | 1.8 | | |
| MAGNESIUM | 126 | | |
| MANGANESE | 20.7 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.6 | | |
| POTASSIUM | 96.9 | J | D |
| SELENIUM | 0.26 | U | |
| SILVER | 0.053 | U | |
| SODIUM | 52.6 | U | |
| THALLIUM | 0.26 | U | |
| VANADIUM | 5.4 | | |
| ZINC | 4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 2620 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 0.32 | | |
| BARIUM | 4.9 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.051 | U | |
| CALCIUM | 51.3 | U | |
| CHROMIUM | 2.3 | | |
| COBALT | 0.26 | U | |
| COPPER | 0.95 | | |
| IRON | 1430 | | |
| LEAD | 1.3 | | |
| MAGNESIUM | 80.6 | | |
| MANGANESE | 12.1 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 1 | | |
| POTASSIUM | 63.1 | J | D |
| SELENIUM | 0.26 | U | |
| SILVER | 0.051 | U | |
| SODIUM | 51.3 | U | |
| THALLIUM | 0.21 | U | |
| VANADIUM | 3.5 | | |
| ZINC | 2.4 | | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB8-S10 | nsample | OLFS4-DPB9-S10 | nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-09 | lab_id | 0609069-10 | lab_id | 0609069-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 92.0 | Pct_Solids | 97.0 | Pct_Solids | 92.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 6730 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 1.1 | | |
| BARIUM | 7.6 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.055 | U | |
| CALCIUM | 90 | | |
| CHROMIUM | 6 | | |
| COBALT | 0.31 | | |
| COPPER | 2.1 | | |
| IRON | 3680 | | |
| LEAD | 2.4 | | |
| MAGNESIUM | 140 | | |
| MANGANESE | 33.1 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 1.6 | | |
| POTASSIUM | 108 | J | D |
| SELENIUM | 0.27 | U | |
| SILVER | 0.055 | U | |
| SODIUM | 54.9 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 9.2 | | |
| ZINC | 4.5 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 10400 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 1.2 | | |
| BARIUM | 10.7 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 149 | | |
| CHROMIUM | 8.2 | | |
| COBALT | 0.39 | | |
| COPPER | 3.8 | | |
| IRON | 4930 | | |
| LEAD | 3.5 | | |
| MAGNESIUM | 206 | | |
| MANGANESE | 16.7 | | |
| MERCURY | 0.013 | | |
| NICKEL | 2.4 | | |
| POTASSIUM | 161 | J | D |
| SELENIUM | 0.26 | U | |
| SILVER | 0.11 | U | |
| SODIUM | 52.9 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 12.8 | | |
| ZINC | 6.8 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 21500 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 3.3 | | |
| BARIUM | 8.1 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.052 | U | |
| CALCIUM | 51.5 | U | |
| CHROMIUM | 15.8 | | |
| COBALT | 0.27 | | |
| COPPER | 6.9 | | |
| IRON | 11600 | | |
| LEAD | 4.6 | | |
| MAGNESIUM | 185 | | |
| MANGANESE | 19.4 | | |
| MERCURY | 0.012 | U | |
| NICKEL | 2.9 | | |
| POTASSIUM | 173 | J | D |
| SELENIUM | 0.26 | UJ | K |
| SILVER | 0.052 | U | |
| SODIUM | 51.5 | U | |
| THALLIUM | 0.26 | UJ | K |
| VANADIUM | 29 | | |
| ZINC | 7.7 | | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW20-S12 | nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-13 | lab_id | 0609069-14 | lab_id | 0609069-15 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 93.0 | Pct_Solids | 85.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 20600 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 3.3 | | |
| BARIUM | 7.8 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 104 | | |
| CHROMIUM | 15.4 | | |
| COBALT | 0.26 | U | |
| COPPER | 6.3 | | |
| IRON | 11000 | | |
| LEAD | 4.3 | | |
| MAGNESIUM | 170 | | |
| MANGANESE | 19.4 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 2.5 | | |
| POTASSIUM | 135 | J | D |
| SELENIUM | 0.26 | UJ | K |
| SILVER | 0.053 | U | |
| SODIUM | 52.7 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 27.3 | | |
| ZINC | 7.1 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 17600 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 2.9 | | |
| BARIUM | 9.7 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.055 | U | |
| CALCIUM | 77.3 | | |
| CHROMIUM | 12.6 | | |
| COBALT | 0.41 | | |
| COPPER | 6.1 | | |
| IRON | 9500 | | |
| LEAD | 4.5 | | |
| MAGNESIUM | 181 | | |
| MANGANESE | 24.8 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 2.8 | | |
| POTASSIUM | 157 | J | D |
| SELENIUM | 0.28 | UJ | K |
| SILVER | 0.055 | U | |
| SODIUM | 55.1 | U | |
| THALLIUM | 0.17 | UJ | K |
| VANADIUM | 23.4 | | |
| ZINC | 7.4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 20500 | | |
| ANTIMONY | 0.29 | UJ | D |
| ARSENIC | 3.1 | | |
| BARIUM | 9.5 | | |
| BERYLLIUM | 0.23 | U | |
| CADMIUM | 0.058 | U | |
| CALCIUM | 179 | | |
| CHROMIUM | 14.4 | | |
| COBALT | 0.33 | | |
| COPPER | 6.5 | | |
| IRON | 11000 | | |
| LEAD | 4.8 | | |
| MAGNESIUM | 203 | | |
| MANGANESE | 22.8 | | |
| MERCURY | 0.016 | U | |
| NICKEL | 3.1 | | |
| POTASSIUM | 171 | J | D |
| SELENIUM | 0.29 | UJ | K |
| SILVER | 0.058 | U | |
| SODIUM | 58.2 | U | |
| THALLIUM | 0.23 | UJ | K |
| VANADIUM | 27 | | |
| ZINC | 8.9 | | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW23-S26 | nsample | OLFS4-DPW24-S26 | nsample | OLFS4-DPW2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-16 | lab_id | 0609069-17 | lab_id | 0609069-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 94.0 | Pct_Solids | 90.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3770 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 0.7 | | |
| BARIUM | 1.2 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 56 | U | |
| CHROMIUM | 3.6 | | |
| COBALT | 0.28 | U | |
| COPPER | 1.2 | | |
| IRON | 1850 | | |
| LEAD | 0.998 | | |
| MAGNESIUM | 56 | U | |
| MANGANESE | 3.1 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.48 | | |
| POTASSIUM | 56 | U | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.056 | U | |
| SODIUM | 56 | U | |
| THALLIUM | 0.34 | U | |
| VANADIUM | 4.7 | | |
| ZINC | 1.4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 7210 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 1.3 | | |
| BARIUM | 2.2 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.051 | U | |
| CALCIUM | 51.1 | U | |
| CHROMIUM | 6.1 | | |
| COBALT | 0.26 | U | |
| COPPER | 2.3 | | |
| IRON | 3600 | | |
| LEAD | 1.7 | | |
| MAGNESIUM | 51.1 | U | |
| MANGANESE | 4.9 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1 | | |
| POTASSIUM | 51.1 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.051 | U | |
| SODIUM | 51.1 | U | |
| THALLIUM | 0.21 | U | |
| VANADIUM | 9 | | |
| ZINC | 2.6 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 18800 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 2.9 | | |
| BARIUM | 7.8 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 611 | | |
| CHROMIUM | 13 | | |
| COBALT | 0.28 | | |
| COPPER | 5.5 | | |
| IRON | 10300 | | |
| LEAD | 3.5 | | |
| MAGNESIUM | 157 | | |
| MANGANESE | 22.6 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 2.3 | | |
| POTASSIUM | 123 | J | D |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.054 | U | |
| SODIUM | 54.2 | U | |
| THALLIUM | 0.22 | UJ | K |
| VANADIUM | 24.9 | | |
| ZINC | 6.7 | | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-DPW3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-20 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 93.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 9160 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 1.4 | | |
| BARIUM | 4.6 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 226 | | |
| CHROMIUM | 7.6 | | |
| COBALT | 0.29 | | |
| COPPER | 2.9 | | |
| IRON | 5270 | | |
| LEAD | 2 | | |
| MAGNESIUM | 92.5 | | |
| MANGANESE | 16.7 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 1.4 | | |
| POTASSIUM | 72 | J | D |
| SELENIUM | 0.27 | U | |
| SILVER | 0.054 | U | |
| SODIUM | 54 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 12.4 | | |
| ZINC | 4.4 | | |

| | |
|---|---|
| nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-21 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 11800 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 1.9 | | |
| BARIUM | 6.5 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.052 | U | |
| CALCIUM | 190 | | |
| CHROMIUM | 8.3 | | |
| COBALT | 0.35 | | |
| COPPER | 3.6 | | |
| IRON | 6700 | | |
| LEAD | 2.6 | | |
| MAGNESIUM | 123 | | |
| MANGANESE | 18 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.8 | | |
| POTASSIUM | 101 | J | D |
| SELENIUM | 0.26 | UJ | K |
| SILVER | 0.052 | U | |
| SODIUM | 51.9 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 15.8 | | |
| ZINC | 5.1 | | |

| | |
|---|---|
| nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-22 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 81.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 12700 | | |
| ANTIMONY | 0.31 | UJ | D |
| ARSENIC | 2 | | |
| BARIUM | 4.9 | | |
| BERYLLIUM | 0.24 | U | |
| CADMIUM | 0.061 | U | |
| CALCIUM | 291 | | |
| CHROMIUM | 8.9 | | |
| COBALT | 0.31 | U | |
| COPPER | 3.8 | | |
| IRON | 7070 | | |
| LEAD | 2.5 | | |
| MAGNESIUM | 108 | | |
| MANGANESE | 19.4 | | |
| MERCURY | 0.016 | U | |
| NICKEL | 1.5 | | |
| POTASSIUM | 76.9 | J | D |
| SELENIUM | 0.31 | UJ | K |
| SILVER | 0.061 | U | |
| SODIUM | 61.1 | U | |
| THALLIUM | 0.24 | UJ | K |
| VANADIUM | 16.7 | | |
| ZINC | 4.9 | | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW6-S10 | nsample | OLFS4-DPW8-S10 | nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-23 | lab_id | 0609069-24 | lab_id | 0609069-25 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 92.0 | Pct_Solids | 92.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 5740 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 0.9 | | |
| BARIUM | 4.9 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.052 | U | |
| CALCIUM | 126 | | |
| CHROMIUM | 4.3 | | |
| COBALT | 0.3 | | |
| COPPER | 2.2 | | |
| IRON | 3450 | | |
| LEAD | 1.6 | | |
| MAGNESIUM | 97 | | |
| MANGANESE | 16.3 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 1.3 | | |
| POTASSIUM | 81.5 | J | D |
| SELENIUM | 0.26 | U | |
| SILVER | 0.052 | U | |
| SODIUM | 52.4 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 8 | | |
| ZINC | 3.8 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 16300 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 2.5 | | |
| BARIUM | 7.4 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 136 | | |
| CHROMIUM | 11.5 | | |
| COBALT | 0.32 | | |
| COPPER | 5 | | |
| IRON | 9120 | | |
| LEAD | 3.2 | | |
| MAGNESIUM | 141 | | |
| MANGANESE | 18.9 | | |
| MERCURY | 0.012 | U | |
| NICKEL | 2.1 | | |
| POTASSIUM | 109 | J | D |
| SELENIUM | 0.26 | UJ | K |
| SILVER | 0.053 | U | |
| SODIUM | 52.8 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 21.7 | | |
| ZINC | 6.5 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 11500 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 1.7 | | |
| BARIUM | 5.9 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 115 | | |
| CHROMIUM | 8.8 | | |
| COBALT | 0.28 | | |
| COPPER | 3.9 | | |
| IRON | 6590 | | |
| LEAD | 2.4 | | |
| MAGNESIUM | 120 | | |
| MANGANESE | 15 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 1.5 | | |
| POTASSIUM | 95.1 | | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.053 | U | |
| SODIUM | 53.3 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 15.9 | | |
| ZINC | 4.9 | | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB10-S10 | nsample | OLFS4-DPB1-S10 | nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-11 | lab_id | 0609069-01 | lab_id | 0609069-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 97.0 | Pct_Solids | 96.0 | Pct_Solids | 98.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB3-S10 | nsample | OLFS4-DPB4-S10 | nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-03 | lab_id | 0609069-04 | lab_id | 0609069-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 96.0 | Pct_Solids | 97.0 | Pct_Solids | 97.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | OLFS4-DPB4-S10-D |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB5-S10 | nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-06 | lab_id | 0609069-07 | lab_id | 0609069-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | 97.0 | DUP_OF: | 97.0 | DUP_OF: | 98.0 |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB8-S10 | nsample | OLFS4-DPB9-S10 | nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-09 | lab_id | 0609069-10 | lab_id | 0609069-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | 92.0 | DUP_OF: | 97.0 | DUP_OF: | 92.0 |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW20-S12 | nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-13 | lab_id | 0609069-14 | lab_id | 0609069-15 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | 93.0 | DUP_OF: | 93.0 | DUP_OF: | 85.0 |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.15 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW23-S26 | nsample | OLFS4-DPW24-S26 | nsample | OLFS4-DPW2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-16 | lab_id | 0609069-17 | lab_id | 0609069-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | 93.0 | DUP_OF: | 94.0 | DUP_OF: | 90.0 |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW3-S10 | nsample | OLFS4-DPW4-S10 | nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-20 | lab_id | 0609069-21 | lab_id | 0609069-22 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | 93.0 | DUP_OF: | 95.0 | DUP_OF: | 81.0 |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.15 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW6-S10 | nsample | OLFS4-DPW8-S10 | nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-23 | lab_id | 0609069-24 | lab_id | 0609069-25 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | 95.0 | DUP_OF: | 92.0 | DUP_OF: | 92.0 |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **MR. G. WALKER** **DATE:** **NOVEMBER 10, 2006**

**FROM:** **EDWARD SEDLMYER** **COPIES:** **DV FILE**

**SUBJECT:** **ORGANIC DATA VALIDATION- VOA/PAH/PCB/PRO**
**CTO 029, SAUFLEY**
**SDG 0609045**

**SAMPLES:** 24/Solid

| | | |
|---|---|---|
| OLFS4-DP10-S20 | OLFS4-DP11-S20 | OLFS4-DP12-S20 |
| OLFS4-DP16-S6 | OLFS4-DP17-S10 | OLFS4-DP18-S6 |
| OLFS4-DP19-S12 | OLFS4-DP1-S20 | OLFS4-DP20-S10 |
| OLFS4-DP21-S10 | OLFS4-DP22-S18 | OLFS4-DP23-S8 |
| OLFS4-DP24-S8 | OLFS4-DP2-S20 | OLFS4-DP3-S20 |
| OLFS4-DP4-S20 | OLFS4-DP5-S20 | OLFS4-DP6-S20 |
| OLFS4-DP7-S20 | OLFS4-DP8-S20 | OLFS4-DP9-S20 |
| OLFS4-TB01 | OLFS4-TB02 | OLFS4-TB03 |

OVERVIEW

The sample set for CTO 029, Saufley, SDG 0609045 consists of three (3) trip blanks and twenty-one (21) soild environmental samples. The samples were analyzed for select volatile organic compounds (VOC) and/or BTEX + MTBE, polynuclear aromatic hydrocarbons (PAH), and petroleum range organics (PRO). Samples OLFS4-DP10-S20, OLFS4-DP12-S20, OLFS4-DP22-S18, OLFS4-DP24-S8, OLFS4-DP8-S20, and OLFS4-DP9-S20 were analyzed for polychlorinated biphenyls (PCBs). The trip blanks were analyzed for VOAs only.

The samples were collected by TetraTech NUS on September 6 and 7, 2006 and analyzed by Empirical Laboratories. All analyses were conducted in accordance with SW-846 Method 8260B, 8270C, 8082, and FL-PRO analysis and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

| | |
|---|---|
| * | • Data completeness |
| * | • Holding times |
| * | • GC/MS Tuning |
| | • Initial and continuing calibration |
| | • Blank results |
| | • Surrogate spike recoveries |
| * | • Internal standard recoveries |
| | • Blank Spike/Blank Spike Duplicate Results |
| | • Matrix Spike/Matrix Spike Duplicate Results |
| * | • Detection Limits |
| * | • Compound Quantitation |
| * | • Compound Identification |

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

The following compounds were detected in the method blanks or trip blanks at the maximum concentrations listed below:

| Compound | Maximum Concentration | Blank Action Level |
|---|---|---|
| Toluene | 1.29 ug/kg | 7 ug/kg |
| Trichlorofluoromethane | 0.32 ug/L | 1.6 ug/L |

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for all compounds. Dilution factors, percent solids, and sample aliquots were taken into consideration during the application of all action levels. No qualification of the data was necessary because toluene and trichlorofluoromethane were not detected in any samples.

A continuing calibration analyzed on instrument VOA1 on 09/13/06 @08:40 had percent differences (%D) greater than the 25% quality control limit for 2-chloroethyl-vinyl ether and chloromethane. No action was taken on this basis because the associated samples were analyzed for BTEX compounds.

A continuing calibration analyzed on instrument VOA1 on 09/13/06 @20:52 had a %D greater than the 25% quality control limit for 2-chloroethyl-vinyl ether. The non-detected 2-chloroethyl-vinyl ether results for samples OLFS4-DP8-S20, OLFS4-DP9-S20, OLFS4-DP10-S20, and OLFS4-DP12-S20 were qualified as estimated, (UJ).

A continuing calibration analyzed on instrument VOA4 on 09/11/06 @10:42 had %Ds greater than the 25% quality control limit for 2-chloroethyl-vinyl ether and 1,2-dichloroethane. The non-detected 2-chloroethyl-vinyl ether and 1,2-dichloroethane results for samples OLFS4-TB01 and OLFS4-TB02 were qualified as estimated, (UJ).

The laboratory control sample (LCS) had a percent recovery greater than the quality control limit for 1,1,1-trichloroethene in the VOA LCS. No action was taken on this basis.

In the BTEX fraction samples, the laboratory did not report m/p-xylenes, total xylenes were reported. No action was taken on this basis. This item is noted because all other SDGs for this project contain m/p-xylenes.

PAHs

The surrogate nitrobenzene-d5 had a percent recovery less that the quality control limit for sample OLFS4-DP19-S12. No action was taken on this basis because only one surrogate was outside of control limits.

The laboratory control sample (LCS) associated with sample OLFS4-DP12-S20 had marginally low percent recoveries for acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, fluorene, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, and phenanthrene. The sample was re-extracted one day outside of the hold time with acceptable LCS recoveries. The original sample and the re-extracted sample did not have any detections. The original sample results are considered the valid results and no qualification action was taken based on the LCS recoveries.

PCBs

The continuing calibrations analyzed on 9/25/06 @17:36 and 9/25/06 @23:48 had %Ds greater than 15% for Aroclor-1260 on the primary and secondary columns. The non-detected Aroclor-1260 results for samples OLFS4-DP10-S20, OLFS4-DP12-S20, OLFS4-DP8-S20, and OLFS4-DP9-S20 have been qualified as estimated (UJ).

The continuing calibration analyzed on 9/22/06 @00:14 had a %D greater than 15% for Aroclor-1260 on the secondary column. No action was taken on this basis because the primary column had an acceptable Aroclor-1260 %D.

Florida-PRO

09/24/06, at 18:41. The non-detected PRO results for samples OLFS4-DPW5-S10, OLFS4-DPW6-S10, OLFS4-DPW8-S10, and OLFS4-DPW9-S10 have been qualified as estimated (UJ).

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated "J", due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Qualifications were made on initial and continuing calibration of several VOC, SVOC, PEST, PCB, and PRO compounds that failed to comply with quality control criteria (%RSDs, %Ds, and RRFs). Several VOC and PCB compounds were detected in the method blanks or trip blanks. The VOA, SVOA, PEST, and PCB fractions had several LCS non-compliances.

**Other Factors Affecting Data Quality:** The SVOA and PEST fractions had matrix spike non-compliances. The PEST and Florida-PRO fractions had surrogate non-compliances.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999), and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM.

Tetra Tech NUS

Edward Sedlmyer
Chemist/Data Validator

Tetra Tech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DP10-S20 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 93.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.92 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1-DICHLOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.47 | U | |
| 1,2-DICHLOROPROPANE | 0.47 | U | |
| 1,3-DICHLOROBENZENE | 0.86 | U | |
| 1,4-DICHLOROBENZENE | 0.56 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.84 | UJ | C |
| ACROLEIN | 5.3 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.48 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.73 | U | |
| CARBON TETRACHLORIDE | 0.9 | U | |
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.56 | U | |
| CHLOROMETHANE | 0.53 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.51 | U | |
| ETHYLBENZENE | 0.76 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.63 | U | |
| TETRACHLOROETHENE | 0.99 | U | |
| TOLUENE | 0.88 | U | |
| TOTAL XYLENES | 0.71 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-DP10-S20 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 93.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRICHLOROETHENE | 0.87 | U | |
| TRICHLOROFLUOROMETHANE | 0.97 | U | |
| VINYL CHLORIDE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-DP11-S20 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 94.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.48 | U | |
| ETHYLBENZENE | 0.77 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| TOLUENE | 0.88 | U | |
| TOTAL XYLENES | 0.72 | U | |

## PROJ_NO: 00389

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DP12-S20 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.86 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.33 | U | |
| 1,1-DICHLOROETHANE | 0.51 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2-DICHLOROBENZENE | 0.35 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.8 | U | |
| 1,4-DICHLOROBENZENE | 0.52 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.78 | UJ | C |
| ACROLEIN | 5 | U | |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.28 | U | |
| BROMOFORM | 0.95 | U | |
| BROMOMETHANE | 0.69 | U | |
| CARBON TETRACHLORIDE | 0.84 | U | |
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.32 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.52 | U | |
| CHLOROMETHANE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| ETHYLBENZENE | 0.71 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.59 | U | |
| TETRACHLOROETHENE | 0.92 | U | |
| TOLUENE | 0.82 | U | |
| TOTAL XYLENES | 0.67 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-DP12-S20 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRICHLOROETHENE | 0.81 | U | |
| TRICHLOROFLUOROMETHANE | 0.9 | U | |
| VINYL CHLORIDE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-DP16-S6 |
| samp_date | 9/6/2006 |
| lab_id | 0609045-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 87.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.57 | U | |
| ETHYLBENZENE | 0.91 | U | |
| METHYL TERT-BUTYL ETHER | 0.39 | U | |
| TOLUENE | 1 | U | |
| TOTAL XYLENES | 0.85 | U | |

## PROJ_NO: 00389

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP17-S10 | nsample | OLFS4-DP18-S6 | nsample | OLFS4-DP19-S12 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/6/2006 |
| lab_id | 0609045-02 | lab_id | 0609045-03 | lab_id | 0609045-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 92.0 | Pct_Solids | 95.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.54 | U | |
| ETHYLBENZENE | 0.86 | U | |
| METHYL TERT-BUTYL ETHER | 0.37 | U | |
| TOLUENE | 0.98 | U | |
| TOTAL XYLENES | 0.8 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.49 | U | |
| ETHYLBENZENE | 0.79 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| TOLUENE | 0.9 | U | |
| TOTAL XYLENES | 0.73 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.51 | U | |
| ETHYLBENZENE | 0.82 | U | |
| METHYL TERT-BUTYL ETHER | 0.35 | U | |
| TOLUENE | 0.93 | U | |
| TOTAL XYLENES | 0.76 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP1-S20 | nsample | OLFS4-DP20-S10 | nsample | OLFS4-DP21-S10 |
| samp_date | 9/6/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-11 | lab_id | 0609045-05 | lab_id | 0609045-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 92.0 | Pct_Solids | 94.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.46 | U | |
| ETHYLBENZENE | 0.74 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| TOLUENE | 0.84 | U | |
| TOTAL XYLENES | 0.69 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.51 | U | |
| ETHYLBENZENE | 0.81 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| TOLUENE | 0.93 | U | |
| TOTAL XYLENES | 0.75 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.51 | U | |
| ETHYLBENZENE | 0.81 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| TOLUENE | 0.93 | U | |
| TOTAL XYLENES | 0.75 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP22-S18 | nsample | OLFS4-DP23-S8 | nsample | OLFS4-DP24-S8 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-07 | lab_id | 0609045-08 | lab_id | 0609045-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 94.0 | Pct_Solids | 92.0 | Pct_Solids | 93.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.54 | U | |
| ETHYLBENZENE | 0.86 | U | |
| METHYL TERT-BUTYL ETHER | 0.37 | U | |
| TOLUENE | 0.98 | U | |
| TOTAL XYLENES | 0.8 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.49 | U | |
| ETHYLBENZENE | 0.78 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| TOLUENE | 0.89 | U | |
| TOTAL XYLENES | 0.72 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.5 | U | |
| ETHYLBENZENE | 0.8 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| TOLUENE | 0.91 | U | |
| TOTAL XYLENES | 0.74 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP2-S20 | nsample | OLFS4-DP3-S20 | nsample | OLFS4-DP4-S20 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/6/2006 |
| lab_id | 0609045-12 | lab_id | 0609045-13 | lab_id | 0609045-14 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 91.0 | Pct_Solids | 93.0 | Pct_Solids | 93.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.46 | U | |
| ETHYLBENZENE | 0.73 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| TOLUENE | 0.83 | U | |
| TOTAL XYLENES | 0.68 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.46 | U | |
| ETHYLBENZENE | 0.74 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.69 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.46 | U | |
| ETHYLBENZENE | 0.73 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| TOLUENE | 0.84 | U | |
| TOTAL XYLENES | 0.68 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP5-S20 | nsample | OLFS4-DP6-S20 | nsample | OLFS4-DP7-S20 |
| samp_date | 9/6/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-15 | lab_id | 0609045-16 | lab_id | 0609045-17 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 91.0 | Pct_Solids | 91.0 | Pct_Solids | 93.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.53 | U | |
| ETHYLBENZENE | 0.84 | U | |
| METHYL TERT-BUTYL ETHER | 0.36 | U | |
| TOLUENE | 0.96 | U | |
| TOTAL XYLENES | 0.78 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.47 | U | |
| ETHYLBENZENE | 0.76 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| TOLUENE | 0.87 | U | |
| TOTAL XYLENES | 0.7 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.5 | U | |
| ETHYLBENZENE | 0.79 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| TOLUENE | 0.91 | U | |
| TOTAL XYLENES | 0.74 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP8-S20 | nsample | OLFS4-DP8-S20 | nsample | OLFS4-DP9-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-18 | lab_id | 0609045-18 | lab_id | 0609045-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 93.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.88 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1-DICHLOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.45 | U | |
| 1,2-DICHLOROPROPANE | 0.45 | U | |
| 1,3-DICHLOROBENZENE | 0.82 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.8 | UJ | C |
| ACROLEIN | 5.1 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.46 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.98 | U | |
| BROMOMETHANE | 0.71 | U | |
| CARBON TETRACHLORIDE | 0.86 | U | |
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.51 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.49 | U | |
| ETHYLBENZENE | 0.74 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.61 | U | |
| TETRACHLOROETHENE | 0.95 | U | |
| TOLUENE | 0.84 | U | |
| TOTAL XYLENES | 0.69 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRICHLOROETHENE | 0.83 | U | |
| TRICHLOROFLUOROMETHANE | 0.93 | U | |
| VINYL CHLORIDE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.89 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.83 | U | |
| 1,4-DICHLOROBENZENE | 0.55 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.81 | UJ | C |
| ACROLEIN | 5.2 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.99 | U | |
| BROMOMETHANE | 0.71 | U | |
| CARBON TETRACHLORIDE | 0.87 | U | |
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.55 | U | |
| CHLOROMETHANE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| ETHYLBENZENE | 0.74 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.62 | U | |
| TETRACHLOROETHENE | 0.96 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.7 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DP9-S20 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRICHLOROETHENE | 0.84 | U | |
| TRICHLOROFLUOROMETHANE | 0.94 | U | |
| VINYL CHLORIDE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-TB01 |
| samp_date | 9/6/2006 |
| lab_id | 0609045-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | UJ | C |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.53 | UJ | C |
| ACROLEIN | 4.1 | U | |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| ETHYLBENZENE | 0.14 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |

| | |
|---|---|
| nsample | OLFS4-TB01 |
| samp_date | 9/6/2006 |
| lab_id | 0609045-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.32 | J | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-TB02 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-23 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | UJ | C |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 2-CHLOROETHYL VINYL ETHER | 0.53 | UJ | C |
| ACROLEIN | 4.1 | U | |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| ETHYLBENZENE | 0.14 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |

| | |
|---|---|
| nsample | OLFS4-TB02 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-23 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.19 | J | |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-TB03 |
| samp_date | 9/7/2006 |
| lab_id | 0609045-24 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| BENZENE | 0.11 | U | |
| ETHYLBENZENE | 0.14 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP10-S20 | nsample | OLFS4-DP11-S20 | nsample | OLFS4-DP12-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-20 | lab_id | 0609045-21 | lab_id | 0609045-22 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 94.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 51 | U | |
| 2-METHYLNAPHTHALENE | 20 | U | |
| ACENAPHTHENE | 20 | U | |
| ACENAPHTHYLENE | 20 | U | |
| ANTHRACENE | 20 | U | |
| BENZO(A)ANTHRACENE | 20 | U | |
| BENZO(A)PYRENE | 20 | U | |
| BENZO(B)FLUORANTHENE | 20 | U | |
| BENZO(G,H,I)PERYLENE | 20 | U | |
| BENZO(K)FLUORANTHENE | 20 | U | |
| CHRYSENE | 20 | U | |
| DIBENZO(A,H)ANTHRACENE | 20 | U | |
| FLUORANTHENE | 20 | U | |
| FLUORENE | 20 | U | |
| INDENO(1,2,3-CD)PYRENE | 20 | U | |
| NAPHTHALENE | 20 | U | |
| PHENANTHRENE | 20 | U | |
| PYRENE | 20 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 54 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP16-S6 | nsample | OLFS4-DP17-S10 | nsample | OLFS4-DP18-S6 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/6/2006 |
| lab_id | 0609045-01 | lab_id | 0609045-02 | lab_id | 0609045-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 87.0 | Pct_Solids | 92.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 56 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP19-S12 | nsample | OLFS4-DP1-S20 | nsample | OLFS4-DP20-S10 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-04 | lab_id | 0609045-11 | lab_id | 0609045-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 94.0 | Pct_Solids | 92.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP21-S10 | nsample | OLFS4-DP22-S18 | nsample | OLFS4-DP23-S8 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-06 | lab_id | 0609045-07 | lab_id | 0609045-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 94.0 | Pct_Solids | 92.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 51 | U | |
| 2-METHYLNAPHTHALENE | 20 | U | |
| ACENAPHTHENE | 20 | U | |
| ACENAPHTHYLENE | 20 | U | |
| ANTHRACENE | 20 | U | |
| BENZO(A)ANTHRACENE | 20 | U | |
| BENZO(A)PYRENE | 20 | U | |
| BENZO(B)FLUORANTHENE | 20 | U | |
| BENZO(G,H,I)PERYLENE | 20 | U | |
| BENZO(K)FLUORANTHENE | 20 | U | |
| CHRYSENE | 20 | U | |
| DIBENZO(A,H)ANTHRACENE | 20 | U | |
| FLUORANTHENE | 20 | U | |
| FLUORENE | 20 | U | |
| INDENO(1,2,3-CD)PYRENE | 20 | U | |
| NAPHTHALENE | 20 | U | |
| PHENANTHRENE | 20 | U | |
| PYRENE | 20 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 51 | U | |
| 2-METHYLNAPHTHALENE | 20 | U | |
| ACENAPHTHENE | 20 | U | |
| ACENAPHTHYLENE | 20 | U | |
| ANTHRACENE | 20 | U | |
| BENZO(A)ANTHRACENE | 20 | U | |
| BENZO(A)PYRENE | 20 | U | |
| BENZO(B)FLUORANTHENE | 20 | U | |
| BENZO(G,H,I)PERYLENE | 20 | U | |
| BENZO(K)FLUORANTHENE | 20 | U | |
| CHRYSENE | 20 | U | |
| DIBENZO(A,H)ANTHRACENE | 20 | U | |
| FLUORANTHENE | 20 | U | |
| FLUORENE | 20 | U | |
| INDENO(1,2,3-CD)PYRENE | 20 | U | |
| NAPHTHALENE | 20 | U | |
| PHENANTHRENE | 20 | U | |
| PYRENE | 20 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 53 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

## PROJ_NO: 00389

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP24-S8 | nsample | OLFS4-DP2-S20 | nsample | OLFS4-DP3-S20 |
| samp_date | 9/7/2006 | samp_date | 9/6/2006 | samp_date | 9/6/2006 |
| lab_id | 0609045-09 | lab_id | 0609045-12 | lab_id | 0609045-13 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 91.0 | Pct_Solids | 93.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 53 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 52 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 53 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP4-S20 | nsample | OLFS4-DP5-S20 | nsample | OLFS4-DP6-S20 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-14 | lab_id | 0609045-15 | lab_id | 0609045-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 91.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 51 | U | |
| 2-METHYLNAPHTHALENE | 20 | U | |
| ACENAPHTHENE | 20 | U | |
| ACENAPHTHYLENE | 20 | U | |
| ANTHRACENE | 20 | U | |
| BENZO(A)ANTHRACENE | 20 | U | |
| BENZO(A)PYRENE | 20 | U | |
| BENZO(B)FLUORANTHENE | 20 | U | |
| BENZO(G,H,I)PERYLENE | 20 | U | |
| BENZO(K)FLUORANTHENE | 20 | U | |
| CHRYSENE | 20 | U | |
| DIBENZO(A,H)ANTHRACENE | 20 | U | |
| FLUORANTHENE | 20 | U | |
| FLUORENE | 20 | U | |
| INDENO(1,2,3-CD)PYRENE | 20 | U | |
| NAPHTHALENE | 20 | U | |
| PHENANTHRENE | 20 | U | |
| PYRENE | 20 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 55 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 53 | U | |
| 2-METHYLNAPHTHALENE | 21 | U | |
| ACENAPHTHENE | 21 | U | |
| ACENAPHTHYLENE | 21 | U | |
| ANTHRACENE | 21 | U | |
| BENZO(A)ANTHRACENE | 21 | U | |
| BENZO(A)PYRENE | 21 | U | |
| BENZO(B)FLUORANTHENE | 21 | U | |
| BENZO(G,H,I)PERYLENE | 21 | U | |
| BENZO(K)FLUORANTHENE | 21 | U | |
| CHRYSENE | 21 | U | |
| DIBENZO(A,H)ANTHRACENE | 21 | U | |
| FLUORANTHENE | 21 | U | |
| FLUORENE | 21 | U | |
| INDENO(1,2,3-CD)PYRENE | 21 | U | |
| NAPHTHALENE | 21 | U | |
| PHENANTHRENE | 21 | U | |
| PYRENE | 21 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP7-S20 | nsample | OLFS4-DP8-S20 | nsample | OLFS4-DP9-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-17 | lab_id | 0609045-18 | lab_id | 0609045-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 93.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 54 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 51 | U | |
| 2-METHYLNAPHTHALENE | 20 | U | |
| ACENAPHTHENE | 20 | U | |
| ACENAPHTHYLENE | 20 | U | |
| ANTHRACENE | 20 | U | |
| BENZO(A)ANTHRACENE | 20 | U | |
| BENZO(A)PYRENE | 20 | U | |
| BENZO(B)FLUORANTHENE | 20 | U | |
| BENZO(G,H,I)PERYLENE | 20 | U | |
| BENZO(K)FLUORANTHENE | 20 | U | |
| CHRYSENE | 20 | U | |
| DIBENZO(A,H)ANTHRACENE | 20 | U | |
| FLUORANTHENE | 20 | U | |
| FLUORENE | 20 | U | |
| INDENO(1,2,3-CD)PYRENE | 20 | U | |
| NAPHTHALENE | 20 | U | |
| PHENANTHRENE | 20 | U | |
| PYRENE | 20 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 55 | U | |
| 2-METHYLNAPHTHALENE | 22 | U | |
| ACENAPHTHENE | 22 | U | |
| ACENAPHTHYLENE | 22 | U | |
| ANTHRACENE | 22 | U | |
| BENZO(A)ANTHRACENE | 22 | U | |
| BENZO(A)PYRENE | 22 | U | |
| BENZO(B)FLUORANTHENE | 22 | U | |
| BENZO(G,H,I)PERYLENE | 22 | U | |
| BENZO(K)FLUORANTHENE | 22 | U | |
| CHRYSENE | 22 | U | |
| DIBENZO(A,H)ANTHRACENE | 22 | U | |
| FLUORANTHENE | 22 | U | |
| FLUORENE | 22 | U | |
| INDENO(1,2,3-CD)PYRENE | 22 | U | |
| NAPHTHALENE | 22 | U | |
| PHENANTHRENE | 22 | U | |
| PYRENE | 22 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP10-S20 | nsample | OLFS4-DP12-S20 | nsample | OLFS4-DP22-S18 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-20 | lab_id | 0609045-22 | lab_id | 0609045-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 91.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.6 | U | |
| AROCLOR-1221 | 4.6 | U | |
| AROCLOR-1232 | 4.6 | U | |
| AROCLOR-1242 | 4.6 | U | |
| AROCLOR-1248 | 4.6 | U | |
| AROCLOR-1254 | 4.6 | U | |
| AROCLOR-1260 | 4.6 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | U | |

## PROJ_NO: 00389

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP24-S8 | nsample | OLFS4-DP8-S20 | nsample | OLFS4-DP9-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-09 | lab_id | 0609045-18 | lab_id | 0609045-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 93.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP10-S20 | nsample | OLFS4-DP11-S20 | nsample | OLFS4-DP12-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-20 | lab_id | 0609045-21 | lab_id | 0609045-22 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 94.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP16-S6 | nsample | OLFS4-DP17-S10 | nsample | OLFS4-DP18-S6 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/6/2006 |
| lab_id | 0609045-01 | lab_id | 0609045-02 | lab_id | 0609045-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 87.0 | Pct_Solids | 92.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | J | P |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP19-S12 | nsample | OLFS4-DP1-S20 | nsample | OLFS4-DP20-S10 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-04 | lab_id | 0609045-11 | lab_id | 0609045-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 94.0 | Pct_Solids | 92.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP21-S10 | nsample | OLFS4-DP22-S18 | nsample | OLFS4-DP23-S8 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-06 | lab_id | 0609045-07 | lab_id | 0609045-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 94.0 | Pct_Solids | 92.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP24-S8 | nsample | OLFS4-DP2-S20 | nsample | OLFS4-DP3-S20 |
| samp_date | 9/7/2006 | samp_date | 9/6/2006 | samp_date | 9/6/2006 |
| lab_id | 0609045-09 | lab_id | 0609045-12 | lab_id | 0609045-13 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 91.0 | Pct_Solids | 93.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP4-S20 | nsample | OLFS4-DP5-S20 | nsample | OLFS4-DP6-S20 |
| samp_date | 9/6/2006 | samp_date | 9/6/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-14 | lab_id | 0609045-15 | lab_id | 0609045-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 91.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP7-S20 | nsample | OLFS4-DP8-S20 | nsample | OLFS4-DP9-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-17 | lab_id | 0609045-18 | lab_id | 0609045-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 93.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **NOVEMBER 10, 2006** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |

**SUBJECT:** **INORGANIC DATA VALIDATION – SELECT METALS**
**SAUFLEY – CTO 029**
**SAMPLE DELIVERY GROUP (SDG) – 0609045**

**SAMPLES:** 6/SOIL/

| | | |
|---|---|---|
| OLFS4-DP10-S20 | OLFS4-DP12-S20 | OLFS4-DP22-S18 |
| OLFS4-DP24-S8 | OLFS4-DP8-S20 | OLFS4-DP9-S20 |

Overview

The sample set for Saufley, CTO 029, SDG 0609045, consists of six soil environmental samples.

All samples were analyzed for the metals arsenic, cadmium, chromium, and lead. The samples were collected by Tetra Tech NUS on September 7, 2006 and analyzed by Empirical Laboratories, LLC. Metals analyses were conducted using SW846 method 6010B.

Metals analyses were conducted using Inductively Coupled Plasma methodology.

These data were evaluated based on the following parameters:

* • Data Completeness
• Holding Times
* • Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
• Matrix Spike Recoveries
• Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminant was detected in the laboratory method/preparation blanks at the following maximum concentration:

| Analyte | Maximum Concentration | Action Level |
|---|---|---|
| Lead [1] | 0.082 mg/kg | 0.41 mg/kg |

[1] Maximum concentration of the contaminant was discovered in the laboratory method/preparation blank.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No samples were qualified due to laboratory blank contamination.

Notes

Percent solids were not reported on the EDD. Percent solid results were populated into the EDD by the data validator from the form ones.

The laboratory did not perform matrix spikes or laboratory duplicate analyses.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Chemist / Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP10-S20 | nsample | OLFS4-DP12-S20 | nsample | OLFS4-DP22-S18 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-20 | lab_id | 0609045-22 | lab_id | 0609045-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 91.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 2 | | |
| CADMIUM | 0.053 | U | |
| CHROMIUM | 12.2 | | |
| LEAD | 2.6 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 3.7 | | |
| CADMIUM | 0.05 | U | |
| CHROMIUM | 25.3 | | |
| LEAD | 4.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 1.2 | | |
| CADMIUM | 0.053 | U | |
| CHROMIUM | 7 | | |
| LEAD | 1.4 | | |

**PROJ_NO: 00389**

SDG: 0609045 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DP24-S8 | nsample | OLFS4-DP8-S20 | nsample | OLFS4-DP9-S20 |
| samp_date | 9/7/2006 | samp_date | 9/7/2006 | samp_date | 9/7/2006 |
| lab_id | 0609045-09 | lab_id | 0609045-18 | lab_id | 0609045-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 93.0 | Pct_Solids | 93.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 1.3 | | |
| CADMIUM | 0.054 | U | |
| CHROMIUM | 5.6 | | |
| LEAD | 2.6 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 2 | | |
| CADMIUM | 0.054 | U | |
| CHROMIUM | 13.4 | | |
| LEAD | 3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 3.2 | | |
| CADMIUM | 0.056 | U | |
| CHROMIUM | 21.6 | | |
| LEAD | 3.8 | | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **NOVEMBER 10, 2006** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS & CYANIDE**
**SAUFLEY – CTO 029**
**SAMPLE DELIVERY GROUP (SDG) – 0609057**

**SAMPLES:** 7/SOIL/

| | | |
|---|---|---|
| OLFS4-DP14-S20 | OLFS4-DP27-S4 | OLFS4-DP29-S4 |
| OLFS4-DP30-S8 | OLFS4-DPW1-S45 | OLFS4-DUP01S |
| OLFS4-DUP02S | | |

Overview

The sample set for Saufley, CTO 029, SDG 0609057, consists of seven soil environmental samples. Two field duplicate pairs (OLFS4-DUP01S / OLFS4-DP27-S4) and (OLFS4-DUP02S / OLFS4-DP29-S4) are included in this SDG.

Six samples were analyzed for select metals (arsenic, cadmium, chromium, and lead), one sample was analyzed for all TAL metals, and one sample was analyzed for cyanide (along with the select metals). The samples were collected by Tetra Tech NUS on September 8, 2006 and analyzed by Empirical Laboratories, LLC in accordance with the State of Florida requirements Rule 62-160 Florida Administrative Code (FAC), DEP-QA-002/02, and DEP-QA-001/01. Metals analyses (expect mercury) were conducted using SW846 method 6010B. Mercury analyses were conducted using SW846 method 7471A and cyanide analyses were conducted using SW846 method 9012A.

Metals (except mercury) analyses were conducted using Inductively Coupled Plasma methodology. Mercury analyses were conducted using Cold Vapor Atomic Absorption methodology. Cyanide analyses were conducted using Automated Colorimetric Instrumentation with Off-Line Distillation.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
• Matrix Spike Recoveries
• Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
* • Field Duplicate Precision
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentration:

| Analyte | Maximum Concentration | Action Level |
|---|---|---|
| Lead [1] | 0.082 mg/kg | 0.41 mg/kg |
| Thallium | 3.10 ug/L | 0.78 mg/kg |

[1] Maximum concentration of the contaminant was discovered in the laboratory method/preparation blank.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No samples were qualified due to laboratory blank contamination.

Notes

Percent solids were not reported on the EDD. Percent solid results were populated into the EDD by the data validator from raw data.

No interfering analytes were present in any of the environmental samples at concentrations comparable to the amount of interfering analytes in the ICP interference check sample solution.

The laboratory did not perform matrix spikes or laboratory duplicate analyses.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Chemist / Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-DP14-S20 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-12 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 93.4 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 2.4 | | |
| CADMIUM | 0.047 | U | |
| CHROMIUM | 12.7 | | |
| LEAD | 3.2 | | |

| | |
|---|---|
| nsample | OLFS4-DP27-S4 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-05 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 94.2 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 0.72 | | |
| CADMIUM | 0.054 | U | |
| CHROMIUM | 3.7 | | |
| LEAD | 5.2 | | |

| | |
|---|---|
| nsample | OLFS4-DP29-S4 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-08 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 94.1 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 1.8 | | |
| CADMIUM | 0.051 | U | |
| CHROMIUM | 7.6 | | |
| LEAD | 3 | | |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-DP30-S8 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-10 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 95.5 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 1.2 | | |
| CADMIUM | 0.051 | U | |
| CHROMIUM | 4.8 | | |
| LEAD | 2.6 | | |

| | |
|---|---|
| nsample | OLFS4-DPW1-S45 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-14 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 90.9 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3800 | | |
| ANTIMONY | 0.28 | U | |
| ARSENIC | 0.93 | | |
| BARIUM | 6.9 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 101 | | |
| CHROMIUM | 4.7 | | |
| COBALT | 0.28 | U | |
| COPPER | 1.7 | | |
| IRON | 2960 | | |
| LEAD | 2.7 | | |
| MAGNESIUM | 131 | | |
| MANGANESE | 6 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 1.4 | | |
| POTASSIUM | 215 | | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.11 | U | |
| SODIUM | 55.8 | U | |
| THALLIUM | 0.22 | U | |
| VANADIUM | 6.7 | | |
| ZINC | 7.6 | | |

| | |
|---|---|
| nsample | OLFS4-DUP01S |
| samp_date | 9/8/2006 |
| lab_id | 0609057-07 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 94.4 |
| DUP_OF: | OLFS4-DP27-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 0.62 | | |
| CADMIUM | 0.049 | U | |
| CHROMIUM | 3.6 | | |
| LEAD | 4.7 | | |

**PROJ_NO: 00389**

SDG: 0609057 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-DUP02S |
| samp_date | 9/8/2006 |
| lab_id | 0609057-09 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 94.3 |
| DUP_OF: | OLFS4-DP29-S4 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ARSENIC | 1.5 | | |
| CADMIUM | 0.053 | U | |
| CHROMIUM | 6.6 | | |
| LEAD | 2.9 | | |

## PROJ_NO: 00389

SDG: 0609057 MEDIA: SOIL DATA FRACTION: MISC

| | |
|---|---|
| nsample | OLFS4-DPW1-S45 |
| samp_date | 9/8/2006 |
| lab_id | 0609057-14 |
| qc_type | NM |
| Pct_Solids | 90.9 |
| DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **NOVEMBER 10, 2006** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS & CYANIDE**
**SAUFLEY – CTO 029**
**SAMPLE DELIVERY GROUP (SDG) – 0609061**

**SAMPLES:** 10/SOIL/

| | | |
|---|---|---|
| OLFS4-DPW10-S45 | OLFS4-DPW11-S45 | OLFS4-DPW12-S45 |
| OLFS4-DPW13-S4 | OLFS4-DPW14-S6 | OLFS4-DPW15-S4 |
| OLFS4-DPW16-S4 | OLFS4-DPW17-S12 | OLFS4-DPW22-S26 |
| OLFS4-DPW7-S45 | | |

Overview

The sample set for Saufley, CTO 029, SDG 0609061, consists of ten soil environmental samples.

Each sample was analyzed for all target analyte list (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on September 11, 2006 and analyzed by Empirical Laboratories, LLC. Metals analyses (expect mercury) were conducted using SW846 method 6010B. Mercury analyses were conducted using SW846 method 7471A and cyanide analyses were conducted using SW846 method 9012A.

Metals (except mercury) analyses were conducted using Inductively Coupled Plasma methodology. Mercury analyses were conducted using Cold Vapor Atomic Absorption methodology. Cyanide analyses were conducted using Automated Colorimetric Instrumentation with Off-Line Distillation.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
• ICP Interference
• Matrix Spike Recoveries
• Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentration:

| Analyte | Maximum Concentration | Action Level |
|---|---|---|
| Chromium [1] | 0.10 mg/kg | 0.50 mg/kg |
| Thallium | 3.10 ug/L | 0.78 mg/kg |

[1] Maximum concentration of the contaminant was discovered in the laboratory method/preparation blank.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No samples were qualified due to laboratory blank contamination.

ICP Interference Results

The interfering analyte iron was present in sample OLFS4-DPW17-S12 at a concentration that was comparable to the level of aluminum in the Interference Check Sample (ICS) solution. Several analytes, namely, cadmium, chromium, lead, selenium, silver, and thallium were present in the ICS solution at a concentration that exceeded the absolute value of the Method Detection Limit (MDL). Interference effects exist for selenium and thallium in the affected sample. The non-detected results reported for selenium and thallium in the affected sample were qualified as estimated, "UJ".

Notes

Percent solids were not reported on the EDD. Percent solid results were populated into the EDD by the data validator from the form ones.

The laboratory did not perform matrix spikes or laboratory duplicate analyses.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** Selenium and thallium were qualified due to ICP interference.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Chemist / Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW11-S45 | nsample | OLFS4-DPW12-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-05 | lab_id | 0609061-07 | lab_id | 0609061-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 85.0 | Pct_Solids | 91.0 | Pct_Solids | 86.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1440 | | |
| ANTIMONY | 0.29 | U | |
| ARSENIC | 1.8 | | |
| BARIUM | 1.5 | | |
| BERYLLIUM | 0.23 | U | |
| CADMIUM | 0.058 | U | |
| CALCIUM | 58 | U | |
| CHROMIUM | 3.7 | | |
| COBALT | 0.29 | U | |
| COPPER | 1 | | |
| IRON | 2410 | | |
| LEAD | 1.9 | | |
| MAGNESIUM | 58 | U | |
| MANGANESE | 1.3 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 0.29 | U | |
| POTASSIUM | 58 | U | |
| SELENIUM | 0.29 | U | |
| SILVER | 0.058 | U | |
| SODIUM | 58 | U | |
| THALLIUM | 0.29 | U | |
| VANADIUM | 9.1 | | |
| ZINC | 0.87 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1380 | | |
| ANTIMONY | 0.28 | U | |
| ARSENIC | 0.66 | | |
| BARIUM | 1.2 | | |
| BERYLLIUM | 0.23 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 56.4 | U | |
| CHROMIUM | 2.5 | | |
| COBALT | 0.28 | U | |
| COPPER | 0.71 | | |
| IRON | 857 | | |
| LEAD | 1.3 | | |
| MAGNESIUM | 56.4 | U | |
| MANGANESE | 1 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.28 | U | |
| POTASSIUM | 56.4 | U | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.056 | U | |
| SODIUM | 56.4 | U | |
| THALLIUM | 0.17 | U | |
| VANADIUM | 4.6 | | |
| ZINC | 0.79 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1270 | | |
| ANTIMONY | 0.27 | U | |
| ARSENIC | 0.8 | | |
| BARIUM | 1.3 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 58.7 | | |
| CHROMIUM | 2.4 | | |
| COBALT | 0.27 | U | |
| COPPER | 0.93 | | |
| IRON | 942 | | |
| LEAD | 1.5 | | |
| MAGNESIUM | 53.1 | U | |
| MANGANESE | 1.2 | | |
| MERCURY | 0.012 | U | |
| NICKEL | 0.27 | U | |
| POTASSIUM | 53.1 | U | |
| SELENIUM | 0.27 | U | |
| SILVER | 0.053 | U | |
| SODIUM | 1090 | | |
| THALLIUM | 0.21 | U | |
| VANADIUM | 5.3 | | |
| ZINC | 0.54 | | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW13-S4 | nsample | OLFS4-DPW14-S6 | nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-19 | lab_id | 0609061-20 | lab_id | 0609061-21 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 90.0 | Pct_Solids | 92.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 6400 | | |
| ANTIMONY | 0.27 | U | |
| ARSENIC | 0.83 | | |
| BARIUM | 9 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 482 | | |
| CHROMIUM | 4.1 | | |
| COBALT | 0.58 | | |
| COPPER | 2.2 | | |
| IRON | 2660 | | |
| LEAD | 2.5 | | |
| MAGNESIUM | 110 | | |
| MANGANESE | 18.9 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 1.6 | | |
| POTASSIUM | 60.4 | | |
| SELENIUM | 0.27 | U | |
| SILVER | 0.054 | U | |
| SODIUM | 54.5 | U | |
| THALLIUM | 0.22 | U | |
| VANADIUM | 7.9 | | |
| ZINC | 4.2 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 9910 | | |
| ANTIMONY | 0.27 | U | |
| ARSENIC | 1.4 | | |
| BARIUM | 13.6 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 410 | | |
| CHROMIUM | 6.2 | | |
| COBALT | 0.93 | | |
| COPPER | 3.5 | | |
| IRON | 5140 | | |
| LEAD | 3.3 | | |
| MAGNESIUM | 177 | | |
| MANGANESE | 202 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 2.5 | | |
| POTASSIUM | 116 | | |
| SELENIUM | 0.27 | U | |
| SILVER | 0.054 | U | |
| SODIUM | 54.3 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 12.6 | | |
| ZINC | 6.1 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 7920 | | |
| ANTIMONY | 0.25 | U | |
| ARSENIC | 1.4 | | |
| BARIUM | 18.5 | | |
| BERYLLIUM | 0.2 | U | |
| CADMIUM | 0.05 | U | |
| CALCIUM | 762 | | |
| CHROMIUM | 5.2 | | |
| COBALT | 0.77 | | |
| COPPER | 3.4 | | |
| IRON | 4580 | | |
| LEAD | 4.1 | | |
| MAGNESIUM | 144 | | |
| MANGANESE | 277 | | |
| MERCURY | 0.019 | | |
| NICKEL | 2.2 | | |
| POTASSIUM | 91.6 | | |
| SELENIUM | 0.25 | U | |
| SILVER | 0.05 | U | |
| SODIUM | 49.8 | U | |
| THALLIUM | 0.15 | U | |
| VANADIUM | 10 | | |
| ZINC | 7.1 | | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW16-S4 | nsample | OLFS4-DPW17-S12 | nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-22 | lab_id | 0609061-23 | lab_id | 0609061-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 92.0 | Pct_Solids | 94.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 8120 | | |
| ANTIMONY | 0.28 | U | |
| ARSENIC | 1.3 | | |
| BARIUM | 15.4 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.055 | U | |
| CALCIUM | 754 | | |
| CHROMIUM | 5.4 | | |
| COBALT | 0.77 | | |
| COPPER | 3.1 | | |
| IRON | 4020 | | |
| LEAD | 3.2 | | |
| MAGNESIUM | 150 | | |
| MANGANESE | 152 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 2 | | |
| POTASSIUM | 107 | | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.055 | U | |
| SODIUM | 55.2 | U | |
| THALLIUM | 0.17 | U | |
| VANADIUM | 10.2 | | |
| ZINC | 5.2 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 12800 | | |
| ANTIMONY | 0.26 | U | |
| ARSENIC | 2 | | |
| BARIUM | 8.7 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 116 | | |
| CHROMIUM | 9.3 | | |
| COBALT | 0.26 | U | |
| COPPER | 4.3 | | |
| IRON | 7100 | | |
| LEAD | 3.2 | | |
| MAGNESIUM | 149 | | |
| MANGANESE | 15.7 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 2.1 | | |
| POTASSIUM | 132 | | |
| SELENIUM | 0.26 | UJ | K |
| SILVER | 0.053 | U | |
| SODIUM | 52.9 | UJ | K |
| THALLIUM | 0.16 | U | |
| VANADIUM | 17.5 | | |
| ZINC | 6.1 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1700 | | |
| ANTIMONY | 0.25 | U | |
| ARSENIC | 0.62 | | |
| BARIUM | 0.55 | | |
| BERYLLIUM | 0.2 | U | |
| CADMIUM | 0.049 | U | |
| CALCIUM | 49.2 | U | |
| CHROMIUM | 4 | | |
| COBALT | 0.25 | U | |
| COPPER | 0.7 | | |
| IRON | 1400 | | |
| LEAD | 0.6 | | |
| MAGNESIUM | 49.2 | U | |
| MANGANESE | 2.6 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 0.37 | | |
| POTASSIUM | 49.2 | U | |
| SELENIUM | 0.25 | U | |
| SILVER | 0.049 | U | |
| SODIUM | 49.2 | U | |
| THALLIUM | 0.2 | U | |
| VANADIUM | 2.4 | | |
| ZINC | 1.8 | | |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-DPW7-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-08 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 84.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1640 | | |
| ANTIMONY | 0.31 | U | |
| ARSENIC | 2.9 | | |
| BARIUM | 2 | | |
| BERYLLIUM | 0.24 | U | |
| CADMIUM | 0.061 | U | |
| CALCIUM | 61.1 | U | |
| CHROMIUM | 4.7 | | |
| COBALT | 0.31 | U | |
| COPPER | 1 | | |
| IRON | 3090 | | |
| LEAD | 2.3 | | |
| MAGNESIUM | 61.1 | U | |
| MANGANESE | 1.3 | | |
| MERCURY | 0.016 | U | |
| NICKEL | 0.31 | U | |
| POTASSIUM | 61.1 | U | |
| SELENIUM | 0.31 | U | |
| SILVER | 0.12 | U | |
| SODIUM | 61.1 | U | |
| THALLIUM | 0.18 | U | |
| VANADIUM | 10.9 | | |
| ZINC | 0.61 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW11-S45 | nsample | OLFS4-DPW12-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-05 | lab_id | 0609061-07 | lab_id | 0609061-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 85.0 | Pct_Solids | 91.0 | Pct_Solids | 86.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.15 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.15 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW13-S4 | nsample | OLFS4-DPW14-S6 | nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-19 | lab_id | 0609061-20 | lab_id | 0609061-21 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 90.0 | Pct_Solids | 92.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW16-S4 | nsample | OLFS4-DPW17-S12 | nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-22 | lab_id | 0609061-23 | lab_id | 0609061-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 92.0 | Pct_Solids | 94.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: SOIL DATA FRACTION: MISC

| | |
|---|---|
| nsample | OLFS4-DPW7-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-08 |
| qc_type | NM |
| Pct_Solids | 84.0 |
| DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.17 | | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **G. WALKER** **DATE:** **NOVEMBER 13, 2006**

**FROM:** **KELLY CARPER** **COPIES:** **DV FILE**

**SUBJECT:** **ORGANIC DATA VALIDATION- VOC/SVOC/PCBs/TPH**
**SAUFLEY**
**CTO 029 SDG 0609061**

**SAMPLES:** 14/Aqueous/ VOC

| | | |
|---|---|---|
| OLFS4-DPW11-G53-55 | OLFS4-DPW13-34-36 | OLFS4-DPW15-36-38 |
| OLFS4-DPW17-34-36 | OLFS4-DPW22-32-34 | OLFS4-DPW23-30-32 |
| OLFS4-DPW24-30-31 | OLFS4-DPW3-G53-55 | OLFS4-DPW5-G53-55 |
| OLFS4-DPW7-G53-55 | OLFS4-DPW9-G53-55 | OLFS4-DUP02G |
| OLFS4-RB01 | OLFS4-TB5 | |

10/Soil/ VOC/SVOC/PCBs/TPH

| | | |
|---|---|---|
| OLFS4-DPW10-S45 | OLFS4-DPW11-S45 | OLFS4-DPW12-S45 |
| OLFS4-DPW13-S4 | OLFS4-DPW14-S6 | OLFS4-DPW15-S4 |
| OLFS4-DPW16-S4 | OLFS4-DPW17-S12 | OLFS4-DPW22-S26 |
| OLFS4-DPW7-S45 | | |

OVERVIEW

The sample set for Saufley CTO 029, SDG 0609061 consists of one (1) rinse blank, one (1) trip blank, ten (10) environmental soil samples, and twelve (12) environmental aqueous samples. All samples were analyzed as indicated above. The trip blank was analyzed for VOCs only. One (1) field duplicate pair was included with this SDG: OLFS4-DUP02G/OLFS4-DPW9-G53-55.

The samples were collected by TetraTech NUS on September 9, 10 and 11, 2006 and analyzed by Empiricial Laboratory. All analyses were conducted in accordance with SW-846 Methods 8260B, 8270C, 8082 and FL-PRO analysis and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

| | |
|---|---|
| * | Data completeness |
| * | Holding times |
| * | GC/MS Tuning |
| | Initial and continuing calibration |
| * | Blank results |
| * | Surrogate spike recoveries |
| * | Internal standard recoveries |
| | Blank Spike/Blank Spike Duplicate Results |
| | Matrix Spike/Matrix Spike Duplicate Results |
| | Field Duplicate Precision |
| * | Detection Limits |
| * | Compound Quantitation |
| * | Compound Identification |

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

Acetone was qualified as estimated (J) as a suspected laboratory contaminant.

Acetone and toluene were detected in the rinsate blank. No actions were taken based on these results as the trip and methods blanks did not contain any detections for these compounds.

The initial calibration relative response factor (RRF) was less than the 0.05 quality control limit for acrolein on instrument VOA4, on 9/13/06. All related continuing calibration RRFs were also less than 0.05. The nondetected results reported for acrolein in the affected samples (all aqueous samples) were rejected, qualified (UR).

The initial calibration RRFs were less than the 0.05 quality control limit for acetonitrile, 1,4-dioxane, isobutyl alcohol, and propionitrile on instrument VOA4, on 9/22/06. All related continuing calibration RRFs were also less than 0.05. The nondetected results reported for these compounds in the affected samples (all aqueous samples) were rejected, qualified (UR).

The continuing calibration percent differences (%Ds) for acetone, acrolein, and dichlorodifluoromethane were greater than the 25% quality control limit on instrument VOA4, on 9/22/06 at 7:34. The nondetected results reported for these compounds in all the aqueous samples were qualified as estimated (UJ). Positive acetone results were qualified as estimated (J). All acrolein results were rejected due to more severe calibration noncompliances noted above.

The initial calibration RRFs were less than the 0.05 quality control limit for 1,4-dioxane and isobutyl alcohol on instrument VOA1, on 9/12/06. All related continuing calibration RRFs were also less than 0.05. The nondetected results reported for these compounds in the affected samples (all soil samples) were rejected, qualified (UR).

The continuing calibration %Ds for acetone and bromomethane were greater than the 25% quality control limit on instrument VOA1, on 9/16/06 at 14:49. The nondetected results reported for these compounds in the affected samples (OLFS4-DPW10-S45, OLFS4-DPW11-S45, OLFS4-DPW7-S45, OLFS4-DPW12-S45, OLFS4-DPW22-S26, OLFS4-DPW13-S4, OLFS4-DPW14-S6, OLFS4-DPW15-S4, and OLFS4-DPW17-S12) were qualified as estimated (UJ). Positive acetone results were qualified as estimated (J).

The continuing calibration %Ds for acrolein and chloromethane were greater than the 25% quality control limit on instrument VOA1, on 9/18/06 at 8:56. The nondetected results reported for these compounds in the affected sample (OLFS4-DPW16-S4) were qualified as estimated (UJ).

The Laboratory Control Samples (LCS) V1PBLK0916 and V1PMBLK0916 had Percent Recoveries (%Rs) for methyl methacrylate that were lower than the respective lower quality control limit. No actions were taken based on this noncompliance.

The matrix spike/matrix spike duplicate (MS/MSD) analysis of sample OLFS4-DPW17-34-36 had a %Rs for vinyl acetate that was lower than the respective lower quality control limit. No actions were taken based on this noncompliance.

Samples OLFS4-DPW15-S4 and OLFS4-DPW16-S4 were analyzed at a 50-fold dilution. These samples were not analyzed undiluted hence the reporting limits are elevated.

Chloromethane was detected in sample OLFS4-DPW9-G53-55 below the reporting limit. However, chloromethane was not detected in the field duplicate sample OLFS4-DUP02G. No actions were warranted as the positive result was reported below the reporting limit.

SVOCs

The LCS SBLK0924BS1 had a %Rs for caprolactam that was greater than the respective upper quality control limit. No actions were taken based on this noncompliance as no positive results were reported for this compound in the affected samples.

The initial calibration (and all related continuing calibrations) run on 8/27/06 on instrument BNA1 yielded relative response factors (RRFs) for 4-nitroquinoline-1-oxide that were less than the 0.05 quality control limit. All results reported for this compound are nondetects and these nondetects are rejected, qualified (UR).

The continuing calibration run on 09/27/06 at 11:07 on instrument BNA1 yielded %Ds for aniline and benzaldehyde that were greater than the 25% quality control limit. The nondetected results reported for these compounds were qualified as estimated (UJ) in all samples except OLFS4-DPW17-S12.

The continuing calibration run on 9/28/06 at 13:04 on instrument BNA1 yielded %Ds for aniline, benzaldehyde, and dibenz(a,h)anthracene that were greater than the 25% quality control limit. These compounds were not detected in the affected sample OLFS4-DPW17-S12 and these nondetects were qualified as estimated (UJ).

PCBs

The continuing calibration performed on 9/25/06 at 17:36 on instrument ecd4.i yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1260 on columns 1 and 2. no action were taken as no samples were affected by this calibration

The continuing calibration performed on 9/25/06 at 23:48 on instrument ecd4.i yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1260 on columns 1 and 2. The nondetected results reported for Aroclor-1260 in samples OLFS4-DPW10-S45, OLFS4-DPW11-S45, OLFS4-DPW7-S45, OLFS4-DPW12-S45, OLFS4-DPW22-S26 were qualified as estimated (UJ), no positive results were reported in these samples.

The continuing calibration performed on 9/26/06 at 8:50 on instrument ecd4.i yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1016 and Aroclor-1260 on column 1. The nondetected results reported for Aroclor-1016 and Aroclor-1260 in samples OLFS4-DPW10-S45, OLFS4-DPW11-S45, OLFS4-DPW7-S45, OLFS4-DPW12-S45, OLFS4-DPW22-S26 were qualified as estimated (UJ), no positive results were reported in these samples.

Total Petroleum Hydrocarbons

The continuing calibration performed on 9/23/06 at 15:54 on instrument gctcdfid.i yielded a %D that exceeded the 15% quality control criterion for TPH. The nondetected results reported for Aroclor-1016 and Aroclor-1260 in samples OLFS4-DPW10-S45, OLFS4-DPW11-S45, OLFS4-DPW7-S45, OLFS4-DPW12-S45, OLFS4-DPW22-S26 were qualified as estimated (UJ), no positive results were reported in these samples.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated (J), due to uncertainty near the detection limit.

The laboratory noted discrepancies between sample tags and COC in a email from Marcia McGinnity (of Empirical) to Gary Davis (of TtNUS) on September 12, 2006, all corrections and confirmations of these corrections are documented in this email and are included in the support documentation of this memorandum.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Qualifications were made based on initial and continuing calibrations of acrolein, acetonitrile, 1,4-dioxane, isobutyl alcohol, propionitrile, and 4-nitroquinoline-1-oxide which failed to comply with RRF or percent difference quality control criterion. Several VOC, SVOC, PCB, and TPH compounds had noncompliant calibration %Ds. Minor LCS noncompliances that did not warrant qualification.

**Other Factors Affecting Data Quality:** Minor volatile fraction MS/MSD noncompliances were noted.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS

Kelly A. Carper
Environmental Scientist

Tetra Tech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

## PROJ_NO: 00389

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW11-G53-55 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 14 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW11-G53-55 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW11-G53-55 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW13-34-36 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 2 | J | P |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 52 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.17 | J | P |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW13-34-36 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 1.1 | J | P |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW13-34-36 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW15-36-38 | | nsample | OLFS4-DPW15-36-38 | | nsample | OLFS4-DPW15-36-38 | |
| samp_date | 9/9/2006 | | samp_date | 9/9/2006 | | samp_date | 9/9/2006 | |
| lab_id | 0609061-13 | | lab_id | 0609061-13 | | lab_id | 0609061-13 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.16 | J | P |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW17-34-36 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-14 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW17-34-36 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-14 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW17-34-36 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-14 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW22-32-34 | | nsample | OLFS4-DPW22-32-34 | | nsample | OLFS4-DPW22-32-34 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-15 | | lab_id | 0609061-15 | | lab_id | 0609061-15 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 6.4 | J | ACP |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.73 | J | P |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.3 | J | P |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW23-30-32 | nsample | OLFS4-DPW23-30-32 | nsample | OLFS4-DPW23-30-32 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-17 | lab_id | 0609061-17 | lab_id | 0609061-17 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 5.5 | J | ACP |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.36 | J | P |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW24-30-31 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-18 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 8.4 | J | ACP |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW24-30-31 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-18 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 3.8 | | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.53 | J | P |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.39 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW24-30-31 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-18 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW3-G53-55 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 3.8 | J | P |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 25 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW3-G53-55 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.56 | J | P |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.89 | J | P |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.54 | J | P |
| TOLUENE | 0.54 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW3-G53-55 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW5-G53-55 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 14 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW5-G53-55 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.32 | J | P |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW5-G53-55 |
| samp_date | 9/9/2006 |
| lab_id | 0609061-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW7-G53-55 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-09 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 24 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW7-G53-55 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-09 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW7-G53-55 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-09 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW9-G53-55 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 18 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW9-G53-55 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | J | P |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW9-G53-55 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DUP02G | | nsample | OLFS4-DUP02G | | nsample | OLFS4-DUP02G | |
| samp_date | 9/10/2006 | | samp_date | 9/10/2006 | | samp_date | 9/10/2006 | |
| lab_id | 0609061-04 | | lab_id | 0609061-04 | | lab_id | 0609061-04 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | OLFS4-DPW9-G53-55 | | DUP_OF: | OLFS4-DPW9-G53-55 | | DUP_OF: | OLFS4-DPW9-G53-55 | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 17 | J | AC |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-RB01 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-24 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 2.5 | J | CP |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-RB01 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-24 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.19 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-RB01 |
| samp_date | 9/10/2006 |
| lab_id | 0609061-24 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-TB5 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-TB5 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-TB5 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW10-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.37 | U | |
| 1,1,1-TRICHLOROETHANE | 1 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.49 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.63 | U | |
| 1,1-DICHLOROETHANE | 0.62 | U | |
| 1,1-DICHLOROETHENE | 1.4 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.48 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.8 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.21 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.4 | U | |
| 1,2-DIBROMOETHANE | 0.49 | U | |
| 1,2-DICHLOROBENZENE | 0.42 | U | |
| 1,2-DICHLOROETHANE | 0.53 | U | |
| 1,2-DICHLOROPROPANE | 0.53 | U | |
| 1,3-DICHLOROBENZENE | 0.96 | U | |
| 1,4-DICHLOROBENZENE | 0.63 | U | |
| 1,4-DIOXANE | 0.57 | UR | C |
| 2-BUTANONE | 1.6 | U | |
| 2-HEXANONE | 2.6 | U | |
| 3-CHLOROPROPENE | 0.57 | U | |
| 4-METHYL-2-PENTANONE | 0.66 | U | |
| ACETONE | 2.3 | UJ | C |
| ACETONITRILE | 0.57 | U | |
| ACROLEIN | 6 | U | |
| ACRYLONITRILE | 1.6 | U | |
| BENZENE | 0.54 | U | |
| BROMODICHLOROMETHANE | 0.34 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.82 | UJ | C |
| CARBON DISULFIDE | 1.5 | U | |
| CARBON TETRACHLORIDE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW10-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.9 | U | |
| CHLORODIBROMOMETHANE | 0.39 | U | |
| CHLOROETHANE | 1.3 | U | |
| CHLOROFORM | 0.63 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.57 | U | |
| CIS-1,2-DICHLOROETHENE | 1.4 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.57 | U | |
| CYCLOHEXANE | 0.62 | U | |
| DIBROMOMETHANE | 0.47 | U | |
| DICHLORODIFLUOROMETHANE | 1.3 | U | |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.86 | U | |
| ISOBUTANOL | 0.57 | UR | C |
| ISOPROPYLBENZENE | 1 | U | |
| M+P-XYLENES | 1.7 | U | |
| METHACRYLONITRILE | 0.57 | U | |
| METHYL ACETATE | 1.8 | U | |
| METHYL CYCLOHEXANE | 0.34 | U | |
| METHYL IODIDE | 0.95 | U | |
| METHYL METHACRYLATE | 0.52 | U | |
| METHYL TERT-BUTYL ETHER | 0.37 | U | |
| METHYLENE CHLORIDE | 0.71 | U | |
| O-XYLENE | 0.8 | U | |
| PROPIONITRILE | 0.57 | U | |
| STYRENE | 0.4 | U | |
| TETRACHLOROETHENE | 1.1 | U | |
| TOLUENE | 0.99 | U | |
| TOTAL XYLENES | 0.8 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.3 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.37 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 9.2 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW10-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.98 | U | |
| TRICHLOROFLUOROMETHANE | 1.1 | U | |
| VINYL ACETATE | 0.63 | U | |
| VINYL CHLORIDE | 1.3 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW11-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-07 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.33 | U | |
| 1,1,1-TRICHLOROETHANE | 0.93 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.44 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.72 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.44 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.48 | U | |
| 1,2-DICHLOROPROPANE | 0.48 | U | |
| 1,3-DICHLOROBENZENE | 0.87 | U | |
| 1,4-DICHLOROBENZENE | 0.57 | U | |
| 1,4-DIOXANE | 0.52 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.52 | U | |
| 4-METHYL-2-PENTANONE | 0.6 | U | |
| ACETONE | 4.3 | J | ACP |
| ACETONITRILE | 0.52 | U | |
| ACROLEIN | 5.4 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.49 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.75 | UJ | C |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.91 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW11-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-07 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.57 | U | |
| CHLOROMETHANE | 0.54 | U | |
| CHLOROPRENE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.52 | U | |
| CYCLOHEXANE | 0.56 | U | |
| DIBROMOMETHANE | 0.42 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.78 | U | |
| ISOBUTANOL | 0.52 | UR | C |
| ISOPROPYLBENZENE | 0.91 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.52 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.86 | U | |
| METHYL METHACRYLATE | 0.47 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.64 | U | |
| O-XYLENE | 0.72 | U | |
| PROPIONITRILE | 0.52 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.89 | U | |
| TOTAL XYLENES | 0.72 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.3 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW11-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-07 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.88 | U | |
| TRICHLOROFLUOROMETHANE | 0.98 | U | |
| VINYL ACETATE | 0.57 | U | |
| VINYL CHLORIDE | 1.1 | U | |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW12-S45 | | nsample | OLFS4-DPW12-S45 | | nsample | OLFS4-DPW12-S45 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-10 | | lab_id | 0609061-10 | | lab_id | 0609061-10 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.35 | U | |
| 1,1,1-TRICHLOROETHANE | 0.99 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.48 | U | |
| 1,1,2-TRICHLOROETHANE | 0.39 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.61 | U | |
| 1,1-DICHLOROETHANE | 0.6 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.46 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.77 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.2 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.48 | U | |
| 1,2-DICHLOROBENZENE | 0.41 | U | |
| 1,2-DICHLOROETHANE | 0.51 | U | |
| 1,2-DICHLOROPROPANE | 0.51 | U | |
| 1,3-DICHLOROBENZENE | 0.93 | U | |
| 1,4-DICHLOROBENZENE | 0.61 | U | |
| 1,4-DIOXANE | 0.55 | UR | C |
| 2-BUTANONE | 1.5 | U | |
| 2-HEXANONE | 2.5 | U | |
| 3-CHLOROPROPENE | 0.55 | U | |
| 4-METHYL-2-PENTANONE | 0.64 | U | |
| ACETONE | 2.2 | UJ | C |
| ACETONITRILE | 0.55 | U | |
| ACROLEIN | 5.7 | U | |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.52 | U | |
| BROMODICHLOROMETHANE | 0.33 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.8 | UJ | C |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.97 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.8 | U | |
| CHLORODIBROMOMETHANE | 0.38 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.61 | U | |
| CHLOROMETHANE | 0.57 | U | |
| CHLOROPRENE | 0.55 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.55 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.45 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.29 | U | |
| ETHYLBENZENE | 0.83 | U | |
| ISOBUTANOL | 0.55 | UR | C |
| ISOPROPYLBENZENE | 0.97 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.55 | U | |
| METHYL ACETATE | 1.8 | U | |
| METHYL CYCLOHEXANE | 0.33 | U | |
| METHYL IODIDE | 0.92 | U | |
| METHYL METHACRYLATE | 0.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.35 | U | |
| METHYLENE CHLORIDE | 0.68 | U | |
| O-XYLENE | 0.77 | U | |
| PROPIONITRILE | 0.55 | U | |
| STYRENE | 0.39 | U | |
| TETRACHLOROETHENE | 1.1 | U | |
| TOLUENE | 0.95 | U | |
| TOTAL XYLENES | 0.77 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.35 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.8 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.94 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.61 | U | |
| VINYL CHLORIDE | 1.2 | U | |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW13-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.87 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.67 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.81 | U | |
| 1,4-DICHLOROBENZENE | 0.53 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.56 | U | |
| ACETONE | 1.9 | UJ | C |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | U | |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.96 | U | |
| BROMOMETHANE | 0.69 | UJ | C |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.85 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW13-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.53 | U | |
| CHLOROMETHANE | 0.5 | U | |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.52 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.72 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.85 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.8 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.6 | U | |
| O-XYLENE | 0.67 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.93 | U | |
| TOLUENE | 0.83 | U | |
| TOTAL XYLENES | 0.67 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.7 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW13-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.82 | U | |
| TRICHLOROFLUOROMETHANE | 0.92 | U | |
| VINYL ACETATE | 0.53 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW14-S6 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.9 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.7 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.43 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.84 | U | |
| 1,4-DICHLOROBENZENE | 0.55 | U | |
| 1,4-DIOXANE | 0.5 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 0.58 | U | |
| ACETONE | 2 | UJ | C |
| ACETONITRILE | 0.5 | U | |
| ACROLEIN | 5.2 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.72 | UJ | C |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.88 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW14-S6 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.55 | U | |
| CHLOROMETHANE | 0.52 | U | |
| CHLOROPRENE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| CYCLOHEXANE | 0.54 | U | |
| DIBROMOMETHANE | 0.41 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.75 | U | |
| ISOBUTANOL | 0.5 | UR | C |
| ISOPROPYLBENZENE | 0.88 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.5 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.83 | U | |
| METHYL METHACRYLATE | 0.45 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.62 | U | |
| O-XYLENE | 0.7 | U | |
| PROPIONITRILE | 0.5 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.97 | U | |
| TOLUENE | 0.86 | U | |
| TOTAL XYLENES | 0.7 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW14-S6 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.85 | U | |
| TRICHLOROFLUOROMETHANE | 0.95 | U | |
| VINYL ACETATE | 0.55 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW15-S4 | | nsample | OLFS4-DPW15-S4 | | nsample | OLFS4-DPW15-S4 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-21 | | lab_id | 0609061-21 | | lab_id | 0609061-21 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 16 | U | |
| 1,1,1-TRICHLOROETHANE | 44 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 21 | U | |
| 1,1,2-TRICHLOROETHANE | 17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 27 | U | |
| 1,1-DICHLOROETHANE | 26 | U | |
| 1,1-DICHLOROETHENE | 59 | U | |
| 1,2,3-TRICHLOROBENZENE | 20 | U | |
| 1,2,3-TRICHLOROPROPANE | 34 | U | |
| 1,2,4-TRICHLOROBENZENE | 8.8 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 59 | U | |
| 1,2-DIBROMOETHANE | 21 | U | |
| 1,2-DICHLOROBENZENE | 18 | U | |
| 1,2-DICHLOROETHANE | 22 | U | |
| 1,2-DICHLOROPROPANE | 22 | U | |
| 1,3-DICHLOROBENZENE | 41 | U | |
| 1,4-DICHLOROBENZENE | 27 | U | |
| 1,4-DIOXANE | 24 | UR | C |
| 2-BUTANONE | 68 | U | |
| 2-HEXANONE | 110 | U | |
| 3-CHLOROPROPENE | 24 | U | |
| 4-METHYL-2-PENTANONE | 28 | U | |
| ACETONE | 98 | UJ | C |
| ACETONITRILE | 24 | U | |
| ACROLEIN | 250 | U | |
| ACRYLONITRILE | 68 | U | |
| BENZENE | 23 | U | |
| BROMODICHLOROMETHANE | 15 | U | |
| BROMOFORM | 49 | U | |
| BROMOMETHANE | 35 | UJ | C |
| CARBON DISULFIDE | 63 | U | |
| CARBON TETRACHLORIDE | 43 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 120 | U | |
| CHLORODIBROMOMETHANE | 17 | U | |
| CHLOROETHANE | 54 | U | |
| CHLOROFORM | 27 | U | |
| CHLOROMETHANE | 25 | U | |
| CHLOROPRENE | 24 | U | |
| CIS-1,2-DICHLOROETHENE | 59 | U | |
| CIS-1,3-DICHLOROPROPENE | 24 | U | |
| CYCLOHEXANE | 26 | U | |
| DIBROMOMETHANE | 20 | U | |
| DICHLORODIFLUOROMETHANE | 54 | U | |
| ETHYL METHACRYLATE | 13 | U | |
| ETHYLBENZENE | 37 | U | |
| ISOBUTANOL | 24 | UR | C |
| ISOPROPYLBENZENE | 43 | U | |
| M+P-XYLENES | 73 | U | |
| METHACRYLONITRILE | 24 | U | |
| METHYL ACETATE | 78 | U | |
| METHYL CYCLOHEXANE | 15 | U | |
| METHYL IODIDE | 40 | U | |
| METHYL METHACRYLATE | 22 | U | |
| METHYL TERT-BUTYL ETHER | 16 | U | |
| METHYLENE CHLORIDE | 30 | U | |
| O-XYLENE | 34 | U | |
| PROPIONITRILE | 24 | U | |
| STYRENE | 17 | U | |
| TETRACHLOROETHENE | 47 | U | |
| TOLUENE | 42 | U | |
| TOTAL XYLENES | 34 | U | |
| TRANS-1,2-DICHLOROETHENE | 54 | U | |
| TRANS-1,3-DICHLOROPROPENE | 16 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 390 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 42 | U | |
| TRICHLOROFLUOROMETHANE | 46 | U | |
| VINYL ACETATE | 27 | U | |
| VINYL CHLORIDE | 54 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW16-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 16 | U | |
| 1,1,1-TRICHLOROETHANE | 45 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 22 | U | |
| 1,1,2-TRICHLOROETHANE | 18 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 28 | U | |
| 1,1-DICHLOROETHANE | 27 | U | |
| 1,1-DICHLOROETHENE | 60 | U | |
| 1,2,3-TRICHLOROBENZENE | 21 | U | |
| 1,2,3-TRICHLOROPROPANE | 35 | U | |
| 1,2,4-TRICHLOROBENZENE | 9 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 60 | U | |
| 1,2-DIBROMOETHANE | 22 | U | |
| 1,2-DICHLOROBENZENE | 19 | U | |
| 1,2-DICHLOROETHANE | 23 | U | |
| 1,2-DICHLOROPROPANE | 23 | U | |
| 1,3-DICHLOROBENZENE | 42 | U | |
| 1,4-DICHLOROBENZENE | 28 | U | |
| 1,4-DIOXANE | 25 | UR | C |
| 2-BUTANONE | 70 | U | |
| 2-HEXANONE | 120 | U | |
| 3-CHLOROPROPENE | 25 | U | |
| 4-METHYL-2-PENTANONE | 29 | U | |
| ACETONE | 100 | U | |
| ACETONITRILE | 25 | U | |
| ACROLEIN | 260 | UJ | C |
| ACRYLONITRILE | 70 | U | |
| BENZENE | 24 | U | |
| BROMODICHLOROMETHANE | 15 | U | |
| BROMOFORM | 50 | U | |
| BROMOMETHANE | 36 | U | |
| CARBON DISULFIDE | 65 | U | |
| CARBON TETRACHLORIDE | 44 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW16-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 120 | U | |
| CHLORODIBROMOMETHANE | 17 | U | |
| CHLOROETHANE | 55 | U | |
| CHLOROFORM | 28 | U | |
| CHLOROMETHANE | 26 | UJ | C |
| CHLOROPRENE | 25 | U | |
| CIS-1,2-DICHLOROETHENE | 60 | U | |
| CIS-1,3-DICHLOROPROPENE | 25 | U | |
| CYCLOHEXANE | 27 | U | |
| DIBROMOMETHANE | 21 | U | |
| DICHLORODIFLUOROMETHANE | 55 | U | |
| ETHYL METHACRYLATE | 13 | U | |
| ETHYLBENZENE | 38 | U | |
| ISOBUTANOL | 25 | UR | C |
| ISOPROPYLBENZENE | 44 | U | |
| M+P-XYLENES | 75 | U | |
| METHACRYLONITRILE | 25 | U | |
| METHYL ACETATE | 80 | U | |
| METHYL CYCLOHEXANE | 15 | U | |
| METHYL IODIDE | 42 | U | |
| METHYL METHACRYLATE | 23 | U | |
| METHYL TERT-BUTYL ETHER | 16 | U | |
| METHYLENE CHLORIDE | 270 | J | P |
| O-XYLENE | 35 | U | |
| PROPIONITRILE | 25 | U | |
| STYRENE | 18 | U | |
| TETRACHLOROETHENE | 49 | U | |
| TOLUENE | 43 | U | |
| TOTAL XYLENES | 35 | U | |
| TRANS-1,2-DICHLOROETHENE | 55 | U | |
| TRANS-1,3-DICHLOROPROPENE | 16 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 400 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW16-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 43 | U | |
| TRICHLOROFLUOROMETHANE | 48 | U | |
| VINYL ACETATE | 28 | U | |
| VINYL CHLORIDE | 55 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW17-S12 | nsample | OLFS4-DPW17-S12 | nsample | OLFS4-DPW17-S12 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-23 | lab_id | 0609061-23 | lab_id | 0609061-23 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.89 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.69 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.83 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 1,4-DIOXANE | 0.49 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.49 | U | |
| 4-METHYL-2-PENTANONE | 0.57 | U | |
| ACETONE | 2 | UJ | C |
| ACETONITRILE | 0.49 | U | |
| ACROLEIN | 5.1 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.46 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.99 | U | |
| BROMOMETHANE | 0.71 | UJ | C |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.87 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.51 | U | |
| CHLOROPRENE | 0.49 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.49 | U | |
| CYCLOHEXANE | 0.53 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.74 | U | |
| ISOBUTANOL | 0.49 | UR | C |
| ISOPROPYLBENZENE | 0.87 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.49 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.82 | U | |
| METHYL METHACRYLATE | 0.44 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.61 | U | |
| O-XYLENE | 0.69 | U | |
| PROPIONITRILE | 0.49 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.96 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.69 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.9 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.84 | U | |
| TRICHLOROFLUOROMETHANE | 0.94 | U | |
| VINYL ACETATE | 0.54 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.35 | U | |
| 1,1,1-TRICHLOROETHANE | 0.98 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.47 | U | |
| 1,1,2-TRICHLOROETHANE | 0.38 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.6 | U | |
| 1,1-DICHLOROETHANE | 0.59 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.46 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.76 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.2 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.47 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.5 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.91 | U | |
| 1,4-DICHLOROBENZENE | 0.6 | U | |
| 1,4-DIOXANE | 0.54 | UR | C |
| 2-BUTANONE | 1.5 | U | |
| 2-HEXANONE | 2.5 | U | |
| 3-CHLOROPROPENE | 0.54 | U | |
| 4-METHYL-2-PENTANONE | 0.63 | U | |
| ACETONE | 2.2 | UJ | C |
| ACETONITRILE | 0.54 | U | |
| ACROLEIN | 5.6 | U | |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.51 | U | |
| BROMODICHLOROMETHANE | 0.32 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.78 | UJ | C |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.96 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.7 | U | |
| CHLORODIBROMOMETHANE | 0.37 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.6 | U | |
| CHLOROMETHANE | 0.56 | U | |
| CHLOROPRENE | 0.54 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.54 | U | |
| CYCLOHEXANE | 0.59 | U | |
| DIBROMOMETHANE | 0.44 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.28 | U | |
| ETHYLBENZENE | 0.81 | U | |
| ISOBUTANOL | 0.54 | UR | C |
| ISOPROPYLBENZENE | 0.96 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.54 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.32 | U | |
| METHYL IODIDE | 0.9 | U | |
| METHYL METHACRYLATE | 0.49 | U | |
| METHYL TERT-BUTYL ETHER | 0.35 | U | |
| METHYLENE CHLORIDE | 0.67 | U | |
| O-XYLENE | 0.76 | U | |
| PROPIONITRILE | 0.54 | U | |
| STYRENE | 0.38 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.93 | U | |
| TOTAL XYLENES | 0.76 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.35 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.7 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.92 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.6 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW7-S45 | | nsample | OLFS4-DPW7-S45 | | nsample | OLFS4-DPW7-S45 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-08 | | lab_id | 0609061-08 | | lab_id | 0609061-08 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.36 | U | |
| 1,1,1-TRICHLOROETHANE | 1 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.48 | U | |
| 1,1,2-TRICHLOROETHANE | 0.39 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.61 | U | |
| 1,1-DICHLOROETHANE | 0.6 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.47 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.78 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.2 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.48 | U | |
| 1,2-DICHLOROBENZENE | 0.41 | U | |
| 1,2-DICHLOROETHANE | 0.51 | U | |
| 1,2-DICHLOROPROPANE | 0.51 | U | |
| 1,3-DICHLOROBENZENE | 0.94 | U | |
| 1,4-DICHLOROBENZENE | 0.61 | U | |
| 1,4-DIOXANE | 0.56 | UR | C |
| 2-BUTANONE | 1.6 | U | |
| 2-HEXANONE | 2.6 | U | |
| 3-CHLOROPROPENE | 0.56 | U | |
| 4-METHYL-2-PENTANONE | 0.65 | U | |
| ACETONE | 2.2 | UJ | C |
| ACETONITRILE | 0.56 | U | |
| ACROLEIN | 5.8 | U | |
| ACRYLONITRILE | 1.6 | U | |
| BENZENE | 0.52 | U | |
| BROMODICHLOROMETHANE | 0.33 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.8 | UJ | C |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.98 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.8 | U | |
| CHLORODIBROMOMETHANE | 0.38 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.61 | U | |
| CHLOROMETHANE | 0.58 | U | |
| CHLOROPRENE | 0.56 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.56 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.46 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.29 | U | |
| ETHYLBENZENE | 0.84 | U | |
| ISOBUTANOL | 0.56 | UR | C |
| ISOPROPYLBENZENE | 0.98 | U | |
| M+P-XYLENES | 1.7 | U | |
| METHACRYLONITRILE | 0.56 | U | |
| METHYL ACETATE | 1.8 | U | |
| METHYL CYCLOHEXANE | 0.33 | U | |
| METHYL IODIDE | 0.92 | U | |
| METHYL METHACRYLATE | 0.5 | U | |
| METHYL TERT-BUTYL ETHER | 0.36 | U | |
| METHYLENE CHLORIDE | 0.69 | U | |
| O-XYLENE | 0.78 | U | |
| PROPIONITRILE | 0.56 | U | |
| STYRENE | 0.39 | U | |
| TETRACHLOROETHENE | 1.1 | U | |
| TOLUENE | 0.96 | U | |
| TOTAL XYLENES | 0.78 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.36 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.9 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.95 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.61 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW10-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-05 | lab_id | 0609061-05 | lab_id | 0609061-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | U | |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 45 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 170 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | U | |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 45 | U | |
| ACENAPHTHYLENE | 45 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 45 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UJ | C |
| BENZO(A)ANTHRACENE | 45 | U | |
| BENZO(A)PYRENE | 45 | U | |
| BENZO(B)FLUORANTHENE | 45 | U | |
| BENZO(G,H,I)PERYLENE | 45 | U | |
| BENZO(K)FLUORANTHENE | 45 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 45 | U | |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 45 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 45 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 45 | U | |
| FLUORENE | 45 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 45 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 45 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW11-S45 | nsample | OLFS4-DPW11-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-05 | lab_id | 0609061-07 | lab_id | 0609061-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 45 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 45 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | U | |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 43 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | U | |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 43 | U | |
| ACENAPHTHYLENE | 43 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 43 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UJ | C |
| BENZO(A)ANTHRACENE | 43 | U | |
| BENZO(A)PYRENE | 43 | U | |
| BENZO(B)FLUORANTHENE | 43 | U | |
| BENZO(G,H,I)PERYLENE | 43 | U | |
| BENZO(K)FLUORANTHENE | 43 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW11-S45 | | nsample | OLFS4-DPW11-S45 | | nsample | OLFS4-DPW12-S45 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-07 | | lab_id | 0609061-07 | | lab_id | 0609061-10 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 43 | U | |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 43 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 43 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 43 | U | |
| FLUORENE | 43 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 43 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 43 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 43 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 43 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | U | |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 44 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 170 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | U | |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW12-S45 | nsample | OLFS4-DPW12-S45 | nsample | OLFS4-DPW12-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-10 | lab_id | 0609061-10 | lab_id | 0609061-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 44 | U | |
| ACENAPHTHYLENE | 44 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 44 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UJ | C |
| BENZO(A)ANTHRACENE | 44 | U | |
| BENZO(A)PYRENE | 44 | U | |
| BENZO(B)FLUORANTHENE | 44 | U | |
| BENZO(G,H,I)PERYLENE | 44 | U | |
| BENZO(K)FLUORANTHENE | 44 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 44 | U | |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 44 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 44 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 44 | U | |
| FLUORENE | 44 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 44 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 44 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 44 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 44 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW13-S4 | | nsample | OLFS4-DPW13-S4 | | nsample | OLFS4-DPW13-S4 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-19 | | lab_id | 0609061-19 | | lab_id | 0609061-19 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | U | |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 43 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | U | |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 43 | U | |
| ACENAPHTHYLENE | 43 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 43 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UJ | C |
| BENZO(A)ANTHRACENE | 43 | U | |
| BENZO(A)PYRENE | 43 | U | |
| BENZO(B)FLUORANTHENE | 43 | U | |
| BENZO(G,H,I)PERYLENE | 43 | U | |
| BENZO(K)FLUORANTHENE | 43 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 43 | U | |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 43 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 43 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 43 | U | |
| FLUORENE | 43 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 43 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 43 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW13-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 43 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 43 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW14-S6 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW14-S6 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW14-S6 | | | nsample | OLFS4-DPW14-S6 | | | nsample | OLFS4-DPW15-S4 | | |
| samp_date | 9/11/2006 | | | samp_date | 9/11/2006 | | | samp_date | 9/11/2006 | | |
| lab_id | 0609061-20 | | | lab_id | 0609061-20 | | | lab_id | 0609061-21 | | |
| qc_type | NM | | | qc_type | NM | | | qc_type | NM | | |
| units | UG/KG | | | units | UG/KG | | | units | UG/KG | | |
| Pct_Solids | | | | Pct_Solids | | | | Pct_Solids | | | |
| DUP_OF: | | | | DUP_OF: | | | | DUP_OF: | | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 42 | U | |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | U | |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 1400 | | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | U | |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 44 | U | |
| ACENAPHTHYLENE | 44 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 44 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UJ | C |
| BENZO(A)ANTHRACENE | 44 | U | |
| BENZO(A)PYRENE | 44 | U | |
| BENZO(B)FLUORANTHENE | 44 | U | |
| BENZO(G,H,I)PERYLENE | 44 | U | |
| BENZO(K)FLUORANTHENE | 44 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 44 | U | |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 44 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 44 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 44 | U | |
| FLUORENE | 78 | J | P |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 44 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 350 | J | P |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 44 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 44 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW16-S4 | nsample | OLFS4-DPW16-S4 | nsample | OLFS4-DPW16-S4 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-22 | lab_id | 0609061-22 | lab_id | 0609061-22 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 42 | U | |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW16-S4 | nsample | OLFS4-DPW17-S12 | nsample | OLFS4-DPW17-S12 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-22 | lab_id | 0609061-23 | lab_id | 0609061-23 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW17-S12 | | nsample | OLFS4-DPW17-S12 | | nsample | OLFS4-DPW22-S26 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-23 | | lab_id | 0609061-23 | | lab_id | 0609061-16 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | UJ | C |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW22-S26 | nsample | OLFS4-DPW22-S26 | nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-16 | lab_id | 0609061-16 | lab_id | 0609061-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 42 | U | |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW7-S45 | | nsample | OLFS4-DPW7-S45 | | nsample | OLFS4-DPW7-S45 | |
| samp_date | 9/11/2006 | | samp_date | 9/11/2006 | | samp_date | 9/11/2006 | |
| lab_id | 0609061-08 | | lab_id | 0609061-08 | | lab_id | 0609061-08 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 120 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 120 | U | |
| 1,2,4-TRICHLOROBENZENE | 120 | U | |
| 1,3,5-TRINITROBENZENE | 120 | U | |
| 1,3-DINITROBENZENE | 120 | U | |
| 1,4-NAPHTHOQUINONE | 120 | U | |
| 1,4-PHENYLENEDIAMINE | 120 | U | |
| 1-NAPHTHYLAMINE | 120 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 120 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 120 | U | |
| 2,4,5-TRICHLOROPHENOL | 120 | U | |
| 2,4,6-TRICHLOROPHENOL | 120 | U | |
| 2,4-DICHLOROPHENOL | 120 | U | |
| 2,4-DIMETHYLPHENOL | 120 | U | |
| 2,4-DINITROPHENOL | 120 | U | |
| 2,4-DINITROTOLUENE | 120 | U | |
| 2,6-DICHLOROPHENOL | 120 | U | |
| 2,6-DINITROTOLUENE | 120 | U | |
| 2-ACETYLAMINOFLUORENE | 120 | U | |
| 2-CHLORONAPHTHALENE | 120 | U | |
| 2-CHLOROPHENOL | 120 | U | |
| 2-METHYLNAPHTHALENE | 47 | U | |
| 2-METHYLPHENOL | 120 | U | |
| 2-NAPHTHYLAMINE | 120 | U | |
| 2-NITROANILINE | 120 | U | |
| 2-NITROPHENOL | 120 | U | |
| 2-PICOLINE | 120 | U | |
| 3&4-METHYLPHENOL | 120 | U | |
| 3,3'-DICHLOROBENZIDINE | 180 | U | |
| 3,3'-DIMETHYLBENZIDINE | 120 | U | |
| 3-METHYLCHOLANTHRENE | 120 | U | |
| 3-METHYLPHENOL | 120 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 3-NITROANILINE | 120 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 120 | U | |
| 4-AMINOBIPHENYL | 120 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 120 | U | |
| 4-CHLORO-3-METHYLPHENOL | 120 | U | |
| 4-CHLOROANILINE | 120 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 120 | U | |
| 4-METHYLPHENOL | 120 | U | |
| 4-NITROANILINE | 120 | U | |
| 4-NITROPHENOL | 120 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 120 | UR | C |
| 5-NITRO-O-TOLUIDINE | 120 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 120 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 120 | U | |
| ACENAPHTHENE | 47 | U | |
| ACENAPHTHYLENE | 47 | U | |
| ACETOPHENONE | 120 | U | |
| ANILINE | 120 | UJ | C |
| ANTHRACENE | 47 | U | |
| ARAMITE | 120 | U | |
| ATRAZINE | 120 | U | |
| BENZALDEHYDE | 120 | UJ | C |
| BENZO(A)ANTHRACENE | 47 | U | |
| BENZO(A)PYRENE | 47 | U | |
| BENZO(B)FLUORANTHENE | 47 | U | |
| BENZO(G,H,I)PERYLENE | 47 | U | |
| BENZO(K)FLUORANTHENE | 47 | U | |
| BENZYL ALCOHOL | 120 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 120 | U | |
| BIS(2-CHLOROETHYL)ETHER | 120 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 120 | U | |
| BUTYL BENZYL PHTHALATE | 120 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CAPROLACTAM | 120 | U | |
| CARBAZOLE | 47 | U | |
| CHLOROBENZILATE | 120 | U | |
| CHRYSENE | 47 | U | |
| DIALLATE | 120 | U | |
| DIBENZO(A,H)ANTHRACENE | 47 | U | |
| DIBENZOFURAN | 120 | U | |
| DIETHYL PHTHALATE | 120 | U | |
| DIMETHOATE | 120 | U | |
| DIMETHYL PHTHALATE | 120 | U | |
| DI-N-BUTYL PHTHALATE | 120 | U | |
| DI-N-OCTYL PHTHALATE | 120 | U | |
| DIPHENYLAMINE | 120 | U | |
| ETHYL METHANE SULFONATE | 120 | U | |
| FLUORANTHENE | 47 | U | |
| FLUORENE | 47 | U | |
| HEXACHLOROBENZENE | 120 | U | |
| HEXACHLOROBUTADIENE | 120 | U | |
| HEXACHLOROCYCLOPENTADIENE | 120 | U | |
| HEXACHLOROETHANE | 120 | U | |
| HEXACHLOROPHENE | 120 | U | |
| HEXACHLOROPROPENE | 120 | U | |
| INDENO(1,2,3-CD)PYRENE | 47 | U | |
| ISODRIN | 120 | U | |
| ISOPHORONE | 120 | U | |
| ISOSAFROLE | 120 | U | |
| KEPONE | 120 | U | |
| METHAPYRILENE | 120 | U | |
| METHYL METHANE SULFONATE | 120 | U | |
| NAPHTHALENE | 47 | U | |
| NITROBENZENE | 120 | U | |
| N-NITROSODIETHYLAMINE | 120 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW7-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-08 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIMETHYLAMINE | 120 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 120 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 120 | U | |
| N-NITROSODIPHENYLAMINE | 120 | U | |
| N-NITROSOMETHYLETHYLAMINE | 120 | U | |
| N-NITROSOMORPHOLINE | 120 | U | |
| N-NITROSOPIPERIDINE | 120 | U | |
| N-NITROSOPYRROLIDINE | 120 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 120 | U | |
| O-TOLUIDINE | 120 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 120 | U | |
| PENTACHLOROBENZENE | 120 | U | |
| PENTACHLOROETHANE | 120 | U | |
| PENTACHLORONITROBENZENE | 120 | U | |
| PENTACHLOROPHENOL | 120 | U | |
| PHENACETIN | 120 | U | |
| PHENANTHRENE | 47 | U | |
| PHENOL | 120 | U | |
| PRONAMIDE | 120 | U | |
| PYRENE | 47 | U | |
| PYRIDINE | 120 | U | |
| SAFROLE | 120 | U | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW11-S45 | nsample | OLFS4-DPW12-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-05 | lab_id | 0609061-07 | lab_id | 0609061-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.8 | UJ | C |
| AROCLOR-1221 | 4.8 | U | |
| AROCLOR-1232 | 4.8 | U | |
| AROCLOR-1242 | 4.8 | U | |
| AROCLOR-1248 | 4.8 | U | |
| AROCLOR-1254 | 4.8 | U | |
| AROCLOR-1260 | 4.8 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.3 | UJ | C |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.8 | UJ | C |
| AROCLOR-1221 | 4.8 | U | |
| AROCLOR-1232 | 4.8 | U | |
| AROCLOR-1242 | 4.8 | U | |
| AROCLOR-1248 | 4.8 | U | |
| AROCLOR-1254 | 4.8 | U | |
| AROCLOR-1260 | 4.8 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW13-S4 | nsample | OLFS4-DPW14-S6 | nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-19 | lab_id | 0609061-20 | lab_id | 0609061-21 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.6 | U | |
| AROCLOR-1221 | 4.6 | U | |
| AROCLOR-1232 | 4.6 | U | |
| AROCLOR-1242 | 4.6 | U | |
| AROCLOR-1248 | 4.6 | U | |
| AROCLOR-1254 | 4.6 | U | |
| AROCLOR-1260 | 6.6 | J | P |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW16-S4 | nsample | OLFS4-DPW17-S12 | nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-22 | lab_id | 0609061-23 | lab_id | 0609061-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.5 | U | |
| AROCLOR-1221 | 4.5 | U | |
| AROCLOR-1232 | 4.5 | U | |
| AROCLOR-1242 | 4.5 | U | |
| AROCLOR-1248 | 4.5 | U | |
| AROCLOR-1254 | 4.5 | U | |
| AROCLOR-1260 | 4.5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.2 | UJ | C |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | |
|---|---|
| nsample | OLFS4-DPW7-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-08 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.9 | UJ | C |
| AROCLOR-1221 | 4.9 | U | |
| AROCLOR-1232 | 4.9 | U | |
| AROCLOR-1242 | 4.9 | U | |
| AROCLOR-1248 | 4.9 | U | |
| AROCLOR-1254 | 4.9 | U | |
| AROCLOR-1260 | 4.9 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW10-S45 | nsample | OLFS4-DPW11-S45 | nsample | OLFS4-DPW12-S45 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-05 | lab_id | 0609061-07 | lab_id | 0609061-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW13-S4 | nsample | OLFS4-DPW14-S6 | nsample | OLFS4-DPW15-S4 |
| samp_date | 9/11/2006 | samp_date | 9/11/2006 | samp_date | 9/11/2006 |
| lab_id | 0609061-19 | lab_id | 0609061-20 | lab_id | 0609061-21 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 510 | | |

**PROJ_NO: 00389**

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PET

| | |
|---|---|
| nsample | OLFS4-DPW16-S4 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-22 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 36 | | |

| | |
|---|---|
| nsample | OLFS4-DPW17-S12 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-23 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW22-S26 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-16 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

## PROJ_NO: 00389

SDG: 0609061 MEDIA: SOIL DATA FRACTION: PET

| | |
|---|---|
| nsample | OLFS4-DPW7-S45 |
| samp_date | 9/11/2006 |
| lab_id | 0609061-08 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | UJ | C |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **MR. G. WALKER** | **DATE:** | **NOVEMBER 17, 2006** |
| **FROM:** | **EDWARD SEDLMYER** | **COPIES:** | **DV FILE** |

**SUBJECT:** **ORGANIC DATA VALIDATION- VOA/SVOC/PCB/PRO**
**CTO 029, SAUFLEY**
**SDG 0609069**

**SAMPLES:** 1/Aqueous

OLFS4-TB06

24/Solid

| | | |
|---|---|---|
| *OLFS4-DPB10-S10 | *OLFS4-DPB1-S10 | *OLFS4-DPB2-S10 |
| *OLFS4-DPB3-S10 | *OLFS4-DPB4-S10 | *OLFS4-DPB4-S10-D |
| *OLFS4-DPB5-S10 | *OLFS4-DPB6-S10 | *OLFS4-DPB7-S10 |
| *OLFS4-DPB8-S10 | *OLFS4-DPB9-S10 | **OLFS4-DPW18-S12 |
| **OLFS4-DPW19-S12 | **OLFS4-DPW20-S12 | **OLFS4-DPW21-S12 |
| **OLFS4-DPW23-S26 | **OLFS4-DPW24-S26 | **OLFS4-DPW2-S10 |
| **OLFS4-DPW3-S10 | **OLFS4-DPW4-S10 | **OLFS4-DPW5-S10 |
| **OLFS4-DPW6-S10 | **OLFS4-DPW8-S10 | **OLFS4-DPW9-S10 |

OVERVIEW

The sample set for CTO 029, Saufley, SDG 0609069 consists of one (1) trip blank and twenty-four (24) soild environmental samples. The following field duplicate pair was associated with this SDG: OLFS4-DPB4-S10 / OLFS4-DPB4-S10-D. The samples were analyzed for Appendix IX volatile organic compounds (VOC), semivolatile organic compounds (SVOC), and polychlorinated biphenyls (PCBs). Samples denoted with an asterisk (*) were analyzed for pesticides (PEST). Samples denoted with two asterisks (**) were analyzed for petroleum range organics (PRO).

The samples were collected by TetraTech NUS on September 12, 2006 and analyzed by Empirical Laboratories. All analyses were conducted in accordance with SW-846 Method 8260B, 8270C, 8081A, 8082, and FL-PRO analysis and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

- * Data completeness
- * Holding times
- * GC/MS Tuning
- Initial and continuing calibration
- Blank results
- Surrogate spike recoveries
- * Internal standard recoveries
- Blank Spike/Blank Spike Duplicate Results
- Matrix Spike/Matrix Spike Duplicate Results
- * Detection Limits
- * Field Duplicate Results
- * Compound Quantitation
- * Compound Identification

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

The following compound was detected in the method blanks at the maximum concentration listed below:

| Compound | Maximum Concentration | Blank Action Level |
|---|---|---|
| Toluene | 0.92 ug/kg | 4.6 ug/kg |

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for toluene. Dilution factors, percent solids, and sample aliquots were taken into consideration during the application of all action levels. No qualification of the data was necessary because toluene was not detected in any samples.

Initial calibration relative response factors (RRFs) were less than the 0.05 quality control limit for 1,4-dioxane and isobutanol on instrument VOA1, on 7/18/06. Only non-detected results were reported for the aforementioned compounds and these were rejected (UR) in all of the soil samples.

Calibration verification RRFs were less than the 0.05 quality control limit for 1,4-dioxane and isobutanol on instrument VOA1, on 9/18/06, @08:56. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument VOA1 on 09/18/06 @08:56 had percent differences (%Ds) greater than the 25% quality control limit for acrolein and chloromethane. The non-detected results for acrolein and chloromethane in the affected samples were qualified as estimated, (UJ).

Calibration verification RRFs were less than the 0.05 quality control limit for 1,4-dioxane and isobutanol on instrument VOA1, on 9/19/06, @11:21. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Calibration verification RRFs were less than the 0.05 quality control limit for 1,4-dioxane and isobutanol on instrument VOA1, on 9/21/06, @08:29. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

A continuing calibration analyzed on instrument VOA1 on 09/21/06 @07:31 had a %D greater than the 25% quality control limit for acrolein. The non-detected results for acrolein in the affected samples were qualified as estimated, (UJ).

Initial calibration relative response factors (RRFs) were less than the 0.05 quality control limit for acrolein, acetonitrile, 1,4-dioxane, isobutanol, and propionitrile on instrument VOA4, on 9/21/06. Only non-detected results were reported for the aforementioned compounds and these were rejected (UR) in the trip blank.

Calibration verification RRFs were less than the 0.05 quality control limit for acrolein, acetonitrile, 1,4-dioxane, isobutanol, and propionitrile on instrument VOA4, on 9/22/06, @07:34. The non-detected results for the aforementioned compounds were rejected (UR), in the trip blank.

A continuing calibration analyzed on instrument VOA4 on 09/22/06, @07:34 had %Ds greater than the 25% quality control limit for acetone and dichlorodifluoromethane. The non-detected results for the aforementioned compounds were qualified as estimated in the trip blank.

The laboratory control sample (LCS) had a percent recovery less than the quality control limit for methyl methacrylate in the LCS (V1PBLK0918). No action was taken on this basis.

Semivolatiles

Initial calibration RRFs were less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide and hexachlorophene on instrument BNA1, on 9/11/06. Only non-detected results were reported for the aforementioned compounds and these were rejected (UR) in all of the soil samples.

Calibration verification RRFs were less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide and hexachlorophene on instrument BNA1, on 9/19/06, @08:22. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument BNA1 on 09/19/06 @08:22 had %Ds greater than the 25% quality control limit for aniline, benzaldehyde, 4-nitroaniline, aramite, chlorobenzilate, p-(dimethylamino)azobenzene, and methapyrilene. The non-detected results for the aforementioned compounds were qualified as estimated (UJ), in the affected samples.

Calibration verification RRFs were less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide and hexachlorophene on instrument BNA1, on 9/19/06, @20:35. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument BNA1 on 09/19/06 @20:35 had %Ds greater than the 25% quality control limit for aniline, 3,3'-dichlorobenzidine, 2,4-dinitrophenol, 4-nitroaniline, and 3,3'-dimethylbenzidine. The non-detected results for the aforementioned compounds were qualified as estimated (UJ), in the affected samples.

Continuing calibration analyzed on instrument BNA1 on 09/27/06 @11:07 had %Ds greater than the 25% quality control limit for aniline and benzaldehyde. No action was taken on this basis because only QC samples were associated with this calibration.

A calibration verification RRF was less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide on instrument BNA1, on 9/28/06, @13:04. The non-detected results for 4-nitroquinoline-1-oxide were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument BNA1 on 09/28/06 @13:04 had %Ds greater than the 25% quality control limit for aniline, benzaldehyde, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and 4-nitroaniline. The non-detected results for the aforementioned compounds were qualified as estimated (UJ), in the affected samples.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample OLFS4-DPB3-S10 had a percent recovery greater than the quality control limit for caprolactam. No action was taken on this basis because caprolactam had an acceptable recovery in the MS.

The LCS SBLK0924BS1 had a percent recovery greater than the quality control limit for carolactam. No action was taken on this basis because caprolactam was not detected in any associated samples.

The laboratory reported 3-methyphenol and 4-methylphenol separately in the EDD. The data reviewer combined the results and changed the parameter to 3&4-methylphenol in the database.

The compound 1,2,4-trichlorobenzene was removed from the SVOA list in the database. The 1,2,4-trichlorobenzene result reported by the VOC analysis is considered the valid result.

Pesticides/PCBs

The following compounds were detected in the method blanks at the maximum concentrations listed below:

| Compound | Maximum Concentration | Blank Action Level |
|---|---|---|
| 4,4'-DDD | 1.1 ug/kg | 5.5 ug/kg |
| 4,4'-DDE | 2.3 ug/kg | 11.5 ug/kg |
| 4,4'-DDT | 12 ug/kg | 60 ug/kg |

| | | |
|---|---|---|
| Delta-BHC | 0.12 ug/kg | 0.6 ug/kg |

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for the aforementioned compounds. Dilution factors, percent solids, and sample aliquots were taken into consideration during the application of all action levels. The positive results for 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT below the action level have been qualified as non-detected (U) in the affected samples.

The surrogate decachlorobiphenyl had percent recoveries greater than the quality control limit on both columns for sample OLFS4-DPB5-S10. No action was taken on this basis because no detections were found in this sample.

The MS/MSD had a percent recovery greater than the quality control limit for 4,4'-DDT in the MS. No action was taken on this basis because the MSD had an acceptable recovery.

The LCS PS1BLK0919 had percent recoveries less than the quality control limit for 4,4'-DDE and 4,4'-DDT. No action was taken on this basis because all positives for these compounds were previously qualified as non-detected.

The LCS/LCSD PS1BLK0920 had percent recoveries less than the quality control limit for 4,4'-DDT. No action was taken on this basis because all positives for 4,4'-DDT were previously qualified as non-detected.

The LCS PS1BLK0920 had a percent recovery less than the quality control limit for PCB-1260 on the primary column. No action was taken on this basis because the secondary column had an acceptable recovery.

The method blank PS1BLK0920 had low surrogate recoveries for tetrachloro-m-xylene on both columns. No action was taken on this basis because QC samples are not qualified.

Calibration verification %Ds exceeded the 15% quality control limit for 4,4'-DDT and methoxychlor on instrument ecd3, on 09/23/06, at 13:47 for the RTX-CLP column. The compounds heptachlor, endrin, 4,4'-DDD, 4,4'-DDT, endrin aldehyde, endosulfan sulfate, methoxychlor, and endrin ketone exceeded control limits on the RTX-CLPII column. The non-detected results for 4,4'-DDT and methoxychlor have been qualified as estimated (UJ) in the affected samples.

Calibration verification %Ds exceeded the 15% average quality control limit for Aroclor-1260 on instrument ecd3, on 09/23/06, at 14:14 for the RTX-CLP column. The Aroclor-1016 and Aroclor-1260 %Ds exceeded the control limit on the RTX-CLPII column. The non-detected results for Aroclor-1260 have been qualified as estimated (UJ) in the affected samples.

Calibration verification %Ds exceeded the 15% quality control limit for endrin, 4,4'-DDT, and methoxychlor on instrument ecd3, on 09/23/06, at 20:43 for the RTX-CLPII column. No action was taken on this basis because the %Ds for the RTX-CLP column met control limits.

Calibration verification %Ds exceeded the 15% quality control limit for heptachlor, endrin, and 4,4'-DDT on instrument ecd3, on 10/05/06, at 00:22 for the RTX-CLP column. The compounds heptachlor, endrin, 4,4'-DDT, and methoxychlor exceeded control limits on the RTX-CLPII column. The positive and non-detected results for heptachlor, endrin, and 4,4'-DDT have been qualified as estimated (J) and (UJ), respectively, in the affected samples.

Calibration verification %Ds exceeded the 15% quality control limit for 4,4'-DDE, endosulfan sulfate, methoxychlor, and endrin ketone on instrument ecd3, on 10/06/06, at 22:31 for the RTX-CLPII column. No action was taken on this basis because the %D for the RTX-CLP column met the control limit.

Calibration verification %D exceeded the 15% average quality control limit for Aroclor-1260 on instrument ecd3, on 10/06/06, at 22:59 for the RTX-CLP column. No action was taken on this basis because the Aroclor-1260 %D for the RTX-CLPII column met control limits.

Calibration verification %Ds exceeded the 15% quality control limit for aldrin, heptachlor epoxide, alpha-chlordane, 4,4'-DDE, endosulfan I, dieldrin, endosulfan II, 4,4'-DDT, endrin aldehyde, endosulfan sulfate, and endrin ketone on instrument ecd3, on 10/07/06, at 02:34 for the RTX-CLP column. No action was taken on this basis because the %Ds for the RTX-CLPII column met control limits.

Florida-PRO

The surrogate nonatriacontane had a percent recovery greater than the quality control limit for sample OLFS4-DPW20-S12. The positive result has been qualified as estimated (J) for sample OLFS4-DPW20-S12.

A continuing calibration %D exceeded the 15% average quality control limit for PRO on instrument gctcdfid, on 09/24/06, at 18:41. The non-detected PRO results for samples OLFS4-DPW5-S10, OLFS4-DPW6-S10, OLFS4-DPW8-S10, and OLFS4-DPW9-S10 have been qualified as estimated (UJ).

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated "J", due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Qualifications were made on initial and continuing calibration of several VOC, SVOC, PEST, PCB, and PRO compounds that failed to comply with quality control criteria (%RSDs, %Ds, and RRFs). Several VOC and PCB compounds were detected in the method blanks or trip blanks. The VOA, SVOA, PEST, and PCB fractions had several LCS non-compliances.

**Other Factors Affecting Data Quality:** The SVOA and PEST fractions had matrix spike non-compliances. The PEST and Florida-PRO fractions had surrogate non-compliances.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999), and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM."

Tetra Tech NUS

Edward Sedlmyer
Chemist/Data Validator

Tetra Tech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-TB06 | nsample | OLFS4-TB06 | nsample | OLFS4-TB06 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-18 | lab_id | 0609069-18 | lab_id | 0609069-18 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 0.18 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | UJ | C |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| M+P-XYLENES | 0.26 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.24 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB10-S10 | nsample | OLFS4-DPB10-S10 | nsample | OLFS4-DPB10-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-11 | lab_id | 0609069-11 | lab_id | 0609069-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.3 | U | |
| 1,1,1-TRICHLOROETHANE | 0.86 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.33 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHANE | 0.51 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.66 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.35 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.8 | U | |
| 1,4-DICHLOROBENZENE | 0.52 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.55 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 4.9 | U | |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.28 | U | |
| BROMOFORM | 0.95 | U | |
| BROMOMETHANE | 0.68 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.84 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.32 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.52 | U | |
| CHLOROMETHANE | 0.49 | U | |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.51 | U | |
| DIBROMOMETHANE | 0.39 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.71 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.84 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.28 | U | |
| METHYL IODIDE | 0.79 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.59 | U | |
| O-XYLENE | 0.66 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.33 | U | |
| TETRACHLOROETHENE | 0.92 | U | |
| TOLUENE | 0.82 | U | |
| TOTAL XYLENES | 0.66 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.81 | U | |
| TRICHLOROFLUOROMETHANE | 0.9 | U | |
| VINYL ACETATE | 0.52 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB1-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.89 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.41 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.69 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.45 | U | |
| 1,2-DICHLOROPROPANE | 0.45 | U | |
| 1,3-DICHLOROBENZENE | 0.83 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 1,4-DIOXANE | 0.49 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.49 | U | |
| 4-METHYL-2-PENTANONE | 0.57 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.49 | U | |
| ACROLEIN | 5.1 | UJ | C |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.46 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.99 | U | |
| BROMOMETHANE | 0.71 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.87 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB1-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.51 | UJ | C |
| CHLOROPRENE | 0.49 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.49 | U | |
| CYCLOHEXANE | 0.53 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.74 | U | |
| ISOBUTANOL | 0.49 | UR | C |
| ISOPROPYLBENZENE | 0.87 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.49 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.82 | U | |
| METHYL METHACRYLATE | 0.44 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.61 | U | |
| O-XYLENE | 0.69 | U | |
| PROPIONITRILE | 0.49 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.96 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.69 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.9 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB1-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.84 | U | |
| TRICHLOROFLUOROMETHANE | 0.94 | U | |
| VINYL ACETATE | 0.54 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-02 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.3 | U | |
| 1,1,1-TRICHLOROETHANE | 0.86 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.33 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.67 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.35 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.8 | U | |
| 1,4-DICHLOROBENZENE | 0.52 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.55 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | UJ | C |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.95 | U | |
| BROMOMETHANE | 0.69 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.84 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-02 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.32 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.52 | U | |
| CHLOROMETHANE | 0.5 | UJ | C |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.52 | U | |
| DIBROMOMETHANE | 0.39 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.72 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.84 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.79 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.59 | U | |
| O-XYLENE | 0.67 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.33 | U | |
| TETRACHLOROETHENE | 0.92 | U | |
| TOLUENE | 0.82 | U | |
| TOTAL XYLENES | 0.67 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-02 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.81 | U | |
| TRICHLOROFLUOROMETHANE | 0.91 | U | |
| VINYL ACETATE | 0.52 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.34 | U | |
| 1,1,1-TRICHLOROETHANE | 0.96 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.46 | U | |
| 1,1,2-TRICHLOROETHANE | 0.38 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.59 | U | |
| 1,1-DICHLOROETHANE | 0.58 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.45 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.75 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.46 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.49 | U | |
| 1,2-DICHLOROPROPANE | 0.49 | U | |
| 1,3-DICHLOROBENZENE | 0.9 | U | |
| 1,4-DICHLOROBENZENE | 0.59 | U | |
| 1,4-DIOXANE | 0.54 | UR | C |
| 2-BUTANONE | 1.5 | U | |
| 2-HEXANONE | 2.5 | U | |
| 3-CHLOROPROPENE | 0.54 | U | |
| 4-METHYL-2-PENTANONE | 0.62 | U | |
| ACETONE | 2.1 | U | |
| ACETONITRILE | 0.54 | U | |
| ACROLEIN | 5.6 | UJ | C |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.5 | U | |
| BROMODICHLOROMETHANE | 0.32 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.77 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.94 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.7 | U | |
| CHLORODIBROMOMETHANE | 0.36 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.59 | U | |
| CHLOROMETHANE | 0.56 | UJ | C |
| CHLOROPRENE | 0.54 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.54 | U | |
| CYCLOHEXANE | 0.58 | U | |
| DIBROMOMETHANE | 0.44 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.28 | U | |
| ETHYLBENZENE | 0.8 | U | |
| ISOBUTANOL | 0.54 | UR | C |
| ISOPROPYLBENZENE | 0.94 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.54 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.32 | U | |
| METHYL IODIDE | 0.89 | U | |
| METHYL METHACRYLATE | 0.48 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| METHYLENE CHLORIDE | 0.66 | U | |
| O-XYLENE | 0.75 | U | |
| PROPIONITRILE | 0.54 | U | |
| STYRENE | 0.38 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.92 | U | |
| TOTAL XYLENES | 0.75 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.34 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.91 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.59 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.34 | U | |
| 1,1,1-TRICHLOROETHANE | 0.94 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.45 | U | |
| 1,1,2-TRICHLOROETHANE | 0.37 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.58 | U | |
| 1,1-DICHLOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.44 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.73 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.45 | U | |
| 1,2-DICHLOROBENZENE | 0.39 | U | |
| 1,2-DICHLOROETHANE | 0.48 | U | |
| 1,2-DICHLOROPROPANE | 0.48 | U | |
| 1,3-DICHLOROBENZENE | 0.88 | U | |
| 1,4-DICHLOROBENZENE | 0.58 | U | |
| 1,4-DIOXANE | 0.52 | UR | C |
| 2-BUTANONE | 1.5 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.52 | U | |
| 4-METHYL-2-PENTANONE | 0.61 | U | |
| ACETONE | 2.1 | U | |
| ACETONITRILE | 0.52 | U | |
| ACROLEIN | 5.4 | UJ | C |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.49 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.76 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.92 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.36 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.58 | U | |
| CHLOROMETHANE | 0.54 | UJ | C |
| CHLOROPRENE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.52 | U | |
| CYCLOHEXANE | 0.57 | U | |
| DIBROMOMETHANE | 0.43 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.79 | U | |
| ISOBUTANOL | 0.52 | UR | C |
| ISOPROPYLBENZENE | 0.92 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.52 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.87 | U | |
| METHYL METHACRYLATE | 0.47 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| METHYLENE CHLORIDE | 0.65 | U | |
| O-XYLENE | 0.73 | U | |
| PROPIONITRILE | 0.52 | U | |
| STYRENE | 0.37 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.9 | U | |
| TOTAL XYLENES | 0.73 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.34 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.4 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.89 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.58 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 |
| lab_id | 0609069-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.29 | U | |
| 1,1,1-TRICHLOROETHANE | 0.82 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.39 | U | |
| 1,1,2-TRICHLOROETHANE | 0.32 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.5 | U | |
| 1,1-DICHLOROETHANE | 0.5 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.38 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.64 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.16 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.39 | U | |
| 1,2-DICHLOROBENZENE | 0.34 | U | |
| 1,2-DICHLOROETHANE | 0.42 | U | |
| 1,2-DICHLOROPROPANE | 0.42 | U | |
| 1,3-DICHLOROBENZENE | 0.77 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 0.46 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.1 | U | |
| 3-CHLOROPROPENE | 0.46 | U | |
| 4-METHYL-2-PENTANONE | 0.53 | U | |
| ACETONE | 1.8 | U | |
| ACETONITRILE | 0.46 | U | |
| ACROLEIN | 4.8 | UJ | C |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.43 | U | |
| BROMODICHLOROMETHANE | 0.28 | U | |
| BROMOFORM | 0.92 | U | |
| BROMOMETHANE | 0.66 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.81 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 |
| lab_id | 0609069-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.3 | U | |
| CHLORODIBROMOMETHANE | 0.31 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.5 | U | |
| CHLOROMETHANE | 0.48 | UJ | C |
| CHLOROPRENE | 0.46 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.46 | U | |
| CYCLOHEXANE | 0.5 | U | |
| DIBROMOMETHANE | 0.38 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.24 | U | |
| ETHYLBENZENE | 0.69 | U | |
| ISOBUTANOL | 0.46 | UR | C |
| ISOPROPYLBENZENE | 0.81 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.46 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.28 | U | |
| METHYL IODIDE | 0.76 | U | |
| METHYL METHACRYLATE | 0.41 | U | |
| METHYL TERT-BUTYL ETHER | 0.29 | U | |
| METHYLENE CHLORIDE | 0.57 | U | |
| O-XYLENE | 0.64 | U | |
| PROPIONITRILE | 0.46 | U | |
| STYRENE | 0.32 | U | |
| TETRACHLOROETHENE | 0.89 | U | |
| TOLUENE | 0.79 | U | |
| TOTAL XYLENES | 0.64 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.29 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.3 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 |
| lab_id | 0609069-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.78 | U | |
| TRICHLOROFLUOROMETHANE | 0.87 | U | |
| VINYL ACETATE | 0.5 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-06 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.92 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.43 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.71 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.44 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.47 | U | |
| 1,2-DICHLOROPROPANE | 0.47 | U | |
| 1,3-DICHLOROBENZENE | 0.86 | U | |
| 1,4-DICHLOROBENZENE | 0.56 | U | |
| 1,4-DIOXANE | 0.51 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.51 | U | |
| 4-METHYL-2-PENTANONE | 0.59 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.51 | U | |
| ACROLEIN | 5.3 | UJ | C |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.48 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.73 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.9 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-06 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.56 | U | |
| CHLOROMETHANE | 0.53 | UJ | C |
| CHLOROPRENE | 0.51 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.51 | U | |
| CYCLOHEXANE | 0.55 | U | |
| DIBROMOMETHANE | 0.42 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.76 | U | |
| ISOBUTANOL | 0.51 | UR | C |
| ISOPROPYLBENZENE | 0.9 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.51 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.84 | U | |
| METHYL METHACRYLATE | 0.46 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.63 | U | |
| O-XYLENE | 0.71 | U | |
| PROPIONITRILE | 0.51 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 0.99 | U | |
| TOLUENE | 0.88 | U | |
| TOTAL XYLENES | 0.71 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.1 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-06 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.86 | U | |
| TRICHLOROFLUOROMETHANE | 0.97 | U | |
| VINYL ACETATE | 0.56 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB6-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-07 | lab_id | 0609069-07 | lab_id | 0609069-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.87 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.68 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.81 | U | |
| 1,4-DICHLOROBENZENE | 0.53 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.56 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | UJ | C |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.96 | U | |
| BROMOMETHANE | 0.69 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.85 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.53 | U | |
| CHLOROMETHANE | 0.5 | UJ | C |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.52 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.72 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.85 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.8 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.6 | U | |
| O-XYLENE | 0.68 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.94 | U | |
| TOLUENE | 0.83 | U | |
| TOTAL XYLENES | 0.68 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.7 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.82 | U | |
| TRICHLOROFLUOROMETHANE | 0.92 | U | |
| VINYL ACETATE | 0.53 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-08 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.3 | U | |
| 1,1,1-TRICHLOROETHANE | 0.86 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.33 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHANE | 0.51 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.67 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.35 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.8 | U | |
| 1,4-DICHLOROBENZENE | 0.52 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.55 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | UJ | C |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.95 | U | |
| BROMOMETHANE | 0.69 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.84 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-08 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.32 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.52 | U | |
| CHLOROMETHANE | 0.5 | UJ | C |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.51 | U | |
| DIBROMOMETHANE | 0.39 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.72 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.84 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.79 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.59 | U | |
| O-XYLENE | 0.67 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.33 | U | |
| TETRACHLOROETHENE | 0.92 | U | |
| TOLUENE | 0.82 | U | |
| TOTAL XYLENES | 0.67 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-08 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.81 | U | |
| TRICHLOROFLUOROMETHANE | 0.9 | U | |
| VINYL ACETATE | 0.52 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.86 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.67 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.35 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.8 | U | |
| 1,4-DICHLOROBENZENE | 0.53 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.56 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | UJ | C |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.96 | U | |
| BROMOMETHANE | 0.69 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.84 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.53 | U | |
| CHLOROMETHANE | 0.5 | UJ | C |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.52 | U | |
| DIBROMOMETHANE | 0.39 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.72 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.84 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.8 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.59 | U | |
| O-XYLENE | 0.67 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.93 | U | |
| TOLUENE | 0.82 | U | |
| TOTAL XYLENES | 0.67 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.7 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.82 | U | |
| TRICHLOROFLUOROMETHANE | 0.91 | U | |
| VINYL ACETATE | 0.53 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPB9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-10 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.87 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.68 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.81 | U | |
| 1,4-DICHLOROBENZENE | 0.53 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.56 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.97 | U | |
| BROMOMETHANE | 0.7 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.85 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-10 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.53 | U | |
| CHLOROMETHANE | 0.5 | U | |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.52 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.72 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.85 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.8 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.6 | U | |
| O-XYLENE | 0.68 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.94 | U | |
| TOLUENE | 0.83 | U | |
| TOTAL XYLENES | 0.68 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.7 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-10 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.82 | U | |
| TRICHLOROFLUOROMETHANE | 0.92 | U | |
| VINYL ACETATE | 0.53 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.89 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.7 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.43 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.83 | U | |
| 1,4-DICHLOROBENZENE | 0.55 | U | |
| 1,4-DIOXANE | 0.5 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 0.58 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.5 | U | |
| ACROLEIN | 5.2 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.99 | U | |
| BROMOMETHANE | 0.71 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.87 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.55 | U | |
| CHLOROMETHANE | 0.52 | U | |
| CHLOROPRENE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| CYCLOHEXANE | 0.54 | U | |
| DIBROMOMETHANE | 0.41 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.74 | U | |
| ISOBUTANOL | 0.5 | UR | C |
| ISOPROPYLBENZENE | 0.87 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.5 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.82 | U | |
| METHYL METHACRYLATE | 0.45 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.62 | U | |
| O-XYLENE | 0.7 | U | |
| PROPIONITRILE | 0.5 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.96 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.7 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.9 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.84 | U | |
| TRICHLOROFLUOROMETHANE | 0.94 | U | |
| VINYL ACETATE | 0.55 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW19-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-13 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.3 | U | |
| 1,1,1-TRICHLOROETHANE | 0.86 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROETHANE | 0.33 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.52 | U | |
| 1,1-DICHLOROETHANE | 0.51 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.67 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.41 | U | |
| 1,2-DICHLOROBENZENE | 0.35 | U | |
| 1,2-DICHLOROETHANE | 0.44 | U | |
| 1,2-DICHLOROPROPANE | 0.44 | U | |
| 1,3-DICHLOROBENZENE | 0.8 | U | |
| 1,4-DICHLOROBENZENE | 0.52 | U | |
| 1,4-DIOXANE | 0.48 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.48 | U | |
| 4-METHYL-2-PENTANONE | 0.55 | U | |
| ACETONE | 1.9 | U | |
| ACETONITRILE | 0.48 | U | |
| ACROLEIN | 5 | U | |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.45 | U | |
| BROMODICHLOROMETHANE | 0.28 | U | |
| BROMOFORM | 0.95 | U | |
| BROMOMETHANE | 0.68 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.84 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW19-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-13 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.32 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.52 | U | |
| CHLOROMETHANE | 0.5 | U | |
| CHLOROPRENE | 0.48 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.48 | U | |
| CYCLOHEXANE | 0.51 | U | |
| DIBROMOMETHANE | 0.39 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.71 | U | |
| ISOBUTANOL | 0.48 | UR | C |
| ISOPROPYLBENZENE | 0.84 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.48 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.28 | U | |
| METHYL IODIDE | 0.79 | U | |
| METHYL METHACRYLATE | 0.43 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.59 | U | |
| O-XYLENE | 0.67 | U | |
| PROPIONITRILE | 0.48 | U | |
| STYRENE | 0.33 | U | |
| TETRACHLOROETHENE | 0.92 | U | |
| TOLUENE | 0.82 | U | |
| TOTAL XYLENES | 0.67 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.6 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW19-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-13 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.81 | U | |
| TRICHLOROFLUOROMETHANE | 0.9 | U | |
| VINYL ACETATE | 0.52 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW20-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-14 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.88 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.41 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.68 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.45 | U | |
| 1,2-DICHLOROPROPANE | 0.45 | U | |
| 1,3-DICHLOROBENZENE | 0.82 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 1,4-DIOXANE | 0.49 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.49 | U | |
| 4-METHYL-2-PENTANONE | 0.57 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.49 | U | |
| ACROLEIN | 5.1 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.46 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.98 | U | |
| BROMOMETHANE | 0.7 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.86 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW20-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-14 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.51 | U | |
| CHLOROPRENE | 0.49 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.49 | U | |
| CYCLOHEXANE | 0.53 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.73 | U | |
| ISOBUTANOL | 0.49 | UR | C |
| ISOPROPYLBENZENE | 0.86 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.49 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.81 | U | |
| METHYL METHACRYLATE | 0.44 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.61 | U | |
| O-XYLENE | 0.68 | U | |
| PROPIONITRILE | 0.49 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.95 | U | |
| TOLUENE | 0.84 | U | |
| TOTAL XYLENES | 0.68 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.8 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW20-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-14 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.83 | U | |
| TRICHLOROFLUOROMETHANE | 0.93 | U | |
| VINYL ACETATE | 0.54 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-15 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.33 | U | |
| 1,1,1-TRICHLOROETHANE | 0.93 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.44 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.72 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.44 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.48 | U | |
| 1,2-DICHLOROPROPANE | 0.48 | U | |
| 1,3-DICHLOROBENZENE | 0.87 | U | |
| 1,4-DICHLOROBENZENE | 0.57 | U | |
| 1,4-DIOXANE | 0.52 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.52 | U | |
| 4-METHYL-2-PENTANONE | 0.6 | U | |
| ACETONE | 2.1 | U | |
| ACETONITRILE | 0.52 | U | |
| ACROLEIN | 5.4 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.49 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.75 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.91 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-15 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.57 | U | |
| CHLOROMETHANE | 0.54 | U | |
| CHLOROPRENE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.52 | U | |
| CYCLOHEXANE | 0.56 | U | |
| DIBROMOMETHANE | 0.42 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.78 | U | |
| ISOBUTANOL | 0.52 | UR | C |
| ISOPROPYLBENZENE | 0.91 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.52 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.86 | U | |
| METHYL METHACRYLATE | 0.47 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.64 | U | |
| O-XYLENE | 0.72 | U | |
| PROPIONITRILE | 0.52 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.89 | U | |
| TOTAL XYLENES | 0.72 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.3 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-15 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.88 | U | |
| TRICHLOROFLUOROMETHANE | 0.98 | U | |
| VINYL ACETATE | 0.57 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW23-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.33 | U | |
| 1,1,1-TRICHLOROETHANE | 0.94 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.45 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.44 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.73 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.45 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.48 | U | |
| 1,2-DICHLOROPROPANE | 0.48 | U | |
| 1,3-DICHLOROBENZENE | 0.88 | U | |
| 1,4-DICHLOROBENZENE | 0.57 | U | |
| 1,4-DIOXANE | 0.52 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.52 | U | |
| 4-METHYL-2-PENTANONE | 0.6 | U | |
| ACETONE | 2.1 | U | |
| ACETONITRILE | 0.52 | U | |
| ACROLEIN | 5.4 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.49 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.75 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.92 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW23-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.57 | U | |
| CHLOROMETHANE | 0.54 | U | |
| CHLOROPRENE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.52 | U | |
| CYCLOHEXANE | 0.56 | U | |
| DIBROMOMETHANE | 0.43 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.78 | U | |
| ISOBUTANOL | 0.52 | UR | C |
| ISOPROPYLBENZENE | 0.92 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.52 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.86 | U | |
| METHYL METHACRYLATE | 0.47 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.64 | U | |
| O-XYLENE | 0.73 | U | |
| PROPIONITRILE | 0.52 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.9 | U | |
| TOTAL XYLENES | 0.73 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.3 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW23-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.88 | U | |
| TRICHLOROFLUOROMETHANE | 0.99 | U | |
| VINYL ACETATE | 0.57 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW24-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-17 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.88 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.41 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.68 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.45 | U | |
| 1,2-DICHLOROPROPANE | 0.45 | U | |
| 1,3-DICHLOROBENZENE | 0.82 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 1,4-DIOXANE | 0.49 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.49 | U | |
| 4-METHYL-2-PENTANONE | 0.57 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.49 | U | |
| ACROLEIN | 5.1 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.46 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.98 | U | |
| BROMOMETHANE | 0.7 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.86 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW24-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-17 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.51 | U | |
| CHLOROPRENE | 0.49 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.49 | U | |
| CYCLOHEXANE | 0.53 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.73 | U | |
| ISOBUTANOL | 0.49 | UR | C |
| ISOPROPYLBENZENE | 0.86 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.49 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.81 | U | |
| METHYL METHACRYLATE | 0.44 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.61 | U | |
| O-XYLENE | 0.68 | U | |
| PROPIONITRILE | 0.49 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.95 | U | |
| TOLUENE | 0.84 | U | |
| TOTAL XYLENES | 0.68 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.8 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW24-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-17 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.83 | U | |
| TRICHLOROFLUOROMETHANE | 0.93 | U | |
| VINYL ACETATE | 0.54 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.89 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.69 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.43 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.83 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 1,4-DIOXANE | 0.5 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 0.58 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.5 | U | |
| ACROLEIN | 5.2 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.99 | U | |
| BROMOMETHANE | 0.71 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.87 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.52 | U | |
| CHLOROPRENE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| CYCLOHEXANE | 0.54 | U | |
| DIBROMOMETHANE | 0.41 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.74 | U | |
| ISOBUTANOL | 0.5 | UR | C |
| ISOPROPYLBENZENE | 0.87 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.5 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.82 | U | |
| METHYL METHACRYLATE | 0.45 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.61 | U | |
| O-XYLENE | 0.69 | U | |
| PROPIONITRILE | 0.5 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.96 | U | |
| TOLUENE | 0.85 | U | |
| TOTAL XYLENES | 0.69 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.9 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW2-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-19 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.84 | U | |
| TRICHLOROFLUOROMETHANE | 0.94 | U | |
| VINYL ACETATE | 0.54 | U | |
| VINYL CHLORIDE | 1.1 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.33 | U | |
| 1,1,1-TRICHLOROETHANE | 0.93 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.43 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.72 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.44 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.47 | U | |
| 1,2-DICHLOROPROPANE | 0.47 | U | |
| 1,3-DICHLOROBENZENE | 0.86 | U | |
| 1,4-DICHLOROBENZENE | 0.57 | U | |
| 1,4-DIOXANE | 0.51 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.51 | U | |
| 4-METHYL-2-PENTANONE | 0.6 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.51 | U | |
| ACROLEIN | 5.4 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.48 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.74 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.91 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.57 | U | |
| CHLOROMETHANE | 0.54 | U | |
| CHLOROPRENE | 0.51 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.51 | U | |
| CYCLOHEXANE | 0.56 | U | |
| DIBROMOMETHANE | 0.42 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.77 | U | |
| ISOBUTANOL | 0.51 | UR | C |
| ISOPROPYLBENZENE | 0.91 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.51 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.85 | U | |
| METHYL METHACRYLATE | 0.46 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.64 | U | |
| O-XYLENE | 0.72 | U | |
| PROPIONITRILE | 0.51 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.88 | U | |
| TOTAL XYLENES | 0.72 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.2 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.88 | U | |
| TRICHLOROFLUOROMETHANE | 0.98 | U | |
| VINYL ACETATE | 0.57 | U | |
| VINYL CHLORIDE | 1.1 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW4-S10 | nsample | OLFS4-DPW4-S10 | nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-21 | lab_id | 0609069-21 | lab_id | 0609069-21 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.3 | U | |
| 1,1,1-TRICHLOROETHANE | 0.83 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROETHANE | 0.32 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.51 | U | |
| 1,1-DICHLOROETHANE | 0.5 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.39 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.65 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.17 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.4 | U | |
| 1,2-DICHLOROBENZENE | 0.34 | U | |
| 1,2-DICHLOROETHANE | 0.42 | U | |
| 1,2-DICHLOROPROPANE | 0.42 | U | |
| 1,3-DICHLOROBENZENE | 0.78 | U | |
| 1,4-DICHLOROBENZENE | 0.51 | U | |
| 1,4-DIOXANE | 0.46 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.1 | U | |
| 3-CHLOROPROPENE | 0.46 | U | |
| 4-METHYL-2-PENTANONE | 0.54 | U | |
| ACETONE | 1.8 | U | |
| ACETONITRILE | 0.46 | U | |
| ACROLEIN | 4.8 | U | |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.43 | U | |
| BROMODICHLOROMETHANE | 0.28 | U | |
| BROMOFORM | 0.92 | U | |
| BROMOMETHANE | 0.66 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.81 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.3 | U | |
| CHLORODIBROMOMETHANE | 0.31 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.51 | U | |
| CHLOROMETHANE | 0.48 | U | |
| CHLOROPRENE | 0.46 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.46 | U | |
| CYCLOHEXANE | 0.5 | U | |
| DIBROMOMETHANE | 0.38 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.24 | U | |
| ETHYLBENZENE | 0.69 | U | |
| ISOBUTANOL | 0.46 | UR | C |
| ISOPROPYLBENZENE | 0.81 | U | |
| M+P-XYLENES | 1.4 | U | |
| METHACRYLONITRILE | 0.46 | U | |
| METHYL ACETATE | 1.5 | U | |
| METHYL CYCLOHEXANE | 0.28 | U | |
| METHYL IODIDE | 0.77 | U | |
| METHYL METHACRYLATE | 0.42 | U | |
| METHYL TERT-BUTYL ETHER | 0.3 | U | |
| METHYLENE CHLORIDE | 0.57 | U | |
| O-XYLENE | 0.65 | U | |
| PROPIONITRILE | 0.46 | U | |
| STYRENE | 0.32 | U | |
| TETRACHLOROETHENE | 0.9 | U | |
| TOLUENE | 0.79 | U | |
| TOTAL XYLENES | 0.65 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.3 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.78 | U | |
| TRICHLOROFLUOROMETHANE | 0.88 | U | |
| VINYL ACETATE | 0.51 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.37 | U | |
| 1,1,1-TRICHLOROETHANE | 1 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.63 | U | |
| 1,1-DICHLOROETHANE | 0.62 | U | |
| 1,1-DICHLOROETHENE | 1.4 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.48 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.81 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.21 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.4 | U | |
| 1,2-DIBROMOETHANE | 0.5 | U | |
| 1,2-DICHLOROBENZENE | 0.43 | U | |
| 1,2-DICHLOROETHANE | 0.53 | U | |
| 1,2-DICHLOROPROPANE | 0.53 | U | |
| 1,3-DICHLOROBENZENE | 0.97 | U | |
| 1,4-DICHLOROBENZENE | 0.63 | U | |
| 1,4-DIOXANE | 0.58 | UR | C |
| 2-BUTANONE | 1.6 | U | |
| 2-HEXANONE | 2.6 | U | |
| 3-CHLOROPROPENE | 0.58 | U | |
| 4-METHYL-2-PENTANONE | 0.67 | U | |
| ACETONE | 2.3 | U | |
| ACETONITRILE | 0.58 | U | |
| ACROLEIN | 6 | U | |
| ACRYLONITRILE | 1.6 | U | |
| BENZENE | 0.54 | U | |
| BROMODICHLOROMETHANE | 0.35 | U | |
| BROMOFORM | 1.2 | U | |
| BROMOMETHANE | 0.83 | U | |
| CARBON DISULFIDE | 1.5 | U | |
| CARBON TETRACHLORIDE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.9 | U | |
| CHLORODIBROMOMETHANE | 0.39 | U | |
| CHLOROETHANE | 1.3 | U | |
| CHLOROFORM | 0.63 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.58 | U | |
| CIS-1,2-DICHLOROETHENE | 1.4 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.58 | U | |
| CYCLOHEXANE | 0.62 | U | |
| DIBROMOMETHANE | 0.47 | U | |
| DICHLORODIFLUOROMETHANE | 1.3 | U | |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.86 | U | |
| ISOBUTANOL | 0.58 | UR | C |
| ISOPROPYLBENZENE | 1 | U | |
| M+P-XYLENES | 1.7 | U | |
| METHACRYLONITRILE | 0.58 | U | |
| METHYL ACETATE | 1.8 | U | |
| METHYL CYCLOHEXANE | 0.35 | U | |
| METHYL IODIDE | 0.96 | U | |
| METHYL METHACRYLATE | 0.52 | U | |
| METHYL TERT-BUTYL ETHER | 0.37 | U | |
| METHYLENE CHLORIDE | 0.72 | U | |
| O-XYLENE | 0.81 | U | |
| PROPIONITRILE | 0.58 | U | |
| STYRENE | 0.4 | U | |
| TETRACHLOROETHENE | 1.1 | U | |
| TOLUENE | 0.99 | U | |
| TOTAL XYLENES | 0.81 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.3 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.37 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 9.2 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.98 | U | |
| TRICHLOROFLUOROMETHANE | 1.1 | U | |
| VINYL ACETATE | 0.63 | U | |
| VINYL CHLORIDE | 1.3 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW6-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-23 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.33 | U | |
| 1,1,1-TRICHLOROETHANE | 0.94 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.45 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.44 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.73 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.45 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.48 | U | |
| 1,2-DICHLOROPROPANE | 0.48 | U | |
| 1,3-DICHLOROBENZENE | 0.88 | U | |
| 1,4-DICHLOROBENZENE | 0.57 | U | |
| 1,4-DIOXANE | 0.52 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.52 | U | |
| 4-METHYL-2-PENTANONE | 0.8 | U | |
| ACETONE | 2.1 | U | |
| ACETONITRILE | 0.52 | U | |
| ACROLEIN | 5.4 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.49 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.75 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.92 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW6-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-23 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.57 | U | |
| CHLOROMETHANE | 0.54 | U | |
| CHLOROPRENE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.52 | U | |
| CYCLOHEXANE | 0.56 | U | |
| DIBROMOMETHANE | 0.43 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.78 | U | |
| ISOBUTANOL | 0.52 | UR | C |
| ISOPROPYLBENZENE | 0.92 | U | |
| M+P-XYLENES | 1.6 | U | |
| METHACRYLONITRILE | 0.52 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.86 | U | |
| METHYL METHACRYLATE | 0.47 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.65 | U | |
| O-XYLENE | 0.73 | U | |
| PROPIONITRILE | 0.52 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.9 | U | |
| TOTAL XYLENES | 0.73 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.3 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW6-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-23 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.88 | U | |
| TRICHLOROFLUOROMETHANE | 0.99 | U | |
| VINYL ACETATE | 0.57 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-24 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.9 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.7 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.43 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.84 | U | |
| 1,4-DICHLOROBENZENE | 0.55 | U | |
| 1,4-DIOXANE | 0.5 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 0.58 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.5 | U | |
| ACROLEIN | 5.2 | UJ | C |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.72 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.88 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-24 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.55 | U | |
| CHLOROMETHANE | 0.52 | U | |
| CHLOROPRENE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| CYCLOHEXANE | 0.54 | U | |
| DIBROMOMETHANE | 0.41 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.75 | U | |
| ISOBUTANOL | 0.5 | UR | C |
| ISOPROPYLBENZENE | 0.88 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.5 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.83 | U | |
| METHYL METHACRYLATE | 0.45 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.62 | U | |
| O-XYLENE | 0.7 | U | |
| PROPIONITRILE | 0.5 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.97 | U | |
| TOLUENE | 0.86 | U | |
| TOTAL XYLENES | 0.7 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-24 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.85 | U | |
| TRICHLOROFLUOROMETHANE | 0.95 | U | |
| VINYL ACETATE | 0.55 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-25 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.31 | U | |
| 1,1,1-TRICHLOROETHANE | 0.88 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,2-TRICHLOROETHANE | 0.34 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHANE | 0.53 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.41 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.68 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.42 | U | |
| 1,2-DICHLOROBENZENE | 0.36 | U | |
| 1,2-DICHLOROETHANE | 0.45 | U | |
| 1,2-DICHLOROPROPANE | 0.45 | U | |
| 1,3-DICHLOROBENZENE | 0.82 | U | |
| 1,4-DICHLOROBENZENE | 0.54 | U | |
| 1,4-DIOXANE | 0.49 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.2 | U | |
| 3-CHLOROPROPENE | 0.49 | U | |
| 4-METHYL-2-PENTANONE | 0.56 | U | |
| ACETONE | 2 | U | |
| ACETONITRILE | 0.49 | U | |
| ACROLEIN | 5.1 | UJ | C |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.46 | U | |
| BROMODICHLOROMETHANE | 0.29 | U | |
| BROMOFORM | 0.98 | U | |
| BROMOMETHANE | 0.7 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.86 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-25 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.4 | U | |
| CHLORODIBROMOMETHANE | 0.33 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.54 | U | |
| CHLOROMETHANE | 0.51 | U | |
| CHLOROPRENE | 0.49 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.49 | U | |
| CYCLOHEXANE | 0.53 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.25 | U | |
| ETHYLBENZENE | 0.73 | U | |
| ISOBUTANOL | 0.49 | UR | C |
| ISOPROPYLBENZENE | 0.86 | U | |
| M+P-XYLENES | 1.5 | U | |
| METHACRYLONITRILE | 0.49 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.29 | U | |
| METHYL IODIDE | 0.81 | U | |
| METHYL METHACRYLATE | 0.44 | U | |
| METHYL TERT-BUTYL ETHER | 0.31 | U | |
| METHYLENE CHLORIDE | 0.6 | U | |
| O-XYLENE | 0.68 | U | |
| PROPIONITRILE | 0.49 | U | |
| STYRENE | 0.34 | U | |
| TETRACHLOROETHENE | 0.95 | U | |
| TOLUENE | 0.84 | U | |
| TOTAL XYLENES | 0.68 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.31 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.8 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-25 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.83 | U | |
| TRICHLOROFLUOROMETHANE | 0.93 | U | |
| VINYL ACETATE | 0.54 | U | |
| VINYL CHLORIDE | 1.1 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB10-S10 | nsample | OLFS4-DPB10-S10 | nsample | OLFS4-DPB10-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-11 | lab_id | 0609069-11 | lab_id | 0609069-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 40 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 40 | U | |
| ACENAPHTHYLENE | 40 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 40 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 40 | U | |
| BENZO(A)PYRENE | 40 | U | |
| BENZO(B)FLUORANTHENE | 40 | U | |
| BENZO(G,H,I)PERYLENE | 40 | U | |
| BENZO(K)FLUORANTHENE | 40 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 40 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 40 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 40 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 40 | U | |
| FLUORENE | 40 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 40 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 40 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPB10-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-11 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 40 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 40 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB1-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 40 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB1-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 40 | U | |
| ACENAPHTHYLENE | 40 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 40 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 40 | U | |
| BENZO(A)PYRENE | 40 | U | |
| BENZO(B)FLUORANTHENE | 40 | U | |
| BENZO(G,H,I)PERYLENE | 40 | U | |
| BENZO(K)FLUORANTHENE | 40 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 40 | U | |
| CHLOROBENZILATE | 100 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB1-S10 | nsample | OLFS4-DPB1-S10 | nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-01 | lab_id | 0609069-01 | lab_id | 0609069-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 40 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 40 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 40 | U | |
| FLUORENE | 40 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 40 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | UJ | C |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 40 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | UJ | C |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 40 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 40 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 96 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 96 | U | |
| 1,3,5-TRINITROBENZENE | 96 | U | |
| 1,3-DINITROBENZENE | 96 | U | |
| 1,4-NAPHTHOQUINONE | 96 | U | |
| 1,4-PHENYLENEDIAMINE | 96 | U | |
| 1-NAPHTHYLAMINE | 96 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 96 | U | |
| 2,4,5-TRICHLOROPHENOL | 96 | U | |
| 2,4,6-TRICHLOROPHENOL | 96 | U | |
| 2,4-DICHLOROPHENOL | 96 | U | |
| 2,4-DIMETHYLPHENOL | 96 | U | |
| 2,4-DINITROPHENOL | 96 | U | |
| 2,4-DINITROTOLUENE | 96 | U | |
| 2,6-DICHLOROPHENOL | 96 | U | |
| 2,6-DINITROTOLUENE | 96 | U | |
| 2-ACETYLAMINOFLUORENE | 96 | U | |
| 2-CHLORONAPHTHALENE | 96 | U | |
| 2-CHLOROPHENOL | 96 | U | |
| 2-METHYLNAPHTHALENE | 39 | U | |
| 2-METHYLPHENOL | 96 | U | |
| 2-NAPHTHYLAMINE | 96 | U | |
| 2-NITROANILINE | 96 | U | |
| 2-NITROPHENOL | 96 | U | |
| 2-PICOLINE | 96 | U | |
| 3&4-METHYLPHENOL | 96 | U | |
| 3,3'-DICHLOROBENZIDINE | 140 | U | |
| 3,3'-DIMETHYLBENZIDINE | 96 | U | |
| 3-METHYLCHOLANTHRENE | 96 | U | |
| 3-NITROANILINE | 96 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 96 | U | |
| 4-AMINOBIPHENYL | 96 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB2-S10 | nsample | OLFS4-DPB2-S10 | nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-02 | lab_id | 0609069-02 | lab_id | 0609069-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 96 | U | |
| 4-CHLORO-3-METHYLPHENOL | 96 | U | |
| 4-CHLOROANILINE | 96 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 96 | U | |
| 4-NITROANILINE | 96 | UJ | C |
| 4-NITROPHENOL | 96 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 96 | UR | C |
| 5-NITRO-O-TOLUIDINE | 96 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 96 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 96 | U | |
| ACENAPHTHENE | 39 | U | |
| ACENAPHTHYLENE | 39 | U | |
| ACETOPHENONE | 96 | U | |
| ANILINE | 96 | UJ | C |
| ANTHRACENE | 39 | U | |
| ARAMITE | 96 | UJ | C |
| ATRAZINE | 96 | U | |
| BENZALDEHYDE | 96 | UJ | C |
| BENZO(A)ANTHRACENE | 39 | U | |
| BENZO(A)PYRENE | 39 | U | |
| BENZO(B)FLUORANTHENE | 39 | U | |
| BENZO(G,H,I)PERYLENE | 39 | U | |
| BENZO(K)FLUORANTHENE | 39 | U | |
| BENZYL ALCOHOL | 96 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 96 | U | |
| BIS(2-CHLOROETHYL)ETHER | 96 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 96 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 96 | U | |
| BUTYL BENZYL PHTHALATE | 96 | U | |
| CAPROLACTAM | 96 | U | |
| CARBAZOLE | 39 | U | |
| CHLOROBENZILATE | 96 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 39 | U | |
| DIALLATE | 96 | U | |
| DIBENZO(A,H)ANTHRACENE | 39 | U | |
| DIBENZOFURAN | 96 | U | |
| DIETHYL PHTHALATE | 96 | U | |
| DIMETHOATE | 96 | U | |
| DIMETHYL PHTHALATE | 96 | U | |
| DI-N-BUTYL PHTHALATE | 96 | U | |
| DI-N-OCTYL PHTHALATE | 96 | U | |
| DIPHENYLAMINE | 96 | U | |
| ETHYL METHANE SULFONATE | 96 | U | |
| FLUORANTHENE | 39 | U | |
| FLUORENE | 39 | U | |
| HEXACHLOROBENZENE | 96 | U | |
| HEXACHLOROBUTADIENE | 96 | U | |
| HEXACHLOROCYCLOPENTADIENE | 96 | U | |
| HEXACHLOROETHANE | 96 | U | |
| HEXACHLOROPHENE | 96 | UR | C |
| HEXACHLOROPROPENE | 96 | U | |
| INDENO(1,2,3-CD)PYRENE | 39 | U | |
| ISODRIN | 96 | U | |
| ISOPHORONE | 96 | U | |
| ISOSAFROLE | 96 | U | |
| KEPONE | 96 | U | |
| METHAPYRILENE | 96 | UJ | C |
| METHYL METHANE SULFONATE | 96 | U | |
| NAPHTHALENE | 39 | U | |
| NITROBENZENE | 96 | U | |
| N-NITROSODIETHYLAMINE | 96 | U | |
| N-NITROSODIMETHYLAMINE | 96 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 96 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 96 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 96 | U | |
| N-NITROSOMETHYLETHYLAMINE | 96 | U | |
| N-NITROSOMORPHOLINE | 96 | U | |
| N-NITROSOPIPERIDINE | 96 | U | |
| N-NITROSOPYRROLIDINE | 96 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 96 | U | |
| O-TOLUIDINE | 96 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 96 | UJ | C |
| PENTACHLOROBENZENE | 96 | U | |
| PENTACHLOROETHANE | 96 | U | |
| PENTACHLORONITROBENZENE | 96 | U | |
| PENTACHLOROPHENOL | 96 | U | |
| PHENACETIN | 96 | U | |
| PHENANTHRENE | 39 | U | |
| PHENOL | 96 | U | |
| PRONAMIDE | 96 | U | |
| PYRENE | 39 | U | |
| PYRIDINE | 96 | U | |
| SAFROLE | 96 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB3-S10 | nsample | OLFS4-DPB3-S10 | nsample | OLFS4-DPB3-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-03 | lab_id | 0609069-03 | lab_id | 0609069-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | UJ | C |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB3-S10 | nsample | OLFS4-DPB4-S10 | nsample | OLFS4-DPB4-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-03 | lab_id | 0609069-04 | lab_id | 0609069-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | UJ | C |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | UJ | C |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB4-S10 | nsample | OLFS4-DPB4-S10 | nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-04 | lab_id | 0609069-04 | lab_id | 0609069-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | UJ | C |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | UJ | C |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 40 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 |
| lab_id | 0609069-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 40 | U | |
| ACENAPHTHYLENE | 40 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 40 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 40 | U | |
| BENZO(A)PYRENE | 40 | U | |
| BENZO(B)FLUORANTHENE | 40 | U | |
| BENZO(G,H,I)PERYLENE | 40 | U | |
| BENZO(K)FLUORANTHENE | 40 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 40 | U | |
| CHLOROBENZILATE | 100 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 |
| lab_id | 0609069-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 40 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 40 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 40 | U | |
| FLUORENE | 40 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 40 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | UJ | C |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 40 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB4-S10-D |
| samp_date | 9/12/2006 |
| lab_id | 0609069-05 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | OLFS4-DPB4-S10 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | UJ | C |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 40 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 40 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB5-S10 | nsample | OLFS4-DPB5-S10 | nsample | OLFS4-DPB5-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-06 | lab_id | 0609069-06 | lab_id | 0609069-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | UJ | C |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPB5-S10 | | nsample | OLFS4-DPB6-S10 | | nsample | OLFS4-DPB6-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-06 | | lab_id | 0609069-07 | | lab_id | 0609069-07 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | UJ | C |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | UJ | C |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-07 | lab_id | 0609069-07 | lab_id | 0609069-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | UJ | C |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | UJ | C |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 40 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB7-S10 | nsample | OLFS4-DPB7-S10 | nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-08 | lab_id | 0609069-08 | lab_id | 0609069-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 40 | U | |
| ACENAPHTHYLENE | 40 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 40 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 40 | U | |
| BENZO(A)PYRENE | 40 | U | |
| BENZO(B)FLUORANTHENE | 40 | U | |
| BENZO(G,H,I)PERYLENE | 40 | U | |
| BENZO(K)FLUORANTHENE | 40 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 40 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 40 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 40 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 40 | U | |
| FLUORENE | 40 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 40 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 40 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 40 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 40 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB8-S10 | nsample | OLFS4-DPB8-S10 | nsample | OLFS4-DPB8-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-09 | lab_id | 0609069-09 | lab_id | 0609069-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 42 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPB8-S10 | | nsample | OLFS4-DPB9-S10 | | nsample | OLFS4-DPB9-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-09 | | lab_id | 0609069-10 | | lab_id | 0609069-10 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |

# PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPB9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-10 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPB9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-10 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 43 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |

# PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-NITROANILINE | 110 | UJ | C |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 43 | U | |
| ACENAPHTHYLENE | 43 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 43 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | U | |
| BENZO(A)ANTHRACENE | 43 | U | |
| BENZO(A)PYRENE | 43 | U | |
| BENZO(B)FLUORANTHENE | 43 | U | |
| BENZO(G,H,I)PERYLENE | 43 | U | |
| BENZO(K)FLUORANTHENE | 43 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 43 | U | |
| CHLOROBENZILATE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 43 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 43 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 43 | U | |
| FLUORENE | 43 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | UR | C |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 43 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 43 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-12 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 43 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 43 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW19-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-13 | lab_id | 0609069-13 | lab_id | 0609069-13 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 42 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW20-S12 | nsample | OLFS4-DPW20-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-13 | lab_id | 0609069-14 | lab_id | 0609069-14 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 43 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-NITROANILINE | 110 | UJ | C |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 43 | U | |
| ACENAPHTHYLENE | 43 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 43 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | U | |
| BENZO(A)ANTHRACENE | 43 | U | |
| BENZO(A)PYRENE | 43 | U | |
| BENZO(B)FLUORANTHENE | 43 | U | |
| BENZO(G,H,I)PERYLENE | 43 | U | |
| BENZO(K)FLUORANTHENE | 43 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 43 | U | |
| CHLOROBENZILATE | 110 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW20-S12 | nsample | OLFS4-DPW20-S12 | nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-14 | lab_id | 0609069-14 | lab_id | 0609069-15 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 43 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 43 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 43 | U | |
| FLUORENE | 43 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | UR | C |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 43 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 43 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 43 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 43 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 46 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 170 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW21-S12 | nsample | OLFS4-DPW21-S12 | nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-15 | lab_id | 0609069-15 | lab_id | 0609069-15 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-NITROANILINE | 110 | UJ | C |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 46 | U | |
| ACENAPHTHYLENE | 46 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 46 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | U | |
| BENZO(A)ANTHRACENE | 46 | U | |
| BENZO(A)PYRENE | 46 | U | |
| BENZO(B)FLUORANTHENE | 46 | U | |
| BENZO(G,H,I)PERYLENE | 46 | U | |
| BENZO(K)FLUORANTHENE | 46 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 46 | U | |
| CHLOROBENZILATE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 46 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 46 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 46 | U | |
| FLUORENE | 46 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | UR | C |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 46 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 46 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 46 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 46 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW23-S26 | nsample | OLFS4-DPW23-S26 | nsample | OLFS4-DPW23-S26 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-16 | lab_id | 0609069-16 | lab_id | 0609069-16 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 40 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 40 | U | |
| ACENAPHTHYLENE | 40 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 40 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 40 | U | |
| BENZO(A)PYRENE | 40 | U | |
| BENZO(B)FLUORANTHENE | 40 | U | |
| BENZO(G,H,I)PERYLENE | 40 | U | |
| BENZO(K)FLUORANTHENE | 40 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 40 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 40 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 40 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 40 | U | |
| FLUORENE | 40 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 40 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 40 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW23-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-16 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 40 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 40 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW24-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-17 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW24-S26 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-17 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW24-S26 | | nsample | OLFS4-DPW24-S26 | | nsample | OLFS4-DPW2-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-17 | | lab_id | 0609069-17 | | lab_id | 0609069-19 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | U | |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | U | |
| 1,4-PHENYLENEDIAMINE | 110 | U | |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 45 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | U | |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3&4-METHYLPHENOL | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 170 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-NITROANILINE | 110 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW2-S10 | | nsample | OLFS4-DPW2-S10 | | nsample | OLFS4-DPW2-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-19 | | lab_id | 0609069-19 | | lab_id | 0609069-19 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-NITROANILINE | 110 | UJ | C |
| 4-NITROPHENOL | 110 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | U | |
| ACENAPHTHENE | 45 | U | |
| ACENAPHTHYLENE | 45 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 45 | U | |
| ARAMITE | 110 | U | |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | U | |
| BENZO(A)ANTHRACENE | 45 | U | |
| BENZO(A)PYRENE | 45 | U | |
| BENZO(B)FLUORANTHENE | 45 | U | |
| BENZO(G,H,I)PERYLENE | 45 | U | |
| BENZO(K)FLUORANTHENE | 45 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |
| CARBAZOLE | 45 | U | |
| CHLOROBENZILATE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 45 | U | |
| DIALLATE | 110 | U | |
| DIBENZO(A,H)ANTHRACENE | 45 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 45 | U | |
| FLUORENE | 45 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | UR | C |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 45 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 45 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | U | |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 45 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 45 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW3-S10 | | nsample | OLFS4-DPW3-S10 | | nsample | OLFS4-DPW3-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-20 | | lab_id | 0609069-20 | | lab_id | 0609069-20 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW3-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-20 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | U | |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-21 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-22 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 120 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 120 | U | |
| 1,3,5-TRINITROBENZENE | 120 | U | |
| 1,3-DINITROBENZENE | 120 | U | |
| 1,4-NAPHTHOQUINONE | 120 | U | |
| 1,4-PHENYLENEDIAMINE | 120 | U | |
| 1-NAPHTHYLAMINE | 120 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 120 | U | |
| 2,4,5-TRICHLOROPHENOL | 120 | U | |
| 2,4,6-TRICHLOROPHENOL | 120 | U | |
| 2,4-DICHLOROPHENOL | 120 | U | |
| 2,4-DIMETHYLPHENOL | 120 | U | |
| 2,4-DINITROPHENOL | 120 | U | |
| 2,4-DINITROTOLUENE | 120 | U | |
| 2,6-DICHLOROPHENOL | 120 | U | |
| 2,6-DINITROTOLUENE | 120 | U | |
| 2-ACETYLAMINOFLUORENE | 120 | U | |
| 2-CHLORONAPHTHALENE | 120 | U | |
| 2-CHLOROPHENOL | 120 | U | |
| 2-METHYLNAPHTHALENE | 49 | U | |
| 2-METHYLPHENOL | 120 | U | |
| 2-NAPHTHYLAMINE | 120 | U | |
| 2-NITROANILINE | 120 | U | |
| 2-NITROPHENOL | 120 | U | |
| 2-PICOLINE | 120 | U | |
| 3&4-METHYLPHENOL | 120 | U | |
| 3,3'-DICHLOROBENZIDINE | 180 | U | |
| 3,3'-DIMETHYLBENZIDINE | 120 | U | |
| 3-METHYLCHOLANTHRENE | 120 | U | |
| 3-NITROANILINE | 120 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 120 | U | |
| 4-AMINOBIPHENYL | 120 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW5-S10 | | nsample | OLFS4-DPW5-S10 | | nsample | OLFS4-DPW5-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-22 | | lab_id | 0609069-22 | | lab_id | 0609069-22 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 120 | U | |
| 4-CHLORO-3-METHYLPHENOL | 120 | U | |
| 4-CHLOROANILINE | 120 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 120 | U | |
| 4-NITROANILINE | 120 | UJ | C |
| 4-NITROPHENOL | 120 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 120 | UR | C |
| 5-NITRO-O-TOLUIDINE | 120 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 120 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 120 | U | |
| ACENAPHTHENE | 49 | U | |
| ACENAPHTHYLENE | 49 | U | |
| ACETOPHENONE | 120 | U | |
| ANILINE | 120 | UJ | C |
| ANTHRACENE | 49 | U | |
| ARAMITE | 120 | U | |
| ATRAZINE | 120 | U | |
| BENZALDEHYDE | 120 | UJ | C |
| BENZO(A)ANTHRACENE | 49 | U | |
| BENZO(A)PYRENE | 49 | U | |
| BENZO(B)FLUORANTHENE | 49 | U | |
| BENZO(G,H,I)PERYLENE | 49 | U | |
| BENZO(K)FLUORANTHENE | 49 | U | |
| BENZYL ALCOHOL | 120 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 120 | U | |
| BIS(2-CHLOROETHYL)ETHER | 120 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 120 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 120 | U | |
| BUTYL BENZYL PHTHALATE | 120 | U | |
| CAPROLACTAM | 120 | U | |
| CARBAZOLE | 49 | U | |
| CHLOROBENZILATE | 120 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 49 | U | |
| DIALLATE | 120 | U | |
| DIBENZO(A,H)ANTHRACENE | 49 | UJ | C |
| DIBENZOFURAN | 120 | U | |
| DIETHYL PHTHALATE | 120 | U | |
| DIMETHOATE | 120 | U | |
| DIMETHYL PHTHALATE | 120 | U | |
| DI-N-BUTYL PHTHALATE | 120 | U | |
| DI-N-OCTYL PHTHALATE | 120 | U | |
| DIPHENYLAMINE | 120 | U | |
| ETHYL METHANE SULFONATE | 120 | U | |
| FLUORANTHENE | 49 | U | |
| FLUORENE | 49 | U | |
| HEXACHLOROBENZENE | 120 | U | |
| HEXACHLOROBUTADIENE | 120 | U | |
| HEXACHLOROCYCLOPENTADIENE | 120 | U | |
| HEXACHLOROETHANE | 120 | U | |
| HEXACHLOROPHENE | 120 | UR | C |
| HEXACHLOROPROPENE | 120 | U | |
| INDENO(1,2,3-CD)PYRENE | 49 | UJ | C |
| ISODRIN | 120 | U | |
| ISOPHORONE | 120 | U | |
| ISOSAFROLE | 120 | U | |
| KEPONE | 120 | U | |
| METHAPYRILENE | 120 | U | |
| METHYL METHANE SULFONATE | 120 | U | |
| NAPHTHALENE | 49 | U | |
| NITROBENZENE | 120 | U | |
| N-NITROSODIETHYLAMINE | 120 | U | |
| N-NITROSODIMETHYLAMINE | 120 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 120 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 120 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 120 | U | |
| N-NITROSOMETHYLETHYLAMINE | 120 | U | |
| N-NITROSOMORPHOLINE | 120 | U | |
| N-NITROSOPIPERIDINE | 120 | U | |
| N-NITROSOPYRROLIDINE | 120 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 120 | U | |
| O-TOLUIDINE | 120 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 120 | U | |
| PENTACHLOROBENZENE | 120 | U | |
| PENTACHLOROETHANE | 120 | U | |
| PENTACHLORONITROBENZENE | 120 | U | |
| PENTACHLOROPHENOL | 120 | U | |
| PHENACETIN | 120 | U | |
| PHENANTHRENE | 49 | U | |
| PHENOL | 120 | U | |
| PRONAMIDE | 120 | U | |
| PYRENE | 49 | U | |
| PYRIDINE | 120 | U | |
| SAFROLE | 120 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW6-S10 | | nsample | OLFS4-DPW6-S10 | | nsample | OLFS4-DPW6-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-23 | | lab_id | 0609069-23 | | lab_id | 0609069-23 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | UJ | C |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | UJ | C |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-DPW6-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-23 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-24 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-DPW8-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-24 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 41 | U | |
| CHLOROBENZILATE | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPW8-S10 | | nsample | OLFS4-DPW8-S10 | | nsample | OLFS4-DPW9-S10 | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-24 | | lab_id | 0609069-24 | | lab_id | 0609069-25 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 41 | UJ | C |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | UJ | C |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | U | |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | U | |
| 1,4-PHENYLENEDIAMINE | 100 | U | |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | U | |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | U | |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3&4-METHYLPHENOL | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | U | |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-NITROANILINE | 100 | U | |
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW9-S10 | nsample | OLFS4-DPW9-S10 | nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-25 | lab_id | 0609069-25 | lab_id | 0609069-25 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-NITROANILINE | 100 | UJ | C |
| 4-NITROPHENOL | 100 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | U | |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | U | |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UJ | C |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-CHLOROISOPROPYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |
| CARBAZOLE | 42 | U | |
| CHLOROBENZILATE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | U | |
| DIBENZO(A,H)ANTHRACENE | 42 | UJ | C |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | UR | C |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | UJ | C |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | U | |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW18-S12 | nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW20-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-12 | lab_id | 0609069-13 | lab_id | 0609069-14 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 17 | J | PR |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW21-S12 | nsample | OLFS4-DPW23-S26 | nsample | OLFS4-DPW24-S26 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-15 | lab_id | 0609069-16 | lab_id | 0609069-17 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW2-S10 | nsample | OLFS4-DPW3-S10 | nsample | OLFS4-DPW4-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-19 | lab_id | 0609069-20 | lab_id | 0609069-21 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW5-S10 | nsample | OLFS4-DPW6-S10 | nsample | OLFS4-DPW8-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-22 | lab_id | 0609069-23 | lab_id | 0609069-24 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 12 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 10 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | UJ | C |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PET

| | |
|---|---|
| nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 |
| lab_id | 0609069-25 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 11 | UJ | C |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB10-S10 | nsample | OLFS4-DPB1-S10 | nsample | OLFS4-DPB2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-11 | lab_id | 0609069-01 | lab_id | 0609069-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 2.8 | U | A |
| 4,4'-DDE | 2.8 | U | A |
| 4,4'-DDT | 2.8 | U | A |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.3 | U | |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | U | |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | UJ | C |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | UJ | C |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | U | |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.17 | U | |
| 4,4'-DDE | 0.17 | U | |
| 4,4'-DDT | 0.17 | UJ | C |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | UJ | C |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | U | |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | U | |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | UJ | C |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.16 | U | |
| 4,4'-DDE | 0.16 | U | |
| 4,4'-DDT | 0.28 | U | A |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.1 | U | |
| AROCLOR-1221 | 4.1 | U | |
| AROCLOR-1232 | 4.1 | U | |
| AROCLOR-1242 | 4.1 | U | |
| AROCLOR-1248 | 4.1 | U | |
| AROCLOR-1254 | 4.1 | U | |
| AROCLOR-1260 | 4.1 | UJ | C |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.16 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.16 | U | |
| ENDOSULFAN SULFATE | 0.16 | U | |
| ENDRIN | 0.16 | U | |
| ENDRIN ALDEHYDE | 0.16 | U | |
| ENDRIN KETONE | 0.16 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | U | |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | UJ | C |
| TOXAPHENE | 11 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-DPB3-S10 | | nsample | OLFS4-DPB4-S10 | | nsample | OLFS4-DPB4-S10-D | |
| samp_date | 9/12/2006 | | samp_date | 9/12/2006 | | samp_date | 9/12/2006 | |
| lab_id | 0609069-03 | | lab_id | 0609069-04 | | lab_id | 0609069-05 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | OLSF4-DPB4-S10 | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.16 | U | |
| 4,4'-DDE | 0.16 | U | |
| 4,4'-DDT | 0.16 | UJ | C |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.1 | U | |
| AROCLOR-1221 | 4.1 | U | |
| AROCLOR-1232 | 4.1 | U | |
| AROCLOR-1242 | 4.1 | U | |
| AROCLOR-1248 | 4.1 | U | |
| AROCLOR-1254 | 4.1 | U | |
| AROCLOR-1260 | 4.1 | UJ | C |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.16 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.16 | U | |
| ENDOSULFAN SULFATE | 0.16 | U | |
| ENDRIN | 0.16 | U | |
| ENDRIN ALDEHYDE | 0.16 | U | |
| ENDRIN KETONE | 0.16 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | U | |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | UJ | C |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.17 | U | |
| 4,4'-DDE | 0.17 | U | |
| 4,4'-DDT | 0.17 | UJ | C |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | UJ | C |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | U | |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | U | |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | UJ | C |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.17 | U | |
| 4,4'-DDE | 0.17 | U | |
| 4,4'-DDT | 0.17 | UJ | C |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | UJ | C |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | U | |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | U | |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | UJ | C |
| TOXAPHENE | 11 | U | |

**PROJ_NO: 00389**

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB5-S10 | nsample | OLFS4-DPB6-S10 | nsample | OLFS4-DPB7-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-06 | lab_id | 0609069-07 | lab_id | 0609069-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 2.5 | U | A |
| 4,4'-DDE | 0.94 | U | A |
| 4,4'-DDT | 15 | U | A |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | UJ | C |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | U | |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | U | |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | UJ | C |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.16 | U | |
| 4,4'-DDE | 0.16 | U | |
| 4,4'-DDT | 1 | U | A |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.1 | U | |
| AROCLOR-1221 | 4.1 | U | |
| AROCLOR-1232 | 4.1 | U | |
| AROCLOR-1242 | 4.1 | U | |
| AROCLOR-1248 | 4.1 | U | |
| AROCLOR-1254 | 4.1 | U | |
| AROCLOR-1260 | 4.1 | U | |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.16 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.16 | U | |
| ENDOSULFAN SULFATE | 0.16 | U | |
| ENDRIN | 0.16 | UJ | C |
| ENDRIN ALDEHYDE | 0.16 | U | |
| ENDRIN KETONE | 0.16 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | UJ | C |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | U | |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.17 | U | |
| 4,4'-DDE | 0.17 | U | |
| 4,4'-DDT | 0.6 | U | A |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | U | |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | UJ | C |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.11 | UJ | C |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | U | |
| TOXAPHENE | 11 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPB8-S10 | nsample | OLFS4-DPB9-S10 | nsample | OLFS4-DPW18-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-09 | lab_id | 0609069-10 | lab_id | 0609069-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.18 | U | |
| 4,4'-DDE | 0.18 | U | |
| 4,4'-DDT | 0.75 | U | A |
| ALDRIN | 0.12 | U | |
| ALPHA-BHC | 0.12 | U | |
| ALPHA-CHLORDANE | 0.12 | U | |
| AROCLOR-1016 | 4.5 | U | |
| AROCLOR-1221 | 4.5 | U | |
| AROCLOR-1232 | 4.5 | U | |
| AROCLOR-1242 | 4.5 | U | |
| AROCLOR-1248 | 4.5 | U | |
| AROCLOR-1254 | 4.5 | U | |
| AROCLOR-1260 | 4.5 | U | |
| BETA-BHC | 0.12 | U | |
| DELTA-BHC | 0.12 | U | |
| DIELDRIN | 0.18 | U | |
| ENDOSULFAN I | 0.12 | U | |
| ENDOSULFAN II | 0.18 | U | |
| ENDOSULFAN SULFATE | 0.18 | U | |
| ENDRIN | 0.18 | UJ | C |
| ENDRIN ALDEHYDE | 0.18 | U | |
| ENDRIN KETONE | 0.18 | U | |
| GAMMA-BHC (LINDANE) | 0.12 | U | |
| GAMMA-CHLORDANE | 0.12 | U | |
| HEPTACHLOR | 0.12 | UJ | C |
| HEPTACHLOR EPOXIDE | 0.12 | U | |
| METHOXYCHLOR | 0.12 | U | |
| TOXAPHENE | 12 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.17 | U | |
| 4,4'-DDE | 0.17 | U | |
| 4,4'-DDT | 1.2 | U | A |
| ALDRIN | 0.11 | U | |
| ALPHA-BHC | 0.11 | U | |
| ALPHA-CHLORDANE | 0.11 | U | |
| AROCLOR-1016 | 4.2 | U | |
| AROCLOR-1221 | 4.2 | U | |
| AROCLOR-1232 | 4.2 | U | |
| AROCLOR-1242 | 4.2 | U | |
| AROCLOR-1248 | 4.2 | U | |
| AROCLOR-1254 | 4.2 | U | |
| AROCLOR-1260 | 4.2 | U | |
| BETA-BHC | 0.11 | U | |
| DELTA-BHC | 0.11 | U | |
| DIELDRIN | 0.17 | U | |
| ENDOSULFAN I | 0.11 | U | |
| ENDOSULFAN II | 0.17 | U | |
| ENDOSULFAN SULFATE | 0.17 | U | |
| ENDRIN | 0.17 | UJ | C |
| ENDRIN ALDEHYDE | 0.17 | U | |
| ENDRIN KETONE | 0.17 | U | |
| GAMMA-BHC (LINDANE) | 0.11 | U | |
| GAMMA-CHLORDANE | 0.11 | U | |
| HEPTACHLOR | 0.18 | J | CP |
| HEPTACHLOR EPOXIDE | 0.11 | U | |
| METHOXYCHLOR | 0.11 | U | |
| TOXAPHENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW19-S12 | nsample | OLFS4-DPW20-S12 | nsample | OLFS4-DPW21-S12 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-13 | lab_id | 0609069-14 | lab_id | 0609069-15 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.6 | U | |
| AROCLOR-1221 | 4.6 | U | |
| AROCLOR-1232 | 4.6 | U | |
| AROCLOR-1242 | 4.6 | U | |
| AROCLOR-1248 | 4.6 | U | |
| AROCLOR-1254 | 4.6 | U | |
| AROCLOR-1260 | 4.6 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW23-S26 | nsample | OLFS4-DPW24-S26 | nsample | OLFS4-DPW2-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-16 | lab_id | 0609069-17 | lab_id | 0609069-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.6 | U | |
| AROCLOR-1221 | 4.6 | U | |
| AROCLOR-1232 | 4.6 | U | |
| AROCLOR-1242 | 4.6 | U | |
| AROCLOR-1248 | 4.6 | U | |
| AROCLOR-1254 | 4.6 | U | |
| AROCLOR-1260 | 4.6 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW3-S10 | nsample | OLFS4-DPW4-S10 | nsample | OLFS4-DPW5-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-20 | lab_id | 0609069-21 | lab_id | 0609069-22 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.3 | U | |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 5.1 | U | |
| AROCLOR-1221 | 5.1 | U | |
| AROCLOR-1232 | 5.1 | U | |
| AROCLOR-1242 | 5.1 | U | |
| AROCLOR-1248 | 5.1 | U | |
| AROCLOR-1254 | 5.1 | U | |
| AROCLOR-1260 | 5.1 | U | |

## PROJ_NO: 00389

SDG: 0609069 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-DPW6-S10 | nsample | OLFS4-DPW8-S10 | nsample | OLFS4-DPW9-S10 |
| samp_date | 9/12/2006 | samp_date | 9/12/2006 | samp_date | 9/12/2006 |
| lab_id | 0609069-23 | lab_id | 0609069-24 | lab_id | 0609069-25 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.3 | U | |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.4 | U | |
| AROCLOR-1221 | 4.4 | U | |
| AROCLOR-1232 | 4.4 | U | |
| AROCLOR-1242 | 4.4 | U | |
| AROCLOR-1248 | 4.4 | U | |
| AROCLOR-1254 | 4.4 | U | |
| AROCLOR-1260 | 4.4 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **MARCH 5, 2007** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS & CYANIDE**
**SAUFLEY – CTO 029**
**SDG – SAUFLEYW003**

**SAMPLES:** 21/Aqueous/

| | | |
|---|---|---|
| OLFS4-MW01D2-001 | OLFS4-MW02D-001 | OLFS4-MW04D-001 |
| OLFS4-MW09S-001 | OLFS4-MW14D-001 | OLFS4-MW15S-001 |
| OLFS4-MW21S-001 | OLFS4-MW24S-001 | OLFS4-MW25S-001 |
| OLFS4-MW26D-001 | OLFS4-MW27S-001 | OLFS4-MW28S-001 |
| OLFS4-MW29D-001 | OLFS4-MW-30S-001 | OLFS4-MW31S-001 |
| OLFS4-MW32S-001 | OLFS4-MW33S-001 | OLFS4-MW34S-001 |
| OLFS4-MW35S-001 | OLFS4-MW35S-001-D | OLFS4-MW36S-001 |

Overview

The sample set for Saufley, CTO 029, SDG SAUFLEYW003, consists of twenty-one aqueous environmental samples. One field duplicate pair (OLFS4-MW35S-001 / OLFS4-MW35S-001-D) is included in this SDG.

Each sample was analyzed for all target analyte list (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on January 4-8, 2007 and analyzed by Empirical Laboratories, LLC. Metals analyses (expect mercury) were conducted using SW846 method 6010B. Mercury and cyanide analyses were conducted using SW846 methods 7470A and 9012A, respectively.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
* • Matrix Spike Recoveries
* • Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
* • Field Duplicate Precision
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Notes

The percent differences for barium, chromium, copper, lead, nickel, sodium and zinc were greater than 10% for the ICP serial dilution of sample OLFS4-MW04D-001; however, the initial sample results of those compounds were less than 50X the instrument detection limit and within 2X the Contract Required Detection Limit (CRDL) of the corresponding results detected in the serial dilution analysis. No validation action was taken.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Chemist / Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW02D-001 | nsample | OLFS4-MW04D-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-01 | lab_id | 0701021-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 336 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 9.1 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 1850 | | |
| CHROMIUM | 8.8 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 705 | | |
| LEAD | 0.61 | | |
| MAGNESIUM | 1000 | U | |
| MANGANESE | 54 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 8.6 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 9640 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 13.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 140 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 54.6 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 2160 | | |
| CHROMIUM | 20.5 | | |
| COBALT | 6.9 | | |
| COPPER | 7.7 | | |
| IRON | 2810 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 1000 | U | |
| MANGANESE | 78.5 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 15.7 | | |
| POTASSIUM | 1550 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 5740 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 34.5 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 19.1 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 1000 | U | |
| CHROMIUM | 11.5 | | |
| COBALT | 5 | U | |
| COPPER | 12.7 | | |
| IRON | 190 | | |
| LEAD | 0.56 | | |
| MAGNESIUM | 1000 | U | |
| MANGANESE | 15.1 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 10.4 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 3870 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 17.4 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW14D-001 | nsample | OLFS4-MW15S-001 |
| samp_date | 1/6/2007 | samp_date | 1/8/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-04 | lab_id | 0701033-08 | lab_id | 0701021-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 93 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 6770 | | |
| CHROMIUM | 14.8 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 8530 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 5500 | | |
| MANGANESE | 847 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 11.6 | | |
| POTASSIUM | 1580 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 4640 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 13.4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 24.8 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 1320 | | |
| CHROMIUM | 5.7 | | |
| COBALT | 8.1 | | |
| COPPER | 5 | U | |
| IRON | 664 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 1090 | | |
| MANGANESE | 67.2 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 8.2 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 7940 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 13.5 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 172 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 43.3 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 7780 | | |
| CHROMIUM | 33.2 | | |
| COBALT | 31.5 | | |
| COPPER | 10.2 | | |
| IRON | 984 | | |
| LEAD | 2.8 | | |
| MAGNESIUM | 1320 | | |
| MANGANESE | 265 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 30.2 | | |
| POTASSIUM | 4760 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 4.8 | | |
| SODIUM | 4240 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 255 | | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW25S-001 |
| samp_date | 1/7/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-07 | lab_id | 0701033-05 | lab_id | 0701033-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 333 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 22.8 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 7130 | | |
| CHROMIUM | 38.6 | | |
| COBALT | 5 | U | |
| COPPER | 14.8 | | |
| IRON | 351 | | |
| LEAD | 1.3 | | |
| MAGNESIUM | 1840 | | |
| MANGANESE | 283 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 35.4 | | |
| POTASSIUM | 1370 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 3890 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 89.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 204 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 12.4 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 6410 | | |
| CHROMIUM | 40.7 | | |
| COBALT | 5 | U | |
| COPPER | 5.9 | | |
| IRON | 592 | | |
| LEAD | 0.39 | | |
| MAGNESIUM | 1000 | U | |
| MANGANESE | 98 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 32.4 | | |
| POTASSIUM | 2020 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 3110 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 37.9 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1440 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 4 | | |
| BARIUM | 23.4 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 18600 | | |
| CHROMIUM | 81.2 | | |
| COBALT | 5 | U | |
| COPPER | 22.3 | | |
| IRON | 4030 | | |
| LEAD | 1.6 | | |
| MAGNESIUM | 1340 | | |
| MANGANESE | 68.7 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 53.9 | | |
| POTASSIUM | 1710 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 3010 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | | |
| ZINC | 25.5 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW28S-001 |
| samp_date | 1/5/2007 | samp_date | 1/7/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-04 | lab_id | 0701033-06 | lab_id | 0701033-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 67.9 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 21900 | | |
| CHROMIUM | 3.4 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 12500 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 9610 | | |
| MANGANESE | 151 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 7 | | |
| POTASSIUM | 7250 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 11400 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 13 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 188 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 41.4 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 13200 | | |
| CHROMIUM | 28.7 | | |
| COBALT | 5 | U | |
| COPPER | 13.6 | | |
| IRON | 470 | | |
| LEAD | 0.68 | | |
| MAGNESIUM | 2260 | | |
| MANGANESE | 17.1 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 20.6 | | |
| POTASSIUM | 1740 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 2830 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 36.4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 109 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 46.9 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 50500 | | |
| CHROMIUM | 6.8 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 2750 | | |
| LEAD | 0.39 | | |
| MAGNESIUM | 6470 | | |
| MANGANESE | 342 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 6.2 | | |
| POTASSIUM | 4920 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 7100 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 14.7 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-01 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 83 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 6130 | | |
| CHROMIUM | 8.8 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 4920 | | |
| LEAD | 0.44 | | |
| MAGNESIUM | 4420 | | |
| MANGANESE | 130 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 12.1 | | |
| POTASSIUM | 1870 | | |
| SELENIUM | 1.4 | | |
| SILVER | 1 | U | |
| SODIUM | 4060 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 21.4 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 14.8 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 18000 | | |
| CHROMIUM | 5.6 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 8690 | | |
| LEAD | 0.73 | | |
| MAGNESIUM | 1670 | | |
| MANGANESE | 563 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 6.1 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 2680 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 29.7 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 262 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 58.4 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 17100 | | |
| CHROMIUM | 14.6 | | |
| COBALT | 5.4 | | |
| COPPER | 5 | U | |
| IRON | 5930 | | |
| LEAD | 0.64 | | |
| MAGNESIUM | 4690 | | |
| MANGANESE | 1860 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 10.6 | | |
| POTASSIUM | 2100 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 3650 | | |
| THALLIUM | 0.99 | | |
| VANADIUM | 5 | U | |
| ZINC | 10 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-MW32S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 15.9 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 17700 | | |
| CHROMIUM | 4.8 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 6780 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 1890 | | |
| MANGANESE | 610 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 6.3 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 2580 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 11.4 | | |

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 144 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 15 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 15100 | | |
| CHROMIUM | 25.7 | | |
| COBALT | 5 | U | |
| COPPER | 11.3 | | |
| IRON | 3550 | | |
| LEAD | 1.1 | | |
| MAGNESIUM | 1710 | | |
| MANGANESE | 178 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 22.4 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 2510 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 38.8 | | |

| | |
|---|---|
| nsample | OLFS4-MW34S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 245 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 18.9 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 22300 | | |
| CHROMIUM | 18 | | |
| COBALT | 9.8 | | |
| COPPER | 5 | U | |
| IRON | 3610 | | |
| LEAD | 0.59 | | |
| MAGNESIUM | 2400 | | |
| MANGANESE | 795 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 13.2 | | |
| POTASSIUM | 1370 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 4020 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 33.7 | | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001-D | nsample | OLFS4-MW36S-001 |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/5/2007 |
| lab_id | 0701033-09 | lab_id | 0701033-10 | lab_id | 0701028-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 197 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 13.3 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 18500 | | |
| CHROMIUM | 14.6 | | |
| COBALT | 5 | U | |
| COPPER | 5.1 | | |
| IRON | 765 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 1800 | | |
| MANGANESE | 98.7 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 15.7 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 2640 | | |
| THALLIUM | 0.82 | | |
| VANADIUM | 5 | U | |
| ZINC | 12.5 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 226 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 13.2 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 18600 | | |
| CHROMIUM | 15.9 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 819 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 1790 | | |
| MANGANESE | 97.6 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 15.6 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 1.3 | | |
| SILVER | 1 | U | |
| SODIUM | 2600 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 12.9 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 75 | U | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 27.6 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 28200 | | |
| CHROMIUM | 6.4 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 309 | | |
| LEAD | 0.38 | U | |
| MAGNESIUM | 3440 | | |
| MANGANESE | 12.5 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 8.3 | | |
| POTASSIUM | 2800 | | |
| SELENIUM | 1.2 | U | |
| SILVER | 1 | U | |
| SODIUM | 3870 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 15.3 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW02D-001 | nsample | OLFS4-MW04D-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-01 | lab_id | 0701021-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW14D-001 | nsample | OLFS4-MW15S-001 |
| samp_date | 1/6/2007 | samp_date | 1/8/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-04 | lab_id | 0701033-08 | lab_id | 0701021-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW25S-001 |
| samp_date | 1/7/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-07 | lab_id | 0701033-05 | lab_id | 0701033-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW28S-001 |
| samp_date | 1/5/2007 | samp_date | 1/7/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-04 | lab_id | 0701033-06 | lab_id | 0701033-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-01 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW32S-001 | nsample | OLFS4-MW33S-001 | nsample | OLFS4-MW34S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-02 | lab_id | 0701021-05 | lab_id | 0701033-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001-D | nsample | OLFS4-MW36S-001 |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/5/2007 |
| lab_id | 0701033-09 | lab_id | 0701033-10 | lab_id | 0701028-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **MARCH 8, 2007** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS/CYANIDE**
**SAUFLEY – CTO 029**
**SDG – SAUFLEYW002**

**SAMPLES:** 9/Aqueous/

| | | |
|---|---|---|
| OLFS4-MW10D-001 | OLFS4-MW11S-001 | OLFS4-MW12S-001 |
| OLFS4-MW13S-001 | OLFS4-MW17S-001 | OLFS4-MW18S-001 |
| OLFS4-MW20S-001 | OLFS4-MW22D-001 | OLFS4-MW23S-001 |

Overview

The sample set for Saufley, CTO 029, SDG SAUFLEYW002, consists of nine aqueous environmental samples.

Each sample was analyzed for all target analyte list (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on December 19-21, 2006 and analyzed by Empirical Laboratories, LLC. Metals analyses (expect mercury) were conducted using SW846 method 6010B. Mercury and cyanide analyses were conducted using SW846 methods 7470A and 9012A, respectively.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
* • Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
• Matrix Spike Recoveries
* • Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Matrix Spike Recoveries

The matrix spike (MS) and matrix spike duplicate (MSD) percent recoveries for mercury in sample OLFS4-MW23S-001 were less than the 75% quality control limit. Non-detected mercury results were qualified as estimated "UJ".

Notes

A laboratory duplicated analyses was not performed of target analyte list (TAL) metals.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** Mercury was qualified due to matrix spike noncompliance.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Environmental Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW10D-001 | nsample | OLFS4-MW11S-001 | nsample | OLFS4-MW12S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-01 | lab_id | 0612181-02 | lab_id | 0612175-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 539 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 104 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 3930 | | |
| CHROMIUM | 22 | | |
| COBALT | 5 | U | |
| COPPER | 5.7 | | |
| IRON | 1170 | | |
| LEAD | 12.2 | | |
| MAGNESIUM | 4900 | | |
| MANGANESE | 46.7 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 16.5 | | |
| POTASSIUM | 1450 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 6320 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 17.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 560 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 29.3 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 20800 | | |
| CHROMIUM | 5.9 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 1710 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1740 | | |
| MANGANESE | 185 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 7.1 | | |
| POTASSIUM | 1950 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 5970 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 309 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3.6 | | |
| BARIUM | 19.7 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 26000 | | |
| CHROMIUM | 13.9 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 297 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1000 | U | |
| MANGANESE | 28.1 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 9.8 | | |
| POTASSIUM | 1170 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 3660 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 10 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW17S-001 | nsample | OLFS4-MW18S-001 |
| samp_date | 12/20/2006 | samp_date | 12/21/2006 | samp_date | 12/21/2006 |
| lab_id | 0612181-03 | lab_id | 0612193-03 | lab_id | 0612193-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 795 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 54 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 24600 | | |
| CHROMIUM | 43.6 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 719 | | |
| LEAD | 3 | | |
| MAGNESIUM | 2540 | | |
| MANGANESE | 332 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 33.7 | | |
| POTASSIUM | 2590 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 4530 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 28.9 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3110 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 5.8 | | |
| BARIUM | 46.4 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 13400 | | |
| CHROMIUM | 138 | | |
| COBALT | 5 | U | |
| COPPER | 8.8 | | |
| IRON | 8340 | | |
| LEAD | 2.7 | | |
| MAGNESIUM | 2190 | | |
| MANGANESE | 209 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 97 | | |
| POTASSIUM | 16200 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 10600 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 12.1 | | |
| ZINC | 15 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 2690 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3.9 | | |
| BARIUM | 47.5 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 13200 | | |
| CHROMIUM | 139 | | |
| COBALT | 5 | U | |
| COPPER | 11.6 | | |
| IRON | 8190 | | |
| LEAD | 4.1 | | |
| MAGNESIUM | 1770 | | |
| MANGANESE | 159 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 96.2 | | |
| POTASSIUM | 2060 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 2200 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 9.9 | | |
| ZINC | 67.9 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW20S-001 | nsample | OLFS4-MW22D-001 | nsample | OLFS4-MW23S-001 |
| samp_date | 12/20/2006 | samp_date | 12/19/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-05 | lab_id | 0612175-02 | lab_id | 0612175-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 333 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 44.9 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 28600 | | |
| CHROMIUM | 14.5 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 290 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 2150 | | |
| MANGANESE | 173 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 11.1 | | |
| POTASSIUM | 1700 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 3900 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 11 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 342 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3 | U | |
| BARIUM | 23.2 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 1000 | U | |
| CHROMIUM | 9.7 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 379 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1000 | U | |
| MANGANESE | 12.8 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 8.4 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 3380 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 10 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 712 | | |
| ANTIMONY | 5 | U | |
| ARSENIC | 3.9 | | |
| BARIUM | 316 | | |
| BERYLLIUM | 4 | U | |
| CADMIUM | 1 | U | |
| CALCIUM | 181000 | | |
| CHROMIUM | 16.2 | | |
| COBALT | 5 | U | |
| COPPER | 5 | U | |
| IRON | 34500 | | |
| LEAD | 9.1 | | |
| MAGNESIUM | 17100 | | |
| MANGANESE | 2790 | | |
| MERCURY | 0.08 | UJ | D |
| NICKEL | 12.3 | | |
| POTASSIUM | 35600 | | |
| SELENIUM | 5 | U | |
| SILVER | 1 | U | |
| SODIUM | 31900 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5 | U | |
| ZINC | 10.7 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW10D-001 | nsample | OLFS4-MW11S-001 | nsample | OLFS4-MW12S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-01 | lab_id | 0612181-02 | lab_id | 0612175-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW17S-001 | nsample | OLFS4-MW18S-001 |
| samp_date | 12/20/2006 | samp_date | 12/21/2006 | samp_date | 12/21/2006 |
| lab_id | 0612181-03 | lab_id | 0612193-03 | lab_id | 0612193-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW20S-001 | nsample | OLFS4-MW22D-001 | nsample | OLFS4-MW23S-001 |
| samp_date | 12/20/2006 | samp_date | 12/19/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-05 | lab_id | 0612175-02 | lab_id | 0612175-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **MARCH 14, 2007** |
| **FROM:** | **TERRI L. SOLOMON** | **COPIES:** | **DV FILE** |

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS, CYANIDE**
**CTO – 029 SAUFLEY**
**SAMPLE DELIVERY GROUP (SDG) – SAUFLEYW001**

**SAMPLES:** 8/Aqueous/

| | |
|---|---|
| OLFS4-MW03S-001 | OLFS4-MW06S-001 |
| OLFS4-MW07S-001 | OLFS4-MW08S-001 |
| OLFS4-MW8S-001-D | OLFS4-MW-16S-001 |
| OLFS4-MW-19S-001 | OLFS4-MW05S-001 |

Overview

The sample set for CTO 029, SAUFLEY, SDG SAUFLEYW001, consists of eight (8) aqueous environmental samples. One (1) field duplicate pair (OLFS4-MW08S-001 / OLFS4-MW08S-001D) is included within this SDG.

All samples were analyzed for target analyte list (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on December 6, 7 and 8, 2006 and analyzed by Empirical Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. All TAL metals analyses were conducted using SW-846 method 6010B. Mercury analyses were conducted using SW-846 method 7470A. Cyanide analyses were conducted using method 9012A.

Metals analyses were conducted using Inductively Coupled Plasma (ICP) instrumentation. Mercury analyses were conducted using Cold Vapor Atomic Absorption (CVAA) instrumentation.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verification Results
* • Laboratory Blank Analyses
* • ICP Interference Check Sample Results
* • Laboratory Control Sample Results
* • Matrix Spike Sample Results
* • ICP Serial Dilution Results
* • Field Duplicate Results
* • Sample Quantitation
* • Detection Limits

* - All quality control criteria were met for this parameter.

**TO:** **G. WALKER – PAGE 2**
**DATE:** **MARCH 14, 2007**

Notes

The Contract Required Detection Limit (CRDL) percent recovery for selenium was > 120% quality control limit. No validation action was taken based on the CRDL percent recovery.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", Oct 2004 and the Department of Defense (DOD) document entitled "Quality Systems Manual (QSM) for Environmental laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DOD QSM and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW03S-001 | nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/8/2006 |
| lab_id | 0612069-03 | lab_id | 0612069-01 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 180 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 57.1 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 8850 | | |
| CHROMIUM | 27.7 | | |
| COBALT | 5.0 | U | |
| COPPER | 5.0 | U | |
| IRON | 962 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 2810 | | |
| MANGANESE | 235 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 19.1 | | |
| POTASSIUM | 5630 | | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 4450 | | |
| THALLIUM | 1.0 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1510 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 43.6 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 13600 | | |
| CHROMIUM | 349 | | |
| COBALT | 9.0 | | |
| COPPER | 10.6 | | |
| IRON | 8870 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 2350 | | |
| MANGANESE | 590 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 179 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 3830 | | |
| THALLIUM | 1.3 | U | |
| VANADIUM | 9.9 | | |
| ZINC | 10.0 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 790 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 72.5 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 38100 | | |
| CHROMIUM | 103 | | |
| COBALT | 5.0 | U | |
| COPPER | 5.0 | U | |
| IRON | 7550 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 4000 | | |
| MANGANESE | 816 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 54.8 | | |
| POTASSIUM | 6010 | | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 5790 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW08S-001 | nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW-16S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-01 | lab_id | 0612081-02 | lab_id | 0612081-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 755 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 50.2 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 13200 | | |
| CHROMIUM | 35.3 | | |
| COBALT | 5.0 | U | |
| COPPER | 5.0 | U | |
| IRON | 2040 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1820 | | |
| MANGANESE | 400 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 22.1 | | |
| POTASSIUM | 9210 | | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 5330 | | |
| THALLIUM | 0.75 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 815 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 49.7 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 13200 | | |
| CHROMIUM | 19.7 | | |
| COBALT | 5.0 | U | |
| COPPER | 5.0 | U | |
| IRON | 1970 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1780 | | |
| MANGANESE | 398 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 13.6 | | |
| POTASSIUM | 9010 | | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 5270 | | |
| THALLIUM | 1.0 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 761 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 30.5 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 9790 | | |
| CHROMIUM | 120 | | |
| COBALT | 5.0 | U | |
| COPPER | 5.0 | U | |
| IRON | 1120 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1060 | | |
| MANGANESE | 310 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 68.6 | | |
| POTASSIUM | 2640 | | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 4380 | | |
| THALLIUM | 1.3 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-MW-19S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 170 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 4.0 | U | |
| BARIUM | 25.4 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 4790 | | |
| CHROMIUM | 855 | | |
| COBALT | 12.1 | | |
| COPPER | 6.8 | | |
| IRON | 3710 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1900 | | |
| MANGANESE | 161 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 438 | | |
| POTASSIUM | 1000 | U | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 4310 | | |
| THALLIUM | 1.0 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

| | |
|---|---|
| nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 752 | | |
| ANTIMONY | 5.0 | U | |
| ARSENIC | 3.0 | U | |
| BARIUM | 81.8 | | |
| BERYLLIUM | 4.0 | U | |
| CADMIUM | 1.0 | U | |
| CALCIUM | 30600 | | |
| CHROMIUM | 79.5 | | |
| COBALT | 5.0 | U | |
| COPPER | 5.0 | U | |
| IRON | 3470 | | |
| LEAD | 1.5 | U | |
| MAGNESIUM | 1450 | | |
| MANGANESE | 495 | | |
| MERCURY | 0.08 | U | |
| NICKEL | 44.0 | | |
| POTASSIUM | 3040 | | |
| SELENIUM | 5.0 | U | |
| SILVER | 1.0 | U | |
| SODIUM | 3760 | | |
| THALLIUM | 1.0 | U | |
| VANADIUM | 5.0 | U | |
| ZINC | 10.0 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW03S-001 | nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/8/2006 |
| lab_id | 0612069-03 | lab_id | 0612069-01 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5.0 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5.0 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5.0 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW08S-001 | nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW-16S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-01 | lab_id | 0612081-02 | lab_id | 0612081-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | OLFS4-MW08-001 | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5.0 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: MISC

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW-19S-001 | nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-06 | lab_id | 0612081-04 |
| qc_type | NM | qc_type | NM |
| Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | UG/L | 5.0 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **G. WALKER** **DATE:** **MARCH 15, 2007**

**FROM:** **TERRI L. SOLOMON** **COPIES:** **DV FILE**

**SUBJECT:** **INORGANIC DATA VALIDATION – TAL METALS, CYANIDE**
**CTO – 029 SAUFLEY**
**SAMPLE DELIVERY GROUP (SDG) – SAUFLEYS001**

**SAMPLES:** 21/Soils/

| | | |
|---|---|---|
| OLFS4-MW24S-20 | OLFS4-MW25-S-10 | OLFS4-MW25-S-40 |
| OLFS4-MW26-S-25 | OLFS4-MW-27S-10 | OLFS4-MW-27S-45 |
| OLFS4-MW33S-26 | OLFS4-MW33S-5 | OLFS4-MW35S-29 |
| OLFS4-MW36S-25 | OLFS4-SB2-S10 | OLFS4-SB2-S-26 |
| OLFS4-SB3-S-10 | OLFS4-SB3-S-26 | OLFS4-SB4-S-10 |
| OLFS4-SB4-S-45 | OLFS4-SB5-S-10 | OLFS4-SB5-S-45 |
| OLFS4-SB6-S-16 | OLFS4-SB7-S-12 | OLFS4-SB8-S-12 |

Overview

The sample set for CTO 029, SAUFLEY, SDG SAUFLEYS001, consists of twenty-one (21) soil environmental samples. No field duplicate pairs are included within this SDG.

All samples were analyzed for target analyte list (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on December 5, 6, 7, 14 and 15, 2006 and analyzed by Empirical Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. All metals analyses were conducted using SW-846 methods 3050B/6010B. Mercury analyses were conducted using SW-846 method 7471A. Cyanide analyses were conducted using SW-846 method 9012A.

Metals analyses were conducted using Inductively Coupled Plasma (ICP) instrumentation. Mercury analyses were conducted using Cold Vapor Atomic Absorption (CVAA) instrumentation.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verification Results
* • Laboratory Blank Analyses
• ICP Interference Check Sample Results
* • Laboratory Control Sample Results
* • Laboratory Duplicate Results
• Matrix Spike / Matrix Spike Duplicate Results
* • ICP Serial Dilution Results
* • Sample Quantitation
* • Detection Limits

* - All quality control criteria were met for this parameter.

ICP Interference Check Sample Results

The interfering analytes aluminum and iron were present in samples OLFS4-MW25-S-10, OLFS4-SB3-S-10 and OLFS4-SB6-S-16 at concentrations that were comparable to the levels of aluminum and iron in the Interference Check Sample (ICS) solution. Several analytes, namely, lead, selenium and thallium were present in the ICS solution at a concentration that exceeded the absolute value of the Instrument Detection Limit (IDL). Interference effects exist for selenium and thallium in the affected samples. The nondetected results reported for these samples were qualified as estimated, "UJ".

The interfering analyte iron was present in samples OLFS4-MW24S-20 and OLFS4-SB8-S-12 at concentrations that were comparable to the level of iron in the Interference Check Sample (ICS) solution. Several analytes, namely, lead, selenium and thallium were present in the ICS solution at a concentration that exceeded the absolute value of the Instrument Detection Limit (IDL). Interference effects exist for lead, selenium and thallium in the affected samples. The positive results reported for lead in these samples were qualified as estimated, "J". The nondetected results reported for selenium and thallium in these samples were qualified as estimated, "UJ".

The interfering analyte iron was present in samples OLFS4-MW33S-5, OLFS4-MW36S-25, OLFS4-SB2-S10 and OLFS4-SB3-S-26 at concentrations that were comparable to the level of iron in the Interference Check Sample (ICS) solution. Several analytes, namely, lead, selenium and thallium were present in the ICS solution at a concentration that exceeded the absolute value of the Instrument Detection Limit (IDL). Interference effects exist for selenium and thallium in the affected samples. The nondetected results reported for selenium and thallium in these samples was qualified as estimated, "UJ".

Matrix Spike / Matrix Spike Duplicate Results

The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries for antimony affecting sample OLFS4-MW24S-20 were < 30% quality control limit. The nondetected results reported for antimony in the affected sample were qualified as rejected, "UR".

The MS/MSD percent recoveries for antimony affecting all samples with the exception of OLFS4-MW24S-20 were < 75% quality control limit. The nondetected results reported for antimony in the affected samples were qualified as estimated, "UJ".

The MS/MSD percent recoveries for chromium, copper, magnesium and vanadium were > 125% quality control limit. The positive results reported for chromium, copper, magnesium and vanadium in the affected samples were qualified as estimated, "J".

Notes

None.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** Antimony was rejected in sample OLFS4-MW24S-20 due to MS/MSD percent recoveries < 30%. The MS/MSD percent recoveries for antimony affecting all samples with the exception of OLFS4-MW24S-20 were < 75% quality control limit. The MS/MSD percent recoveries for chromium, copper, magnesium and vanadium were > 125% quality control limit. Several analytes were qualified due to ICS noncompliance.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", Oct 2004 and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (Jan 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DOD QSM and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW24S-20 | | nsample | OLFS4-MW25-S-10 | | nsample | OLFS4-MW25-S-40 | |
| samp_date | 12/5/2006 | | samp_date | 12/7/2006 | | samp_date | 12/7/2006 | |
| lab_id | 0612094-01 | | lab_id | 0612084-01 | | lab_id | 0612084-02 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | MG/KG | | units | MG/KG | | units | MG/KG | |
| Pct_Solids | 92.0 | | Pct_Solids | 90.0 | | Pct_Solids | 88.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 11700 | | |
| ANTIMONY | 0.27 | UR | D |
| ARSENIC | 2.3 | | |
| BARIUM | 2.8 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 76.4 | | |
| CHROMIUM | 14.0 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 2.7 | J | D |
| IRON | 9130 | | |
| LEAD | 2.2 | J | K |
| MAGNESIUM | 54.1 | U | |
| MANGANESE | 8.1 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 0.78 | | |
| POTASSIUM | 54.1 | U | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.054 | U | |
| SODIUM | 54.1 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 22.2 | J | D |
| ZINC | 1.6 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 20100 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 2.9 | | |
| BARIUM | 5.1 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 141 | | |
| CHROMIUM | 13.4 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 4.3 | J | D |
| IRON | 11400 | | |
| LEAD | 3.2 | | |
| MAGNESIUM | 70.3 | J | D |
| MANGANESE | 14.4 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.5 | | |
| POTASSIUM | 63.2 | | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.11 | U | |
| SODIUM | 54.5 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 27.0 | J | D |
| ZINC | 3.9 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 949 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 0.31 | | |
| BARIUM | 0.69 | | |
| BERYLLIUM | 0.23 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 75.8 | | |
| CHROMIUM | 1.5 | J | D |
| COBALT | 0.28 | U | |
| COPPER | 0.39 | J | D |
| IRON | 1110 | | |
| LEAD | 0.68 | | |
| MAGNESIUM | 56.3 | U | |
| MANGANESE | 1.3 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.28 | U | |
| POTASSIUM | 56.3 | U | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.056 | U | |
| SODIUM | 56.3 | U | |
| THALLIUM | 0.17 | U | |
| VANADIUM | 4.0 | J | D |
| ZINC | 0.56 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW-27S-10 | nsample | OLFS4-MW-27S-45 |
| samp_date | 12/7/2006 | samp_date | 12/6/2006 | samp_date | 12/6/2006 |
| lab_id | 0612084-03 | lab_id | 0612068-01 | lab_id | 0612068-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 95.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 7010 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 1.2 | | |
| BARIUM | 0.89 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 52.9 | U | |
| CHROMIUM | 4.7 | J | D |
| COBALT | 0.26 | U | |
| COPPER | 1.5 | J | D |
| IRON | 3730 | | |
| LEAD | 1.1 | | |
| MAGNESIUM | 52.9 | U | |
| MANGANESE | 4.3 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.51 | | |
| POTASSIUM | 52.9 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.053 | U | |
| SODIUM | 52.9 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 8.4 | J | D |
| ZINC | 1.1 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3160 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 0.56 | | |
| BARIUM | 3.0 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 52.6 | U | |
| CHROMIUM | 2.2 | J | D |
| COBALT | 0.26 | U | |
| COPPER | 0.84 | J | D |
| IRON | 2260 | | |
| LEAD | 1.1 | | |
| MAGNESIUM | 52.6 | U | |
| MANGANESE | 5.7 | | |
| MERCURY | 0.012 | U | |
| NICKEL | 0.79 | | |
| POTASSIUM | 52.6 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.053 | U | |
| SODIUM | 52.6 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 4.4 | J | D |
| ZINC | 1.7 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 875 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 2.1 | | |
| BARIUM | 1.2 | | |
| BERYLLIUM | 0.23 | U | |
| CADMIUM | 0.057 | U | |
| CALCIUM | 56.5 | U | |
| CHROMIUM | 5.1 | J | D |
| COBALT | 0.28 | U | |
| COPPER | 0.90 | J | D |
| IRON | 2850 | | |
| LEAD | 1.4 | | |
| MAGNESIUM | 56.5 | U | |
| MANGANESE | 1.8 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 0.28 | U | |
| POTASSIUM | 56.5 | U | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.11 | U | |
| SODIUM | 56.5 | U | |
| THALLIUM | 0.17 | U | |
| VANADIUM | 11.8 | J | D |
| ZINC | 0.57 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-MW33S-26 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-02 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 96.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3000 | | |
| ANTIMONY | 0.25 | UJ | D |
| ARSENIC | 0.62 | | |
| BARIUM | 0.42 | | |
| BERYLLIUM | 0.20 | U | |
| CADMIUM | 0.05 | U | |
| CALCIUM | 50.1 | U | |
| CHROMIUM | 3.0 | J | D |
| COBALT | 0.25 | U | |
| COPPER | 0.68 | J | D |
| IRON | 1950 | | |
| LEAD | 0.62 | | |
| MAGNESIUM | 50.1 | U | |
| MANGANESE | 2.2 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.25 | U | |
| POTASSIUM | 50.1 | U | |
| SELENIUM | 0.25 | U | |
| SILVER | 0.05 | U | |
| SODIUM | 50.1 | U | |
| THALLIUM | 0.15 | U | |
| VANADIUM | 4.4 | J | D |
| ZINC | 0.98 | | |

| | |
|---|---|
| nsample | OLFS4-MW33S-5 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-01 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 89.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 5700 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 4.2 | | |
| BARIUM | 30.1 | | |
| BERYLLIUM | 0.23 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 517 | | |
| CHROMIUM | 3.6 | J | D |
| COBALT | 1.2 | | |
| COPPER | 2.2 | J | D |
| IRON | 10200 | | |
| LEAD | 4.1 | | |
| MAGNESIUM | 59.7 | J | D |
| MANGANESE | 588 | | |
| MERCURY | 0.019 | | |
| NICKEL | 0.88 | | |
| POTASSIUM | 56.2 | U | |
| SELENIUM | 0.28 | UJ | K |
| SILVER | 0.056 | U | |
| SODIUM | 56.2 | U | |
| THALLIUM | 0.39 | UJ | K |
| VANADIUM | 7.8 | J | D |
| ZINC | 5.0 | | |

| | |
|---|---|
| nsample | OLFS4-MW35S-29 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-03 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 94.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 7200 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 1.3 | | |
| BARIUM | 5.4 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 52.9 | U | |
| CHROMIUM | 7.9 | J | D |
| COBALT | 0.42 | | |
| COPPER | 2.5 | J | D |
| IRON | 5110 | | |
| LEAD | 2.4 | | |
| MAGNESIUM | 52.9 | U | |
| MANGANESE | 61.7 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 1.2 | | |
| POTASSIUM | 52.9 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.053 | U | |
| SODIUM | 52.9 | U | |
| THALLIUM | 0.37 | U | |
| VANADIUM | 9.9 | J | D |
| ZINC | 2.5 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| | |
|---|---|
| nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-04 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 8820 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 1.8 | | |
| BARIUM | 1.7 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.051 | U | |
| CALCIUM | 113 | | |
| CHROMIUM | 6.3 | J | D |
| COBALT | 0.26 | U | |
| COPPER | 2.2 | J | D |
| IRON | 5350 | | |
| LEAD | 1.4 | | |
| MAGNESIUM | 51.3 | U | |
| MANGANESE | 6.2 | | |
| MERCURY | 0.012 | U | |
| NICKEL | 0.65 | | |
| POTASSIUM | 51.3 | U | |
| SELENIUM | 0.26 | UJ | K |
| SILVER | 0.051 | U | |
| SODIUM | 51.3 | U | |
| THALLIUM | 0.15 | UJ | K |
| VANADIUM | 12.4 | J | D |
| ZINC | 1.8 | | |

| | |
|---|---|
| nsample | OLFS4-SB2-S10 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-01 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 93.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 8150 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 1.4 | | |
| BARIUM | 5.2 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 63.1 | | |
| CHROMIUM | 6.5 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 2.2 | J | D |
| IRON | 5490 | | |
| LEAD | 1.9 | | |
| MAGNESIUM | 61.7 | J | D |
| MANGANESE | 19.9 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 1.0 | | |
| POTASSIUM | 54.3 | U | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.054 | U | |
| SODIUM | 54.3 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 12.5 | J | D |
| ZINC | 2.8 | | |

| | |
|---|---|
| nsample | OLFS4-SB2-S-26 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-02 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 88.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 776 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 0.20 | | |
| BARIUM | 1.2 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.055 | U | |
| CALCIUM | 55.4 | U | |
| CHROMIUM | 2.7 | J | D |
| COBALT | 0.28 | U | |
| COPPER | 0.35 | J | D |
| IRON | 382 | | |
| LEAD | 0.89 | | |
| MAGNESIUM | 55.4 | U | |
| MANGANESE | 2.2 | | |
| MERCURY | 0.016 | U | |
| NICKEL | 0.28 | U | |
| POTASSIUM | 55.4 | U | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.055 | U | |
| SODIUM | 55.4 | U | |
| THALLIUM | 0.22 | U | |
| VANADIUM | 1.2 | J | D |
| ZINC | 0.55 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB3-S-10 | nsample | OLFS4-SB3-S-26 | nsample | OLFS4-SB4-S-10 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-03 | lab_id | 0612161-04 | lab_id | 0612161-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 89.0 | Pct_Solids | 91.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 19500 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 3.3 | | |
| BARIUM | 4.2 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.055 | U | |
| CALCIUM | 55.1 | U | |
| CHROMIUM | 18.8 | J | D |
| COBALT | 0.28 | U | |
| COPPER | 4.2 | J | D |
| IRON | 14100 | | |
| LEAD | 3.7 | | |
| MAGNESIUM | 55.1 | U | |
| MANGANESE | 16.5 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 1.2 | | |
| POTASSIUM | 55.1 | U | |
| SELENIUM | 0.28 | UJ | K |
| SILVER | 0.055 | U | |
| SODIUM | 55.1 | U | |
| THALLIUM | 0.22 | UJ | K |
| VANADIUM | 35.8 | J | D |
| ZINC | 3.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 7170 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 1.4 | | |
| BARIUM | 2.3 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 53.6 | U | |
| CHROMIUM | 9.3 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 1.8 | J | D |
| IRON | 7030 | | |
| LEAD | 1.8 | | |
| MAGNESIUM | 53.6 | U | |
| MANGANESE | 3.2 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.75 | | |
| POTASSIUM | 53.6 | U | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.054 | U | |
| SODIUM | 53.6 | U | |
| THALLIUM | 0.27 | UJ | K |
| VANADIUM | 18.2 | J | D |
| ZINC | 1.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3610 | | |
| ANTIMONY | 0.26 | UJ | D |
| ARSENIC | 0.60 | | |
| BARIUM | 3.6 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.052 | U | |
| CALCIUM | 52.1 | U | |
| CHROMIUM | 2.7 | J | D |
| COBALT | 0.26 | U | |
| COPPER | 1.2 | J | D |
| IRON | 2660 | | |
| LEAD | 1.3 | | |
| MAGNESIUM | 52.1 | U | |
| MANGANESE | 6.3 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 0.71 | | |
| POTASSIUM | 52.1 | U | |
| SELENIUM | 0.26 | U | |
| SILVER | 0.052 | U | |
| SODIUM | 52.1 | U | |
| THALLIUM | 0.31 | U | |
| VANADIUM | 5.6 | J | D |
| ZINC | 1.9 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB4-S-45 | nsample | OLFS4-SB5-S-10 | nsample | OLFS4-SB5-S-45 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-06 | lab_id | 0612161-07 | lab_id | 0612161-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 90.0 | Pct_Solids | 88.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 827 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 2.4 | | |
| BARIUM | 1.2 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 55.8 | U | |
| CHROMIUM | 3.8 | J | D |
| COBALT | 0.28 | U | |
| COPPER | 1.3 | J | D |
| IRON | 2970 | | |
| LEAD | 1.9 | | |
| MAGNESIUM | 55.8 | U | |
| MANGANESE | 0.85 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 0.28 | U | |
| POTASSIUM | 55.8 | U | |
| SELENIUM | 0.35 | | |
| SILVER | 0.056 | U | |
| SODIUM | 55.8 | U | |
| THALLIUM | 0.17 | U | |
| VANADIUM | 12.0 | J | D |
| ZINC | 0.56 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 3020 | | |
| ANTIMONY | 0.28 | UJ | D |
| ARSENIC | 0.55 | | |
| BARIUM | 2.9 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.056 | U | |
| CALCIUM | 76.3 | | |
| CHROMIUM | 2.0 | J | D |
| COBALT | 0.34 | | |
| COPPER | 0.91 | J | D |
| IRON | 2090 | | |
| LEAD | 1.2 | | |
| MAGNESIUM | 56 | U | |
| MANGANESE | 12.5 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 0.71 | | |
| POTASSIUM | 56.0 | U | |
| SELENIUM | 0.28 | U | |
| SILVER | 0.056 | U | |
| SODIUM | 56.0 | U | |
| THALLIUM | 0.17 | U | |
| VANADIUM | 4.3 | J | D |
| ZINC | 1.7 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 883 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 2.2 | | |
| BARIUM | 1.2 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.054 | U | |
| CALCIUM | 54.1 | U | |
| CHROMIUM | 3.5 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 0.93 | J | D |
| IRON | 2440 | | |
| LEAD | 1.7 | | |
| MAGNESIUM | 54.1 | U | |
| MANGANESE | 0.93 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 0.27 | U | |
| POTASSIUM | 54.1 | U | |
| SELENIUM | 0.28 | | |
| SILVER | 0.054 | U | |
| SODIUM | 54.1 | U | |
| THALLIUM | 0.16 | U | |
| VANADIUM | 10.3 | J | D |
| ZINC | 0.54 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: M

| nsample | OLFS4-SB6-S-16 |
|---|---|
| samp_date | 12/15/2006 |
| lab_id | 0612161-09 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 92.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 20600 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 3.1 | | |
| BARIUM | 4.1 | | |
| BERYLLIUM | 0.22 | U | |
| CADMIUM | 0.11 | U | |
| CALCIUM | 84.5 | | |
| CHROMIUM | 16.1 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 4.1 | J | D |
| IRON | 11900 | | |
| LEAD | 3.3 | | |
| MAGNESIUM | 54.1 | U | |
| MANGANESE | 12.7 | | |
| MERCURY | 0.015 | U | |
| NICKEL | 1.2 | | |
| POTASSIUM | 54.1 | U | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.054 | U | |
| SODIUM | 54.1 | U | |
| THALLIUM | 0.54 | UJ | K |
| VANADIUM | 28.5 | J | D |
| ZINC | 2.8 | | |

| nsample | OLFS4-SB7-S-12 |
|---|---|
| samp_date | 12/15/2006 |
| lab_id | 0612161-10 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 4630 | | |
| ANTIMONY | 0.25 | UJ | D |
| ARSENIC | 0.84 | | |
| BARIUM | 4.6 | | |
| BERYLLIUM | 0.20 | U | |
| CADMIUM | 0.051 | U | |
| CALCIUM | 50.6 | U | |
| CHROMIUM | 3.2 | J | D |
| COBALT | 0.25 | U | |
| COPPER | 1.2 | J | D |
| IRON | 3120 | | |
| LEAD | 1.4 | | |
| MAGNESIUM | 51.8 | J | D |
| MANGANESE | 6.7 | | |
| MERCURY | 0.013 | U | |
| NICKEL | 0.88 | | |
| POTASSIUM | 50.6 | U | |
| SELENIUM | 0.25 | U | |
| SILVER | 0.051 | U | |
| SODIUM | 50.6 | U | |
| THALLIUM | 0.15 | U | |
| VANADIUM | 6.6 | J | D |
| ZINC | 2.0 | | |

| nsample | OLFS4-SB8-S-12 |
|---|---|
| samp_date | 12/15/2006 |
| lab_id | 0612161-11 |
| qc_type | NM |
| units | MG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 11800 | | |
| ANTIMONY | 0.27 | UJ | D |
| ARSENIC | 0.97 | | |
| BARIUM | 4.9 | | |
| BERYLLIUM | 0.21 | U | |
| CADMIUM | 0.053 | U | |
| CALCIUM | 145 | | |
| CHROMIUM | 7.5 | J | D |
| COBALT | 0.27 | U | |
| COPPER | 2.3 | J | D |
| IRON | 6120 | | |
| LEAD | 2.2 | J | K |
| MAGNESIUM | 53.1 | U | |
| MANGANESE | 21.8 | | |
| MERCURY | 0.014 | U | |
| NICKEL | 1.1 | | |
| POTASSIUM | 56.4 | | |
| SELENIUM | 0.27 | UJ | K |
| SILVER | 0.053 | U | |
| SODIUM | 53.1 | U | |
| THALLIUM | 0.16 | UJ | K |
| VANADIUM | 14.2 | J | D |
| ZINC | 2.5 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW24S-20 | nsample | OLFS4-MW25-S-10 | nsample | OLFS4-MW25-S-40 |
| samp_date | 12/5/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612094-01 | lab_id | 0612084-01 | lab_id | 0612084-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 92.0 | Pct_Solids | 90.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW-27S-10 | nsample | OLFS4-MW-27S-45 |
| samp_date | 12/7/2006 | samp_date | 12/6/2006 | samp_date | 12/6/2006 |
| lab_id | 0612084-03 | lab_id | 0612068-01 | lab_id | 0612068-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 95.0 | Pct_Solids | 95.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW33S-26 | nsample | OLFS4-MW33S-5 | nsample | OLFS4-MW35S-29 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-02 | lab_id | 0612148-01 | lab_id | 0612148-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 96.0 | Pct_Solids | 89.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW36S-25 | nsample | OLFS4-SB2-S10 | nsample | OLFS4-SB2-S-26 |
| samp_date | 12/14/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612148-04 | lab_id | 0612161-01 | lab_id | 0612161-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 95.0 | Pct_Solids | 93.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB3-S-10 | nsample | OLFS4-SB3-S-26 | nsample | OLFS4-SB4-S-10 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-03 | lab_id | 0612161-04 | lab_id | 0612161-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 89.0 | Pct_Solids | 91.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB4-S-45 | nsample | OLFS4-SB5-S-10 | nsample | OLFS4-SB5-S-45 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-06 | lab_id | 0612161-07 | lab_id | 0612161-08 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 90.0 | Pct_Solids | 88.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: MISC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB6-S-16 | nsample | OLFS4-SB7-S-12 | nsample | OLFS4-SB8-S-12 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-09 | lab_id | 0612161-10 | lab_id | 0612161-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| Pct_Solids | 92.0 | Pct_Solids | 95.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.13 | U | |

| Parameter | units | Result | Val Qual | Qual Code |
|---|---|---|---|---|
| CYANIDE | MG/KG | 0.14 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **GERRY WALKER** | **DATE:** | **MARCH 15, 2007** |
| **FROM:** | **KELLY CARPER** | **COPIES:** | **DV FILE** |

**SUBJECT:** **ORGANIC DATA VALIDATION- VOC/EDB/SVOC/PAH/PEST/PCBs/TPH**
**NETPMSA SAUFLEY**
**CTO 029 SDG SAUFLEYW002**

**SAMPLES:** 13/Aqueous/VOC/EDB/SVOC/PAH/PCB/TPH

| | | |
|---|---|---|
| OLFS4-MW10D-001 | OLFS4-MW11S-001 | OLFS4-MW12S-001 |
| OLFS4-MW13S-001 | OLFS4-MW17S-001 | OLFS4-MW18S-001 |
| OLFS4-MW20S-001 | OLFS4-MW22D-001 | OLFS4-MW23S-001 |
| TRIP BLANK (4308) | TRIP BLANK (4310) | TRIP BLANK (4314) |
| TRIP BLANK (4306) | | |

2/Aqueous/PEST

| | |
|---|---|
| OLFS4-MW22D-001 | OLFS4-MW23S-001 |

OVERVIEW

The sample set for NETPMSA Saufley CTO 029, SDG SAUFLEYW002 consists of four (4) trip blanks and nine (9) environmental water samples. All samples were analyzed as indicated above. The trip blanks were analyzed for VOCs only, except TRIP BLANK (4306) which was analysed for EDB only.

The samples were collected by TetraTech NUS on December 19, 20, and 21, 2006 analyzed by Empirical Laboratory. All analyses were conducted in accordance with SW-846 Methods 8260B, 8270C, 8270C SIM, 8081A, 8082, and FL-PRO analysis and reporting protocols. PEL Laboratory analyzed EDB via SW-84 8011.

The data contained in this SDG were validated with regard to the following parameters:

- * Data completeness
- Holding times
- * GC/MS Tuning
- Initial and continuing calibration
- Blank results
- Surrogate spike recoveries
- * Internal standard recoveries
- Blank Spike/Blank Spike Duplicate Results
- Matrix Spike/Matrix Spike Duplicate Results
- * Detection Limits
- * Compound Quantitation
- * Compound Identification

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

The ethylene dibromide (1,2-dibromoethane) analyes of samples OLFS4-MW11S-001, OLFS4-MW17S-001, OLFS4-MW20S-001, TRIP BLANK (4310), OLFS4-MW13S-001, OLFS4-MW18S-001, OLFS4-MW10D-001 were analyzed 15 days from the date of sample collection, which exceeds the holding time. The nondetected ethylene dibromide results in these samples were qualified as estimated (UJ).

The following compounds were detected in the method and trip blanks at the following maximum concentrations:

| Compound | Maximum Concentration | Action Level |
|---|---|---|
| Acetone | 5.1 ug/L | 51 ug/L |
| Toluene* | 0.5 ug/L | 2.5 ug/L |

*detected in the trip blank.

An action level of 10X the maximum contaminant concentration (for acetone) was established to evaluate blank contamination. An action level of 5X the maximum contaminant concentration (for toluene) was established to evaluate blank contamination. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. Positive results for acetone less than the action level were qualified undetected (U). No actions were necessary for toluene as no positive results were reported this compound. The trip blanks were not qualified for lab blank contamination.

The initial calibration relative response factor (RRF) was less than the 0.05 quality control limit for acrolein on instrument VOA4 on 12/23/06. All related continuing calibration RRFs were also less than 0.05 for acrolein. The nondetected results reported for acrolein in all samples in this SDG were rejected, qualified (UR). No positive results were reported for acrolein.

Initial calibration RRFs were less than the 0.05 quality control limit for acetonitrile, 1,4-dioxane, isobutyl alcohol, and propionitrile on instrument VOA4 on 12/24/06. All related continuing calibration RRFs were also less than 0.05 for these compounds. The nondetected results reported for these compounds in all samples in this SDG were rejected, qualified (UR). No positive results were reported for these compounds.

The continuing calibration percent differences (%Ds) for acetone, chloromethane, 2-hexanone, acrolein, and 4-methyl-2-pentanone were greater than the 25% quality control limit on instrument VOA4, on 12/28/06 at 9:27. The nondetected results reported for these compounds, except acrolein, in samples TRIP BLANK (4308), OLFS4-MW18S-001, and OLFS4-MW17S-001 were qualified as estimated (UJ). Positive acetone results were qualified due to blank contamination and did not require further qualification. No positive results were reported for the remaining compounds. Nondetected acrolein results were rejected due to more severe noncompliances and did not require further qualification.

The Laboratory Control Samples (LCS) 081BLK had Percent Recoveries (%Rs) for 1,2-dibromoethane that were higher than the respective upper quality control limits. No actions were necessary as no positive results were reported for 1,2-dibromoethane in any samples in this SDG.

The matrix spike/matrix spike duplicate (MS/MSD) performed on sample OLFS4-MW10D-001 had %Rs greater than the quality control limit for chloromethane and methyl methacrylate in both the MS. No actions were necessary as no positive results were reported for these compounds in the unspiked sample.

SVOCs

The initial calibration RRF was less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide on instrument BNA1 on 9/11/06. Most of the related continuing calibration RRFs were also less than 0.05 for this compound. The nondetected results reported for 4-nitroquinoline-1-oxide in all samples in this SDG were rejected, qualified (UR). No positive results were reported for 4-nitroquinoline-1-oxide.

The continuing calibrations run on 12/28/06 at 13:09 through 14:58 on instrument BNA1 yielded %Ds for aniline, 4-chloroanilne, carbazole, 2-nitroaniline, 3-nitroaniline, hexachloropropene, isodrin, kepone, diallate, 3,3'-dimethylbenzidine, 1,4-naphthoquinone, 4-nitroquinoline-1-oxide, N-nitrosodimethylethylamine, N-

nitrosomorpholine, N-nitrosopyrrolidine, dimethoate, a,a-dimethyl-phenethylamine, and 1,4-phenylenediamine that were greater than the 25% quality control limit. Additionally, the RRF for hexachlorophene was less than 0.05. The nondetected results reported for hexachlorophene were rejected, qualified (UR) in samples OLFS4-MW23S-001, OLFS4-MW22D-001, and OLFS-MW12S-001. The nondetected results reported for aniline, 4-chloroanilne, carbazole, 2-nitroaniline, 3-nitroaniline, hexachloropropene, isodrin, kepone, diallate, 3,3'-dimethylbenzidine, 1,4-naphthoquinone, N-nitrosodimethylethylamine, N-nitrosomorpholine, N-nitrosopyrrolidine, dimethoate, a,a-dimethyl-phenethylamine, and 1,4-phenylenediamine were qualified as estimated (UJ). No positive results were reported for any of these compounds. Nondetected results reported for 4-nitroquinoline-1-oxide were qualified as a result of more severe calibration noncompliances and did not require further qualification.

The continuing calibration run on 1/3/07 at 07:05 through 08:51 on instrument BNA1 yielded %Ds for aniline, atrazine, 4-chloroanilne, carbazole, 3-nitroaniline, hexachloropropene, 1,2,4,5-tetrachlorobenzene, 1,3,5-trinitrobenzene, diallate, 1,4-naphthoquinone, 4-nitroquinoline-1-oxide, N-nitrosomorpholine, and 1,4-phenylenediamine that were greater than the 25% quality control limit. Additionally, the RRF for hexachlorophene was less than 0.05. The nondetected results reported for hexachlorophene were rejected, qualified (UR) in samples OLFS4-MW18S-001, OLFS4-MW17S-001, OLFS4-MW11S-001, OLFS4-MW13S-001, and OLFS4-MW20S-001. The nondetected results reported for aniline, atrazine, 4-chloroanilne, carbazole, 3-nitroaniline, hexachloropropene, 1,2,4,5-tetrachlorobenzene, 1,3,5-trinitrobenzene, diallate, 1,4-naphthoquinone, 4-nitroquinoline-1-oxide, N-nitrosomorpholine, and 1,4-phenylenediamine were qualified as estimated (UJ). No positive results were reported for any of these compounds. Nondetected results reported for 4-nitroquinoline-1-oxide were qualified as a result of more severe calibration noncompliances and did not require further qualification.

The continuing calibration run on 1/4/07 at 09:38 through 10:48 on instrument BNA1 yielded %Ds for aniline, benzaldehyde, 2-nitroaniline, hexachloropene, 1,2,4,5-tetrachlorobenzene, 1,3,5-trinitrobenzene, diallate, methyl methane sulfonate, 1,4-naphthoquinone, N-nitrosomorpholine, and phenacetin that were greater than the 25% quality control limit. Additionally the RRF for hexachlorophene was less than 0.05. The nondetected results reported for hexachlorophene was rejected, qualified (UR) in samples OLFS4-MW10D-001RE. The nondetected results reported for aniline, benzaldehyde, 2-nitroaniline, hexachloropene, 1,2,4,5-tetrachlorobenzene, 1,3,5-trinitrobenzene, diallate, methyl methane sulfonate, 1,4-naphthoquinione, N-nitrosomorpholine, and phenacetin were qualified as estimated (UJ). No positive results were reported for any of these compounds in these samples. 1,4-Nitroquinoline-1-oxide was qualified due to a more severe calibration noncompliance and did not require further qualification.

The LCS/LCSD SBLK1221 had %Rs for caprolactam, hexachloroethane, 4-nitrophenol, N-nitrosodimethylamine, phenol, and pyridine that were lower than the respective lower quality control limits in both the LCS and LCSD. The %R for hexachlorobutadiene was also low but just in the LCS. Additionally, there was a high %R for carbazole and a high relative percent difference (RPD) for hexachlorocyclopentadiene. The positive and nondetected results reported for caprolactam, hexachloroethane, 4-nitrophenol, N-nitrosodimethylamine, phenol, and pyridine were qualified as estimated (J) and (UJ), respectively in samples OLFS4-MW23S-001, OLFS4-MW22D-001, and OLFS4-MW12S-001. No actions were necessary for the remaining analytes as no positive results were reported for these compounds in any samples in this SDG. No actions were necessary for the hexachlorobutadiene as the noncompliance did not occur in both the LCS and the LCSD.

The LCS/LCSD SBLK1227 had %Rs for 2,4,5-trichlorophenol were higher than the respective upper quality control limit in both the LCS and LCSD. The %Rs for acenaphthylene and 2,4,6-trichlorophenol were also high but just in the LCS. The LCS and LCSD %Rs for pyridine were below 10%. Additionally, there was a high RPD for aniline. No actions were necessary for compounds with high %Rs or RPDs as no positive results were reported for these compounds in any of the affected samples. The nondetected results reported for pyridine were rejected, qualified (UR) in samples OLFS4-MW18S-001, OLFS4-MW17S-001, OLFS4-MW11S-001, OLFS4-MW13S-001, and OLFS4-MW20S-001.

The LCS/LCSD SBLK0103 had %Rs for benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene that were higher than the respective upper quality control limits in both the LCS and LCSD. The %Rs for benzo(g,h,i)perylene, di-n-octylphthalate, and indeno(1,2,3-cd)pyrene were also high but just in the LCSD. Low %Rs were noted for bis(2-chloroethoxy)methane and 2-nitroaniline in the LCS, only. Additionally high RPDs for acenaphthene, 1,1'-biphenyl, 2-chloronaphhtalene, 2,4-dichlorophenol, 2,4-dinitrophenol, hexachlorobutadiene, hexachlorocyclopentadiene, hexachloroethane, nitrobenzene, and 1,2,4-trichlorophenol were noted. No actions were necessary for the high %Rs and RPDs as no positive results were reported for these compounds in the

affected sample OLFS4-MW10D-001RE. No actions were necessary for the low %Rs as the noncompliance did not occur in both the LCS and the LCSD.

All 3 acid fraction surrogate %Rs were low (below 10% in 2 of the 3 surrogates) in sample OLFS4-MW10D-001. the sample was re-extracted and reanalyzed and yield compliant surrogate recoveries. The reextraction/reanalysis was used in the validation of this SDG. However, the reextraction was preformed in excess of the 14 day holding time until extraction. Therefore the nondetected results reported for all compounds in this sample were qualified as estimated (UJ). No positive results were reported in this sample.

PAHs

No noncompliances were noted

PEST/PCBs

The percent breakdown for endrin was greater that 15% on column 2. No action was necessary as the percent breakdown on column 1 was compliant and no positive results were reported for endrin, endrin ketone, or endrin aldehyde.

The continuing calibration performed on 01/16/07 at 1:56 on instrument ECD3 yielded %Ds that exceeded the 15% quality control criterion for 4,4'-DDD, 4,4'-DDT, methoxychlor, and endrin ketone on columns 1 and 2. The nondetected results reported for these compounds in the affected samples (OLFS4-MW22D-001 and OLFS4-MW23S-001) were qualified as estimated (UJ). No positive results were reported for these compounds in these samples. Additionally, the %Ds for 4,4'-DDE and endrin were noncompliant on column 2. No actions were taken for 4,4'-DDE or endrin because the noncompliance occurred on only one column and these compounds were not detected.

The continuing calibration performed on 01/15/07 at 22:53 on instrument ECD3 yielded %Ds that exceeded the 15% quality control criterion for endrin ketone on column 2. No actions were warranted as no positive results were reported for this compound in the affected samples.

The continuing calibration performed on 12/29/06 at 18:21 on instrument ECD4 yielded %Ds that exceeded the 15% quality control criterion for Aroclor-1260 on column 1. No actions were warranted as no positive results were reported for these compounds in the affected samples.

The continuing calibration performed on 01/15/07 at 23:11 on instrument ECD4 yielded %Ds that exceeded the 15% quality control criterion for Aroclors-1016 and -1260 on column 2. No actions were warranted as no positive results were reported for these compounds in the affected samples.

The continuing calibration performed on 01/16/07 at 2:14 on instrument ECD4 yielded %Ds that exceeded the 15% quality control criterion for Aroclors-1016 and -1260 on column 2. No actions were warranted as no positive results were reported for these compounds in the affected samples.

The percent difference between analytical columns was greater than 100% for beta-BHC in sample OLFS4-MW23S-001. The positive result for this compound in this sample was rejected, qualified (R).

TPH

No noncompliances were noted

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated (J), due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Several VOC and SVOC compounds had failed RRFs resulting in rejection of data. Several VOC, SVOC, PEST, and PCB compounds had noncompliant calibration %Ds. One SVOC surrogate noncompliance was noted. Seven ethylene dibromide samples were analyzed one day outside of the holding time.

**Other Factors Affecting Data Quality:** None were noted.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99) and the Department of Defense (DoD) Quality Systems Manual (QSM) (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Kelly A. Carper
Environmental Scientist

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW10D-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW10D-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW10D-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0075 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW12S-001 | nsample | OLFS4-MW12S-001 | nsample | OLFS4-MW12S-001 |
| samp_date | 12/19/2006 | samp_date | 12/19/2006 | samp_date | 12/19/2006 |
| lab_id | 0612175-04 | lab_id | 0612175-04 | lab_id | 0612175-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 7.8 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.42 | J | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW13S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/20/2006 |
| lab_id | 0612181-03 | lab_id | 0612181-03 | lab_id | 0612181-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 2.4 | U | P |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.47 | J | P |
| CHLOROMETHANE | 0.45 | J | P |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.45 | J | P |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW17S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0074 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | UJ | C |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 1.7 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW17S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW17S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW18S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | UJ | C |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW18S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW18S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW20S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 2.9 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.52 | J | P |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW20S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.75 | J | P |
| CHLOROMETHANE | 0.51 | J | P |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW20S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW22D-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW22D-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW22D-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 8.4 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.21 | J | P |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.33 | J | P |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | Trip Blank (4308) |
| samp_date | 12/21/2006 |
| lab_id | 0612193-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | UJ | C |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 6.2 | J | CP |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank (4308) |
| samp_date | 12/21/2006 |
| lab_id | 0612193-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |
| TRICHLOROETHENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank (4308) |
| samp_date | 12/21/2006 |
| lab_id | 0612193-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | Trip Blank (4310) |
| samp_date | 12/20/2006 |
| lab_id | 0612181-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 6 | J | P |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | Trip Blank (4310) |
| samp_date | 12/20/2006 |
| lab_id | 0612181-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.5 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | Trip Blank (4310) |
| samp_date | 12/20/2006 |
| lab_id | 0612181-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | TRIP BLANK 4306 (W002) |
| samp_date | 12/19/2006 |
| lab_id | 250556503 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0075 | U | |

| | |
|---|---|
| nsample | TRIPBLANK 4314 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 7.9 | J | P |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| | |
|---|---|
| nsample | TRIPBLANK 4314 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |
| TRICHLOROETHENE | 0.28 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | TRIPBLANK 4314 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW10D-001 RE | nsample | OLFS4-MW10D-001 RE | nsample | OLFS4-MW10D-001 RE |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/20/2006 |
| lab_id | 0612181-01RE | lab_id | 0612181-01RE | lab_id | 0612181-01RE |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | UJ | H |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | UJ | CH |
| 1,2,4-TRICHLOROBENZENE | 1 | UJ | H |
| 1,3,5-TRINITROBENZENE | 3.1 | UJ | CH |
| 1,3-DINITROBENZENE | 3.1 | UJ | H |
| 1,4-NAPHTHOQUINONE | 1 | UJ | CH |
| 1,4-PHENYLENEDIAMINE | 1 | UJ | H |
| 1-NAPHTHYLAMINE | 1 | UJ | H |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | UJ | H |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | UJ | H |
| 2,4,5-TRICHLOROPHENOL | 1 | UJ | H |
| 2,4,6-TRICHLOROPHENOL | 1 | UJ | H |
| 2,4-DICHLOROPHENOL | 1 | UJ | H |
| 2,4-DIMETHYLPHENOL | 1 | UJ | H |
| 2,4-DINITROPHENOL | 10 | UJ | H |
| 2,4-DINITROTOLUENE | 1 | UJ | H |
| 2,6-DICHLOROPHENOL | 1 | UJ | H |
| 2,6-DINITROTOLUENE | 1 | UJ | H |
| 2-ACETYLAMINOFLUORENE | 2.1 | UJ | H |
| 2-CHLORONAPHTHALENE | 1 | UJ | H |
| 2-CHLOROPHENOL | 1 | UJ | H |
| 2-METHYLNAPHTHALENE | 1 | UJ | H |
| 2-METHYLPHENOL | 1 | UJ | H |
| 2-NAPHTHYLAMINE | 1 | UJ | H |
| 2-NITROANILINE | 1 | UJ | CH |
| 2-NITROPHENOL | 1 | UJ | H |
| 2-PICOLINE | 7.3 | UJ | H |
| 3,3'-DICHLOROBENZIDINE | 1 | UJ | H |
| 3,3'-DIMETHYLBENZIDINE | 44 | UJ | H |
| 3-METHYLCHOLANTHRENE | 1 | UJ | H |
| 3-METHYLPHENOL | 1 | UJ | H |
| 3-NITROANILINE | 1 | UJ | H |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | UJ | H |
| 4-AMINOBIPHENYL | 2.1 | UJ | H |
| 4-BROMOPHENYL PHENYL ETHER | 1 | UJ | H |
| 4-CHLORO-3-METHYLPHENOL | 1 | UJ | H |
| 4-CHLOROANILINE | 1 | UJ | H |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | UJ | H |
| 4-METHYLPHENOL | 1 | UJ | H |
| 4-NITROANILINE | 1 | UJ | H |
| 4-NITROPHENOL | 5.2 | UJ | H |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | UJ | H |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | UJ | H |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | UJ | H |
| ACENAPHTHENE | 1 | UJ | H |
| ACENAPHTHYLENE | 1 | UJ | H |
| ACETOPHENONE | 1 | UJ | H |
| ANILINE | 1 | UJ | CH |
| ANTHRACENE | 1 | UJ | H |
| ARAMITE | 1 | UJ | H |
| ATRAZINE | 1 | UJ | H |
| BENZALDEHYDE | 1 | UJ | CH |
| BENZO(A)ANTHRACENE | 1 | UJ | H |
| BENZO(A)PYRENE | 1 | UJ | H |
| BENZO(B)FLUORANTHENE | 1 | UJ | H |
| BENZO(G,H,I)PERYLENE | 1 | UJ | H |
| BENZO(K)FLUORANTHENE | 1 | UJ | H |
| BENZYL ALCOHOL | 1 | UJ | H |
| BIS(2-CHLOROETHOXY)METHANE | 1 | UJ | H |
| BIS(2-CHLOROETHYL)ETHER | 1 | UJ | H |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | UJ | H |
| BUTYL BENZYL PHTHALATE | 1 | UJ | H |
| CAPROLACTAM | 1 | UJ | H |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | UJ | H |
| CHLOROBENZILATE | 1 | UJ | H |
| CHRYSENE | 1 | UJ | H |
| DIALLATE | 1 | UJ | CH |
| DIBENZO(A,H)ANTHRACENE | 1 | UJ | H |
| DIBENZOFURAN | 1 | UJ | H |
| DIETHYL PHTHALATE | 1 | UJ | H |
| DIMETHOATE | 4.2 | UJ | H |
| DIMETHYL PHTHALATE | 1 | UJ | H |
| DI-N-BUTYL PHTHALATE | 1 | UJ | H |
| DI-N-OCTYL PHTHALATE | 1 | UJ | H |
| DIPHENYLAMINE | 1 | UJ | H |
| ETHYL METHANE SULFONATE | 1 | UJ | H |
| FLUORANTHENE | 1 | UJ | H |
| FLUORENE | 1 | UJ | H |
| HEXACHLOROBENZENE | 1 | UJ | H |
| HEXACHLOROBUTADIENE | 1 | UJ | H |
| HEXACHLOROCYCLOPENTADIENE | 1 | UJ | H |
| HEXACHLOROETHANE | 1 | UJ | H |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | UJ | CH |
| INDENO(1,2,3-CD)PYRENE | 1 | UJ | H |
| ISODRIN | 2.1 | UJ | H |
| ISOPHORONE | 1 | UJ | H |
| ISOSAFROLE | 1 | UJ | H |
| KEPONE | 1 | UJ | H |
| METHAPYRILENE | 1 | UJ | H |
| METHYL METHANE SULFONATE | 1 | UJ | H |
| NAPHTHALENE | 1 | UJ | H |
| NITROBENZENE | 1 | UJ | H |
| N-NITROSODIETHYLAMINE | 1 | UJ | H |
| N-NITROSODIMETHYLAMINE | 1 | UJ | H |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW10D-001 RE |
| samp_date | 12/20/2006 |
| lab_id | 0612181-01RE |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | UJ | H |
| N-NITROSO-DI-N-PROPYLAMINE | 0.83 | UJ | H |
| N-NITROSODIPHENYLAMINE | 1 | UJ | H |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | UJ | H |
| N-NITROSOMORPHOLINE | 1 | UJ | CH |
| N-NITROSOPIPERIDINE | 1 | UJ | H |
| N-NITROSOPYRROLIDINE | 1 | UJ | H |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | UJ | H |
| O-TOLUIDINE | 4.2 | UJ | H |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | UJ | H |
| PENTACHLOROBENZENE | 4.2 | UJ | H |
| PENTACHLOROETHANE | 4.2 | UJ | H |
| PENTACHLORONITROBENZENE | 4.2 | UJ | H |
| PENTACHLOROPHENOL | 1 | UJ | H |
| PHENACETIN | 1 | UJ | CH |
| PHENANTHRENE | 1 | UJ | H |
| PHENOL | 1 | UJ | H |
| PRONAMIDE | 1 | UJ | H |
| PYRENE | 1 | UJ | H |
| PYRIDINE | 1 | UJ | H |
| SAFROLE | 1 | UJ | H |

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | UJ | C |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.6 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 46 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.4 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | UJ | C |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.3 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 27 | UR | C |
| HEXACHLOROPROPENE | 4.3 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW11S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.87 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.3 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.3 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.3 | U | |
| PENTACHLOROETHANE | 4.3 | U | |
| PENTACHLORONITROBENZENE | 4.3 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UR | E |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW12S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.1 | U | |
| 1,3-DINITROBENZENE | 3.1 | U | |
| 1,4-NAPHTHOQUINONE | 1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | UJ | C |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 1 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7.1 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 43 | UJ | C |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 1 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW12S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5.1 | UJ | E |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | U | |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1.4 | J | EP |

| | |
|---|---|
| nsample | OLFS4-MW12S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 4.1 | UJ | C |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 0.48 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | UJ | E |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.1 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2 | UJ | C |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | UJ | C |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | UJ | E |

| | |
|---|---|
| nsample | OLFS4-MW12S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.82 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.1 | UJ | C |
| N-NITROSOMORPHOLINE | 1 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 1 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | U | |
| O-TOLUIDINE | 4.1 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.1 | U | |
| PENTACHLOROETHANE | 4.1 | U | |
| PENTACHLORONITROBENZENE | 4.1 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | UJ | E |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | UJ | E |
| SAFROLE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW13S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/20/2006 |
| lab_id | 0612181-03 | lab_id | 0612181-03 | lab_id | 0612181-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | UJ | C |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | UJ | C |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW13S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UR | E |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW17S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.4 | UJ | C |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.4 | UJ | C |
| 1,3-DINITROBENZENE | 3.4 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.3 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 48 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW17S-001 |
| samp_date | 12/21/2006 |
| lab_id | 0612193-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.3 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.7 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.3 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | UJ | C |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.8 | J | P |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW17S-001 | | nsample | OLFS4-MW17S-001 | | nsample | OLFS4-MW18S-001 | |
| samp_date | 12/21/2006 | | samp_date | 12/21/2006 | | samp_date | 12/21/2006 | |
| lab_id | 0612193-03 | | lab_id | 0612193-03 | | lab_id | 0612193-01 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.6 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | UR | C |
| HEXACHLOROPROPENE | 4.6 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.3 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.91 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.6 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.4 | U | |
| O-TOLUIDINE | 4.6 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.6 | U | |
| PENTACHLOROETHANE | 4.6 | U | |
| PENTACHLORONITROBENZENE | 4.6 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UR | E |
| SAFROLE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | UJ | C |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 47 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW18S-001 | nsample | OLFS4-MW18S-001 | nsample | OLFS4-MW18S-001 |
| samp_date | 12/21/2006 | samp_date | 12/21/2006 | samp_date | 12/21/2006 |
| lab_id | 0612193-01 | lab_id | 0612193-01 | lab_id | 0612193-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.6 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | UJ | C |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.4 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | UR | C |
| HEXACHLOROPROPENE | 4.4 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.89 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.4 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.4 | U | |
| PENTACHLOROETHANE | 4.4 | U | |
| PENTACHLORONITROBENZENE | 4.4 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UR | E |
| SAFROLE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW20S-001 | nsample | OLFS4-MW20S-001 | nsample | OLFS4-MW20S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/20/2006 |
| lab_id | 0612181-05 | lab_id | 0612181-05 | lab_id | 0612181-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.2 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.5 | UJ | C |
| 1,2,4-TRICHLOROBENZENE | 1.2 | U | |
| 1,3,5-TRINITROBENZENE | 3.5 | UJ | C |
| 1,3-DINITROBENZENE | 3.5 | U | |
| 1,4-NAPHTHOQUINONE | 1.2 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.2 | UJ | C |
| 1-NAPHTHYLAMINE | 1.2 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.2 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.2 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.2 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.2 | U | |
| 2,4-DICHLOROPHENOL | 1.2 | U | |
| 2,4-DIMETHYLPHENOL | 1.2 | U | |
| 2,4-DINITROPHENOL | 12 | U | |
| 2,4-DINITROTOLUENE | 1.2 | U | |
| 2,6-DICHLOROPHENOL | 1.2 | U | |
| 2,6-DINITROTOLUENE | 1.2 | U | |
| 2-ACETYLAMINOFLUORENE | 2.4 | U | |
| 2-CHLORONAPHTHALENE | 1.2 | U | |
| 2-CHLOROPHENOL | 1.2 | U | |
| 2-METHYLNAPHTHALENE | 1.2 | U | |
| 2-METHYLPHENOL | 1.2 | U | |
| 2-NAPHTHYLAMINE | 1.2 | U | |
| 2-NITROANILINE | 1.2 | U | |
| 2-NITROPHENOL | 1.2 | U | |
| 2-PICOLINE | 8.2 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.2 | U | |
| 3,3'-DIMETHYLBENZIDINE | 49 | U | |
| 3-METHYLCHOLANTHRENE | 1.2 | U | |
| 3-METHYLPHENOL | 1.2 | U | |
| 3-NITROANILINE | 1.2 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.2 | U | |
| 4-AMINOBIPHENYL | 2.4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.2 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.2 | U | |
| 4-CHLOROANILINE | 1.2 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1.2 | U | |
| 4-METHYLPHENOL | 1.2 | U | |
| 4-NITROANILINE | 1.2 | U | |
| 4-NITROPHENOL | 5.9 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.2 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.4 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.2 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.2 | U | |
| ACENAPHTHENE | 1.2 | U | |
| ACENAPHTHYLENE | 1.2 | U | |
| ACETOPHENONE | 1.2 | U | |
| ANILINE | 1.2 | UJ | C |
| ANTHRACENE | 1.2 | U | |
| ARAMITE | 1.2 | U | |
| ATRAZINE | 1.2 | UJ | C |
| BENZALDEHYDE | 1.2 | U | |
| BENZO(A)ANTHRACENE | 1.2 | U | |
| BENZO(A)PYRENE | 1.2 | U | |
| BENZO(B)FLUORANTHENE | 1.2 | U | |
| BENZO(G,H,I)PERYLENE | 1.2 | U | |
| BENZO(K)FLUORANTHENE | 1.2 | U | |
| BENZYL ALCOHOL | 1.2 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.2 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.2 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.2 | U | |
| BUTYL BENZYL PHTHALATE | 1.2 | U | |
| CAPROLACTAM | 1.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.2 | UJ | C |
| CHLOROBENZILATE | 1.2 | U | |
| CHRYSENE | 1.2 | U | |
| DIALLATE | 1.2 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1.2 | U | |
| DIBENZOFURAN | 1.2 | U | |
| DIETHYL PHTHALATE | 12 | U | |
| DIMETHOATE | 4.7 | U | |
| DIMETHYL PHTHALATE | 1.2 | U | |
| DI-N-BUTYL PHTHALATE | 1.2 | U | |
| DI-N-OCTYL PHTHALATE | 1.2 | U | |
| DIPHENYLAMINE | 1.2 | U | |
| ETHYL METHANE SULFONATE | 1.2 | U | |
| FLUORANTHENE | 1.2 | U | |
| FLUORENE | 1.2 | U | |
| HEXACHLOROBENZENE | 1.2 | U | |
| HEXACHLOROBUTADIENE | 1.2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.2 | U | |
| HEXACHLOROETHANE | 1.2 | U | |
| HEXACHLOROPHENE | 29 | UR | C |
| HEXACHLOROPROPENE | 4.7 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.2 | U | |
| ISODRIN | 2.4 | U | |
| ISOPHORONE | 1.2 | U | |
| ISOSAFROLE | 1.2 | U | |
| KEPONE | 1.2 | U | |
| METHAPYRILENE | 1.2 | U | |
| METHYL METHANE SULFONATE | 1.2 | U | |
| NAPHTHALENE | 1.2 | U | |
| NITROBENZENE | 1.2 | U | |
| N-NITROSODIETHYLAMINE | 1.2 | U | |
| N-NITROSODIMETHYLAMINE | 1.2 | U | |

## PROJ_NO: 00389

SDG:-SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW20S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.2 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.94 | U | |
| N-NITROSODIPHENYLAMINE | 1.2 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.7 | U | |
| N-NITROSOMORPHOLINE | 1.2 | UJ | C |
| N-NITROSOPIPERIDINE | 1.2 | U | |
| N-NITROSOPYRROLIDINE | 1.2 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.5 | U | |
| O-TOLUIDINE | 4.7 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.2 | U | |
| PENTACHLOROBENZENE | 4.7 | U | |
| PENTACHLOROETHANE | 4.7 | U | |
| PENTACHLORONITROBENZENE | 4.7 | U | |
| PENTACHLOROPHENOL | 12 | U | |
| PHENACETIN | 1.2 | U | |
| PHENANTHRENE | 1.2 | U | |
| PHENOL | 1.2 | U | |
| PRONAMIDE | 1.2 | U | |
| PYRENE | 1.2 | U | |
| PYRIDINE | 1.2 | UR | E |
| SAFROLE | 1.2 | U | |

| | |
|---|---|
| nsample | OLFS4-MW22D-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.1 | U | |
| 1,3-DINITROBENZENE | 3.1 | U | |
| 1,4-NAPHTHOQUINONE | 1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | UJ | C |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 1 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7.2 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 43 | UJ | C |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 1 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW22D-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5.2 | UJ | E |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | U | |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1.5 | J | EP |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW22D-001 | | nsample | OLFS4-MW22D-001 | | nsample | OLFS4-MW23S-001 | |
| samp_date | 12/19/2006 | | samp_date | 12/19/2006 | | samp_date | 12/19/2006 | |
| lab_id | 0612175-02 | | lab_id | 0612175-02 | | lab_id | 0612175-01 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 4.1 | UJ | C |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 0.48 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | UJ | E |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.1 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2.1 | UJ | C |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | UJ | C |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | UJ | E |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.82 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.1 | UJ | C |
| N-NITROSOMORPHOLINE | 1 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 1 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | U | |
| O-TOLUIDINE | 4.1 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.1 | U | |
| PENTACHLOROETHANE | 4.1 | U | |
| PENTACHLORONITROBENZENE | 4.1 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | UJ | E |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | UJ | E |
| SAFROLE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | U | |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | UJ | C |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | UJ | C |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | UJ | C |

## PROJ_NO: 00389

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.3 | UJ | E |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 2.7 | J | EP |

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | UJ | C |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | UJ | E |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | UJ | C |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | UJ | E |

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | UJ | C |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | UJ | E |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | E |
| SAFROLE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW10D-001 | nsample | OLFS4-MW11S-001 | nsample | OLFS4-MW12S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-01 | lab_id | 0612181-02 | lab_id | 0612175-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.009 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0096 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | U | |
| PHENANTHRENE | 0.015 | U | |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | U | |
| 2-METHYLNAPHTHALENE | 0.018 | U | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0097 | U | |
| ANTHRACENE | 0.011 | U | |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.015 | U | |
| BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.022 | U | |
| PHENANTHRENE | 0.016 | U | |
| PYRENE | 0.012 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | J | P |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0088 | U | |
| ANTHRACENE | 0.0099 | U | |
| BENZO(A)ANTHRACENE | 0.03 | J | P |
| BENZO(A)PYRENE | 0.03 | J | P |
| BENZO(B)FLUORANTHENE | 0.04 | J | P |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.037 | J | P |
| CHRYSENE | 0.046 | J | P |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.093 | | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | U | |
| PHENANTHRENE | 0.07 | | |
| PYRENE | 0.06 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PAH

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | | nsample | OLFS4-MW17S-001 | | nsample | OLFS4-MW18S-001 | |
| samp_date | 12/20/2006 | | samp_date | 12/21/2006 | | samp_date | 12/21/2006 | |
| lab_id | 0612181-03 | | lab_id | 0612193-03 | | lab_id | 0612193-01 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |
| Parameter | Result | Val Qual | Parameter | Result | Val Qual | Parameter | Result | Val Qual | Qual Code |
| 1-METHYLNAPHTHALENE | 0.011 | U | 1-METHYLNAPHTHALENE | 0.012 | U | 1-METHYLNAPHTHALENE | 0.011 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | 2-METHYLNAPHTHALENE | 0.019 | U | 2-METHYLNAPHTHALENE | 0.018 | U | |
| ACENAPHTHENE | 0.011 | U | ACENAPHTHENE | 0.012 | U | ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.009 | U | ACENAPHTHYLENE | 0.01 | U | ACENAPHTHYLENE | 0.0097 | U | |
| ANTHRACENE | 0.01 | U | ANTHRACENE | 0.011 | U | ANTHRACENE | 0.011 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | BENZO(A)ANTHRACENE | 0.012 | U | BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.01 | U | BENZO(A)PYRENE | 0.011 | U | BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | BENZO(B)FLUORANTHENE | 0.019 | U | BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | BENZO(G,H,I)PERYLENE | 0.015 | U | BENZO(G,H,I)PERYLENE | 0.015 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | BENZO(K)FLUORANTHENE | 0.015 | U | BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.0096 | U | CHRYSENE | 0.01 | U | CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | DIBENZO(A,H)ANTHRACENE | 0.014 | U | DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.012 | U | FLUORANTHENE | 0.014 | U | FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.013 | U | FLUORENE | 0.015 | U | FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | INDENO(1,2,3-CD)PYRENE | 0.021 | U | INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.02 | U | NAPHTHALENE | 0.022 | U | NAPHTHALENE | 0.022 | U | |
| PHENANTHRENE | 0.015 | U | PHENANTHRENE | 0.016 | U | PHENANTHRENE | 0.03 | J | P |
| PYRENE | 0.011 | U | PYRENE | 0.012 | U | PYRENE | 0.012 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW20S-001 | nsample | OLFS4-MW22D-001 | nsample | OLFS4-MW23S-001 |
| samp_date | 12/20/2006 | samp_date | 12/19/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-05 | lab_id | 0612175-02 | lab_id | 0612175-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.009 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0096 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.016 | J | P |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | U | |
| PHENANTHRENE | 0.027 | J | P |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0088 | U | |
| ANTHRACENE | 0.0099 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0099 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0094 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | U | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.035 | J | P |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.4 | | |
| ACENAPHTHYLENE | 0.009 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0096 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.15 | | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | U | |
| PHENANTHRENE | 0.015 | U | |
| PYRENE | 0.011 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW10D-001 | nsample | OLFS4-MW11S-001 | nsample | OLFS4-MW12S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-01 | lab_id | 0612181-02 | lab_id | 0612175-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.12 | U | |
| AROCLOR-1221 | 0.12 | U | |
| AROCLOR-1232 | 0.12 | U | |
| AROCLOR-1242 | 0.12 | U | |
| AROCLOR-1248 | 0.12 | U | |
| AROCLOR-1254 | 0.12 | U | |
| AROCLOR-1260 | 0.12 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.12 | U | |
| AROCLOR-1221 | 0.12 | U | |
| AROCLOR-1232 | 0.12 | U | |
| AROCLOR-1242 | 0.12 | U | |
| AROCLOR-1248 | 0.12 | U | |
| AROCLOR-1254 | 0.12 | U | |
| AROCLOR-1260 | 0.12 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW17S-001 | nsample | OLFS4-MW18S-001 |
| samp_date | 12/20/2006 | samp_date | 12/21/2006 | samp_date | 12/21/2006 |
| lab_id | 0612181-03 | lab_id | 0612193-03 | lab_id | 0612193-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PEST/PCB

| | |
|---|---|
| nsample | OLFS4-MW20S-001 |
| samp_date | 12/20/2006 |
| lab_id | 0612181-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| | |
|---|---|
| nsample | OLFS4-MW22D-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.0052 | UJ | C |
| 4,4'-DDE | 0.0052 | U | |
| 4,4'-DDT | 0.0052 | UJ | C |
| ALDRIN | 0.0034 | U | |
| ALPHA-BHC | 0.0034 | U | |
| ALPHA-CHLORDANE | 0.0034 | U | |
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |
| BETA-BHC | 0.0034 | U | |
| CHLORDANE | 0.018 | U | |
| DELTA-BHC | 0.0034 | U | |
| DIELDRIN | 0.0052 | U | |
| ENDOSULFAN I | 0.0034 | U | |
| ENDOSULFAN II | 0.0052 | U | |
| ENDOSULFAN SULFATE | 0.0052 | U | |
| ENDRIN | 0.0052 | U | |
| ENDRIN ALDEHYDE | 0.0052 | U | |
| ENDRIN KETONE | 0.0052 | UJ | C |
| GAMMA-BHC (LINDANE) | 0.0034 | U | |
| GAMMA-CHLORDANE | 0.0034 | U | |
| HEPTACHLOR | 0.0034 | U | |
| HEPTACHLOR EPOXIDE | 0.0034 | U | |
| METHOXYCHLOR | 0.0034 | UJ | C |
| TOXAPHENE | 0.34 | U | |

| | |
|---|---|
| nsample | OLFS4-MW23S-001 |
| samp_date | 12/19/2006 |
| lab_id | 0612175-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,4'-DDD | 0.0053 | UJ | C |
| 4,4'-DDE | 0.0053 | U | |
| 4,4'-DDT | 0.0053 | UJ | C |
| ALDRIN | 0.0035 | U | |
| ALPHA-BHC | 0.0035 | U | |
| ALPHA-CHLORDANE | 0.0035 | U | |
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |
| BETA-BHC | 0.0094 | R | U |
| CHLORDANE | 0.018 | U | |
| DELTA-BHC | 0.0035 | U | |
| DIELDRIN | 0.0053 | U | |
| ENDOSULFAN I | 0.0035 | U | |
| ENDOSULFAN II | 0.0053 | U | |
| ENDOSULFAN SULFATE | 0.0053 | U | |
| ENDRIN | 0.0053 | U | |
| ENDRIN ALDEHYDE | 0.0053 | U | |
| ENDRIN KETONE | 0.0053 | UJ | C |
| GAMMA-BHC (LINDANE) | 0.0035 | U | |
| GAMMA-CHLORDANE | 0.0035 | U | |
| HEPTACHLOR | 0.0035 | U | |
| HEPTACHLOR EPOXIDE | 0.0035 | U | |
| METHOXYCHLOR | 0.0035 | UJ | C |
| TOXAPHENE | 0.35 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW10D-001 | nsample | OLFS4-MW11S-001 | nsample | OLFS4-MW12S-001 |
| samp_date | 12/20/2006 | samp_date | 12/20/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-01 | lab_id | 0612181-02 | lab_id | 0612175-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.56 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.57 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.54 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW13S-001 | nsample | OLFS4-MW17S-001 | nsample | OLFS4-MW18S-001 |
| samp_date | 12/20/2006 | samp_date | 12/21/2006 | samp_date | 12/21/2006 |
| lab_id | 0612181-03 | lab_id | 0612193-03 | lab_id | 0612193-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.53 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.57 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.56 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW002 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW20S-001 | nsample | OLFS4-MW22D-001 | nsample | OLFS4-MW23S-001 |
| samp_date | 12/20/2006 | samp_date | 12/19/2006 | samp_date | 12/19/2006 |
| lab_id | 0612181-05 | lab_id | 0612175-02 | lab_id | 0612175-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.54 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.52 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.55 | | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **GERRY WALKER** **DATE:** **MARCH 16, 2007**

**FROM:** **KELLY CARPER** **COPIES:** **DV FILE**

**SUBJECT:** **ORGANIC DATA VALIDATION- VOC/SVOC/PAH/PCBs/TPH**
**NETPMSA SAUFLEY**
**CTO 029 SDG SAUFLEYW003**

**SAMPLES:** 24/Aqueous/VOC/SVOC/PAH/PCBs/TPH

| | | |
|---|---|---|
| OLFS4-MW01D2-001 | OLFS4-MW02D-001 | OLFS4-MW04D-001 |
| OLFS4-MW09S-001 | OLFS4-MW14D-001 | OLFS4-MW15S-001 |
| OLFS4-MW21S-001 | OLFS4-MW24S-001 | OLFS4-MW25S-001 |
| OLFS4-MW26D-001 | OLFS4-MW27S-001 | OLFS4-MW28S-001 |
| OLFS4-MW29D-001 | OLFS4-MW30S-001 | OLFS4-MW31S-001 |
| OLFS4-MW32S-001 | OLFS4-MW33S-001 | OLFS4-MW34S-001 |
| OLFS4-MW35S-001 | OLFS4-MW35S-001-D | OLFS4-MW36S-001 |
| TRIP BLANK | TRIP BLANK (4312) | TRIP BLANK (4313) |

OVERVIEW

The sample set for NETPMSA Saufley CTO 029, SDG SAUFLEYW003 consists of three (3) trip blanks and twenty-one (21) environmental water samples. One field duplicate pair was included in this SDG: OLFS4-MW35S-001/OLFS4-MW35S-001-D. All samples were analyzed as indicated above. The trip blanks were analyzed for VOCs only.

The samples were collected by TetraTech NUS on January 4, 5, 6, 7, and 8, 2007 analyzed by Empirical Laboratory. All analyses were conducted in accordance with SW-846 Methods 8260B, 8270C, 8270C SIM, 8082, and FL-PRO analysis and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

* • Data completeness
* • Holding times
* • GC/MS Tuning
• Initial and continuing calibration
• Blank results
• Surrogate spike recoveries
* • Internal standard recoveries
• Blank Spike/Blank Spike Duplicate Results
• Matrix Spike/Matrix Spike Duplicate Results
* • Field Duplicate Results
* • Detection Limits
* • Compound Quantitation
* • Compound Identification

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

The following compounds were detected in the method and trip blanks at the following maximum concentrations:

| Compound | Maximum Concentration | Action Level |
|---|---|---|
| Methyl tert butyl ether (MTBE) | 0.27 ug/L | 1.35 ug/L |
| Acetone* | 6.7 ug/L | 67 ug/L |

*detected in the trip blank.

An action level of 10X the maximum contaminant concentration (for acetone) was established to evaluate blank contamination. An action level of 5X the maximum contaminant concentration (for MTBE) was established to evaluate blank contamination. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. Positive results for acetone less than the action level were qualified undetected (U). No actions were necessary for MTBE as no positive results were reported this compound. The trip blanks were not qualified for blank contamination.

The initial calibration relative response factor (RRF) was less than the 0.05 quality control limit for acrolein on instrument VOA4 on 12/23/06. All related continuing calibration RRFs were also less than 0.05 for acrolein. The nondetected results reported for acrolein in all samples in this SDG were rejected, qualified (UR). No positive results were reported for acrolein.

Initial calibration RRFs were less than the 0.05 quality control limit for acetonitrile, 1,4-dioxane, isobutyl alcohol, and propionitrile on instrument VOA4 on 12/24/06. All related continuing calibration RRFs were also less than 0.05 for these compounds. The nondetected results reported for these compounds in all samples in this SDG were rejected, qualified (UR). No positive results were reported for these compounds.

The continuing calibration percent differences (%Ds) for acetone, chloromethane, and 4-methyl-2-pentanone were greater than the 25% quality control limit on instrument VOA4, on 1/8/07 at 10:51. The positive and nondetected results reported for these compounds in samples TRIP BLANK (4312), OLFS4-MW15S-001, OLFS4-MW04D-001, OLFS4-MW33S-001, and OLFS4-MW30S-001 were qualified as estimated (J) and (UJ), respectively. Positive acetone results were qualified due to blank contamination and did not require further qualification.

The continuing calibration %Ds for acrolein, chloromethane, methyl acetate, and vinyl acetate were greater than the 25% quality control limit on instrument VOA4, on 1/10/07 at 9:55. No further actions were taken for acrolein as these results were rejected due to more severe calibration noncompliances. The positive and nondetected results reported for the remaining compounds in samples OLFS4-MW01D2-001, OLFS4-MW02D-001, OLFS4-MW09S-001, OLFS4-MW14D-001, OLFS4-MW21S-001, OLFS4-MW24S-001, OLFS4-MW25S-001, OLFS4-MW26D-001, OLFS4-MW27S-001, OLFS4-MW29D-001, OLFS4-MW35S-001, OLFS4-MW36S-001, TRIP BLANK, and TRIP BLANK (4313) were qualified as estimated (J) and (UJ), respectively. Positive acetone results were qualified due to blank contamination and did not require further qualification.

The continuing calibration %D for trans-1,4-dichloro-2-butene was greater than the 25% quality control limit on instrument VOA4, on 1/10/07 at 10:29. The nondetected results reported for this compound in samples OLFS4-MW01D2-001, OLFS4-MW02D-001, OLFS4-MW09S-001, OLFS4-MW14D-001, OLFS4-MW21S-001, OLFS4-MW24S-001, OLFS4-MW25S-001, OLFS4-MW26D-001, OLFS4-MW27S-001, OLFS4-MW29D-001, OLFS4-MW35S-001, OLFS4-MW36S-001, TRIP BLANK, and TRIP BLANK (4313) were qualified as estimated (UJ).

The continuing calibration %Ds for chloromethane and methyl acetate were greater than the 25% quality control limit on instrument VOA4, on 1/10/07 at 22:06. The positive and nondetected results reported for these compounds in samples OLFS4-MW28S-001, OLFS4-MW31S-001, OLFS4-MW34S-001, OLFS4-MW35S-001-D, and OLFS4-MW32S-001 were qualified as estimated (J) and (UJ), respectively.

The Laboratory Control Samples (LCS) VBLK0110 and VBLK0110E had a Percent Recoveries (%Rs) for 2-butanone that were higher than the respective upper quality control limits. No actions were necessary as no positive results were reported for 2-butanone in any samples in this SDG.

The matrix spike/matrix spike duplicate (MS/MSD) performed on sample OLFS4-MW29D-001 had percent recoveries (%Rs) greater than the quality control limit for 2-butanone in both the MS and MSD. The compound chloromethane also had a %R greater than the upper quality control limit in the MSD. No actions were necessary as no positive results were reported for these compounds in the unspiked sample.

Sample OLFS4-MW32S-001 was reanalyzed at a 5-fold dilution due to high concentrations of m&p-xylene and o-xylene. Only results for m&p-xylene and o-xylene were reported from the dilution analysis.

SVOCs

The initial calibration RRF was less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide on instrument BNA1 on 9/11/06. Most of the related continuing calibration RRFs were also less than 0.05 for this compound. The nondetected results reported for 4-nitroquinoline-1-oxide in all samples in this SDG were rejected, qualified (UR). No positive results were reported for 4-nitroquinoline-1-oxide.

The continuing calibration run on 1/11/07 at 08:03 on instrument BNA1 yielded %Ds for aniline, benzaldehyde, caprolactam, 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol, 4-nitrophenol, isodrin, 1,3,5-trinitrobenzene, 1,4-naphthquinone, N-nitrosomorpholine, and hexachlorophene that were greater than the 25% quality control limit. Additionally the RRF for hexachlorophene was less than 0.05. The nondetected results reported for hexachlorophene was rejected in samples OLFS4-MW30S-001, OLFS4-MW29D-001, OLFS4-MW32S-001, OLFS4-MW26D-001, and OLFS-MW36S-001, qualified (UR). The nondetected results reported for aniline, benzaldehyde, caprolactam, 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol, 4-nitrophenol, isodrin, 1,3,5-trinitrobenzene, 1,4-naphthquinone, and N-nitrosomorpholine were qualified as estimated (UJ). No positive results were reported for any of these compounds, except caprolactam, in these samples. Positive caprolactam results were qualified as estimated (J).

The continuing calibration run on 1/12/07 at 09:42 on instrument BNA1 yielded %Ds for aniline, benzo(g,h,i)perylene, caprolactam, 4-nitroaniline, pyridine, 1,3,5-trinitrobenzene, methapyrilene, 3-methylcholanthrene, 1,4-naphthquinone, N-nitrosomorpholine, 1,4-phenylenediamine, and hexachlorophene that were greater than the 25% quality control limit. Additionally the RRF for hexachlorophene was less than 0.05. The nondetected results reported for hexachlorophene was rejected in samples OLFS4-MW01D2-001, OLFS4-MW02D-001, OLFS4-MW09S-001, OLFS4-MW14D-001, OLFS4-MW21S-001, OLFS4-MW24S-001, OLFS4-MW25S-001, OLFS4-MW27S-001, OLFS4-MW28S-001, OLFS4-MW31S-001, OLFS4-MW34S-001, OLFS4-MW35S-001, and OLFS4-MW35S-001-D qualified (UR). The nondetected results reported for aniline, benzo(g,h,i)perylene, caprolactam, 4-nitroaniline, pyridine, 1,3,5-trinitrobenzene, methapyrilene, 3-methylcholanthrene, 1,4-naphthquinone, and N-nitrosomorpholine were qualified as estimated (UJ). No positive results were reported for any of these compounds in these samples.

The continuing calibration run on 1/16/07 at 09:44 on instrument BNA1 yielded %Ds for aniline, benzaldehyde, carbazole, hexachlorocyclopentadiene, 4-nitroaniline, 2-acetylaminofluorene, isodrin, 1,4-naphthquinone, N-nitrosomorpholine, 4-nitroquinoline-1-oxide, hexachloropene, and a,a-dimethylphenethylamine that were greater than the 25% quality control limit. The nondetected results reported for aniline, benzaldehyde, carbazole, hexachlorocyclopentadiene, 4-nitroaniline, 2-acetylaminofluorene, isodrin, 1,4-naphthquinone, N-nitrosomorpholine, hexachlorophene, and a,a-dimethylphenethylamine were qualified as estimated (UJ). No positive results were reported for any of these compounds in these samples. All 1,4-nitroquinoline-1-oxide results were qualified due to a more severe calibration noncompliance an did not require further qualification.

The MS/MSD performed on sample OLFS4-MW29D-001 had percent recoveries (%Rs) greater than the quality control limit for aniline and 3,3'-dichlorobenzidine in the MS. No actions were necessary as no positive results were reported for these compounds in the unspiked sample.

The LCS SBLK0109 had %Rs for aniline and 3,3'-dichlorobenzidine that were higher than the respective upper quality control limits. No actions were necessary as no positive results were reported for these compounds in any samples in this SDG.

The LCS SBLK0110 had a %R for aniline that was higher than the respective upper quality control limit. No actions were necessary as no positive results were reported for this compound in any samples in this SDG.

The internal standard area for perylene-d12 was low in sample OLFS4-MW04D-100MS. The internal standard

areas were compliant in the unspiked sample and the MSD. No actions were warranted as this is a quality control sample which is not qualified.

PAHs

The LCS SBLK0112 yielded low %Rs for acenaphthene, acenapthylene, anthracene, fluorene, 2-methylnaphthalene, 1-methylnapthalene, naphthalene, and phenanthrene. Only nondetected results were reported for these compounds in the affected samples and these nondetects were qualified as estimated (UJ). Samples OLFS4-MW09S-001RE, OLFS-MW24S-001RE, OLFS4-MW27S-001RE, OLFS-MW21S-001RE, OLFS4-MW14D-001RE, OLFS4-MW35S-001RE, OLFS4-MW35S-001-DRE, OLFS4-MW34S-001RE, and OLFS4-MW28S-001RE were affected.

The surrogate percent recoveries (%Rs) for terphenyl-d14 were low in samples OLFS4-MW09S-001, OLFS4-MW24S-001, OLFS4-MW21S-001, OLFS-MW35S-001-D, OLFS4-MW34S-001. These samples were re-extracted and reanalyzed and yielded improved surrogate recoveries in all samples except OLFSMW34S-001RE which was similar to the original analysis. No actions were warranted as the reanalyses were used for validation and in sample OLFS-MW34S-001 there was only one fractional surrogate noncompliance.

The surrogate %Rs for 2-fluorobiphenyl and terphenyl-d14 were low in samples OLFS4-MW27S-001, OLFS4-MW14D-001, and OLFS-MW35S-001. These samples were reanalyzed and yielded improved surrogate recoveries in all, however one surrogate 2-fluorobiphenyl was still noncompliant. The reanalyses were used for validation and no actions were warranted as there was only one fractional surrogate noncompliance in the reanalyses.

All three surrogate %Rs for were low in sample OLFS4-MW28S-001. This sample was re-extracted and reanalyzed and yielded improved surrogate recoveries. However, one surrogate, 2-fluorobiphenyl was still noncompliant. The reanalysis were used for validation and no actions were warranted as there was only one fractional surrogate noncompliance in the reanalysis.

Sample OLFS4-MW31S-001 was reanalyzed at a 5-fold dilution due to a high concentration of naphthalene. Only the naphthalene result was reported and from the dilution analysis and it was qualified as estimated (J) because naphthalene was still in excess of the calibration range but the lab did not further dilute the sample. The remaining compound results in this sample were reported from the original undiluted analysis.

Sample OLFS4-MW32S-001 was reanalyzed at a 10-fold dilution due to a high concentration of naphthalene. Only the naphthalene result was reported and from the dilution analysis and it was qualified as estimated (J) because naphthalene was still in excess of the calibration range but the lab did not further dilute the sample. The remaining compound results in this sample were reported from the original undiluted analysis.

PCBs

No noncompliances were noted.

TPH

The surrogate recovery for ortho-terphenyl was high in OLFS4-MW21S-001. No action was warranted as TPH was not detected in this sample and nondetects are not impacted by this noncompliance.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated (J), due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Several VOC and SVOC compounds had failed RRFs resulting in rejection of data. Several VOC, SVOC, and PCB compounds had noncompliant calibration %Ds. Various surrogate and internal standard noncompliances were noted.

**Other Factors Affecting Data Quality:** None were noted.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99) and the Department of Defense (DoD) Quality Systems Manual (QSM) (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Kelly A. Carper
Environmental Scientist

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW01D2-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-02 | lab_id | 0701033-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.49 | J | P |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW09S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 4.3 | | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW09S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW09S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW14D-001 | | nsample | OLFS4-MW14D-001 | | nsample | OLFS4-MW14D-001 | |
| samp_date | 1/8/2007 | | samp_date | 1/8/2007 | | samp_date | 1/8/2007 | |
| lab_id | 0701033-08 | | lab_id | 0701033-08 | | lab_id | 0701033-08 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |
| Parameter | Result | Val Qual / Qual Code | Parameter | Result | Val Qual / Qual Code | Parameter | Result | Val Qual / Qual Code |
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | CHLOROBENZENE | 0.28 | U | TRICHLOROETHENE | 0.28 | U |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | CHLORODIBROMOMETHANE | 0.08 | U | TRICHLOROFLUOROMETHANE | 0.15 | U |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | CHLOROETHANE | 0.38 | U | VINYL ACETATE | 1.3 | UJ C |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | CHLOROFORM | 0.34 | J P | VINYL CHLORIDE | 0.19 | U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | CHLOROMETHANE | 0.4 | UJ C | | | |
| 1,1-DICHLOROETHANE | 0.15 | U | CHLOROPRENE | 0.2 | U | | | |
| 1,1-DICHLOROETHENE | 0.42 | U | CIS-1,2-DICHLOROETHENE | 0.44 | U | | | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | CIS-1,3-DICHLOROPROPENE | 0.13 | U | | | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | CYCLOHEXANE | 0.18 | U | | | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | DIBROMOMETHANE | 0.14 | U | | | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | DICHLORODIFLUOROMETHANE | 0.24 | U | | | |
| 1,2-DIBROMOETHANE | 0.0076 | U | ETHYL METHACRYLATE | 0.21 | U | | | |
| 1,2-DICHLOROBENZENE | 0.17 | U | ETHYLBENZENE | 0.14 | U | | | |
| 1,2-DICHLOROETHANE | 0.15 | U | ISOBUTANOL | 0.2 | UR C | | | |
| 1,2-DICHLOROPROPANE | 0.18 | U | ISOPROPYLBENZENE | 0.25 | U | | | |
| 1,3-DICHLOROBENZENE | 0.21 | U | METHACRYLONITRILE | 0.2 | U | | | |
| 1,4-DICHLOROBENZENE | 0.12 | U | METHYL ACETATE | 0.87 | UJ C | | | |
| 1,4-DIOXANE | 0.2 | UR C | METHYL CYCLOHEXANE | 0.2 | U | | | |
| 2-BUTANONE | 1.2 | U | METHYL IODIDE | 0.19 | U | | | |
| 2-HEXANONE | 0.83 | U | METHYL METHACRYLATE | 0.35 | U | | | |
| 3-CHLOROPROPENE | 0.2 | U | METHYL TERT-BUTYL ETHER | 0.17 | U | | | |
| 4-METHYL-2-PENTANONE | 1.4 | U | METHYLENE CHLORIDE | 0.26 | U | | | |
| ACETONE | 1.1 | U | M-XYLENE | 0.44 | J P | | | |
| ACETONITRILE | 0.2 | UR C | O-XYLENE | 0.21 | U | | | |
| ACROLEIN | 4.1 | UR C | PROPIONITRILE | 0.2 | UR C | | | |
| ACRYLONITRILE | 0.95 | U | STYRENE | 0.22 | U | | | |
| BENZENE | 12 | | TETRACHLOROETHENE | 0.14 | U | | | |
| BROMODICHLOROMETHANE | 0.24 | U | TOLUENE | 0.18 | U | | | |
| BROMOFORM | 0.24 | U | TOTAL XYLENES | 0.41 | J P | | | |
| BROMOMETHANE | 0.33 | U | TRANS-1,2-DICHLOROETHENE | 0.4 | U | | | |
| CARBON DISULFIDE | 0.13 | U | TRANS-1,3-DICHLOROPROPENE | 0.22 | U | | | |
| CARBON TETRACHLORIDE | 0.14 | U | TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ C | | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 4.2 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.26 | J | P |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.54 | J | P |
| CHLOROMETHANE | 0.55 | J | CP |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.2 | J | P |
| TOLUENE | 0.23 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 48 | | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.36 | J | P |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW21S-001 |
| samp_date | 1/7/2007 | samp_date | 1/7/2007 | samp_date | 1/7/2007 |
| lab_id | 0701033-07 | lab_id | 0701033-07 | lab_id | 0701033-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 2.4 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.5 | J | CP |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW24S-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-05 | lab_id | 0701033-05 | lab_id | 0701033-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.43 | J | P |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.34 | J | P |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW25S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW25S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.61 | J | O |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW25S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW26D-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-04 | lab_id | 0701028-04 | lab_id | 0701028-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.42 | J | CP |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |
| TRICHLOROETHENE | 0.28 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW26D-001-R |
| samp_date | 1/5/2007 |
| lab_id | 0701028-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |

| | |
|---|---|
| nsample | OLFS4-MW27S-001 |
| samp_date | 1/7/2007 |
| lab_id | 0701033-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 7.9 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW27S-001 |
| samp_date | 1/7/2007 |
| lab_id | 0701033-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW27S-001 |
| samp_date | 1/7/2007 |
| lab_id | 0701033-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 2.1 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW29D-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 3.7 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| | |
|---|---|
| nsample | OLFS4-MW29D-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.35 | J | P |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |
| TRICHLOROETHENE | 0.28 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW29D-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW29D-001-R |
| samp_date | 1/5/2007 |
| lab_id | 0701028-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |

| | |
|---|---|
| nsample | OLFS4-MW30S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 2.5 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/4/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701021-04 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.76 | J | P |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 39 | | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 1.4 | | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.71 | J | P |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.66 | J | P |
| TRANS-1,2-DICHLOROETHENE | 3.2 | | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 14 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.2 | J | P |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW31S-001 | nsample | OLFS4-MW31S-001 | nsample | OLFS4-MW32S-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-06 | lab_id | 0701028-06 | lab_id | 250567208 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.27 | J | P |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 35 | | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 28 | | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 1.2 | | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 25 | | |
| O-XYLENE | 0.32 | J | P |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.25 | J | P |
| TOTAL XYLENES | 24 | | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| M-XYLENE | 560 | | |
| O-XYLENE | 220 | | |
| TOTAL XYLENES | 840 | | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW32S-001-R | nsample | OLFS4-MW32S-001-R | nsample | OLFS4-MW33S-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/4/2007 |
| lab_id | 0701028-02 | lab_id | 0701028-02 | lab_id | 0701021-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.85 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 | U | |
| 1,1-DICHLOROETHANE | 0.75 | U | |
| 1,1-DICHLOROETHENE | 2.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.4 | U | |
| 1,2-DICHLOROBENZENE | 0.85 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 1 | U | |
| 4-METHYL-2-PENTANONE | 7.2 | U | |
| ACETONE | 16 | U | A |
| ACETONITRILE | 1 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 4.8 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 1.2 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 1.6 | U | |
| CARBON DISULFIDE | 0.65 | U | |
| CARBON TETRACHLORIDE | 0.7 | U | |
| CHLOROBENZENE | 1.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.4 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 1 | U | |
| CIS-1,2-DICHLOROETHENE | 2.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 4.2 | J | P |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 110 | | |
| ISOBUTANOL | 1 | UR | C |
| ISOPROPYLBENZENE | 80 | | |
| METHACRYLONITRILE | 1 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 16 | | |
| METHYL IODIDE | 0.95 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 1.3 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.7 | U | |
| TOLUENE | 4.8 | J | P |
| TRANS-1,2-DICHLOROETHENE | 2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 1.1 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |
| TRICHLOROETHENE | 1.4 | U | |
| TRICHLOROFLUOROMETHANE | 0.75 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.95 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 1.1 | UJ | C |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW34S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 2.9 | U | A |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW34S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.97 | J | P |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.58 | J | P |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW34S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW35S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-09 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.5 | U | B |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW35S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-09 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW35S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-09 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW35S-001-D |
| samp_date | 1/8/2007 |
| lab_id | 0701033-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW35S-001-D |
| samp_date | 1/8/2007 |
| lab_id | 0701033-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW35S-001-D |
| samp_date | 1/8/2007 |
| lab_id | 0701033-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |
| TRICHLOROETHENE | 0.28 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.16 | J | P |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-001-R |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | Trip Blank |
| samp_date | 1/6/2007 |
| lab_id | 0701033-13 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank |
| samp_date | 1/6/2007 |
| lab_id | 0701033-13 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |
| TRICHLOROETHENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank |
| samp_date | 1/6/2007 |
| lab_id | 0701033-13 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | Trip Blank (4312) |
| samp_date | 1/4/2007 |
| lab_id | 0701021-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | UJ | C |
| ACETONE | 6.7 | J | CP |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank (4312) |
| samp_date | 1/4/2007 |
| lab_id | 0701021-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |
| TRICHLOROETHENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank (4312) |
| samp_date | 1/4/2007 |
| lab_id | 0701021-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | Trip Blank (4313) |
| samp_date | 1/5/2007 |
| lab_id | 0701028-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 0.2 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 6.7 | J | P |
| ACETONITRILE | 0.2 | UR | C |
| ACROLEIN | 4.1 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |
| CHLOROBENZENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank (4313) |
| samp_date | 1/5/2007 |
| lab_id | 0701028-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 0.2 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | UJ | C |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | UJ | C |
| TRICHLOROETHENE | 0.28 | U | |

| | |
|---|---|
| nsample | Trip Blank (4313) |
| samp_date | 1/5/2007 |
| lab_id | 0701028-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | UJ | C |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW01D2-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-02 | lab_id | 0701033-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 47 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.6 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.4 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.52 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | UR | C |
| HEXACHLOROPROPENE | 4.4 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW01D2-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.89 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.4 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.4 | U | |
| PENTACHLOROETHANE | 4.4 | U | |
| PENTACHLORONITROBENZENE | 4.4 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW02D-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | U | |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | UJ | C |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | UJ | C |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | U | |
| HEXACHLOROPROPENE | 4.2 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW04D-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW09S-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-04 | lab_id | 0701033-04 | lab_id | 0701033-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.4 | UJ | C |
| 1,3-DINITROBENZENE | 3.4 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.3 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 48 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.3 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.7 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.3 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.6 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.54 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | UR | C |
| HEXACHLOROPROPENE | 4.6 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.3 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW09S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.91 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.6 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.4 | U | |
| O-TOLUIDINE | 4.6 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.6 | U | |
| PENTACHLOROETHANE | 4.6 | U | |
| PENTACHLORONITROBENZENE | 4.6 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW14D-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-08 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.6 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 46 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW14D-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-08 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.4 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW14D-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-08 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.3 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.51 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 27 | UR | C |
| HEXACHLOROPROPENE | 4.3 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW14D-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-08 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.87 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.3 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.3 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.3 | U | |
| PENTACHLOROETHANE | 4.3 | U | |
| PENTACHLORONITROBENZENE | 4.3 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | U | |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | UJ | C |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 47 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

# PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.6 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 3.6 | J | P |

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.4 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.52 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | UJ | C |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | U | |
| HEXACHLOROPROPENE | 4.4 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW15S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.89 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.4 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.4 | U | |
| PENTACHLOROETHANE | 4.4 | U | |
| PENTACHLORONITROBENZENE | 4.4 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW21S-001 |
| samp_date | 1/7/2007 | samp_date | 1/7/2007 | samp_date | 1/7/2007 |
| lab_id | 0701033-07 | lab_id | 0701033-07 | lab_id | 0701033-07 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3 | UJ | C |
| 1,3-DINITROBENZENE | 3 | U | |
| 1,4-NAPHTHOQUINONE | 1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | UJ | C |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 1 | U | |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 42 | U | |
| 3-METHYLCHOLANTHRENE | 1 | UJ | C |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | UJ | C |
| 4-NITROPHENOL | 5 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | U | |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | U | |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | U | |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 4 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 0.47 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 25 | UR | C |
| HEXACHLOROPROPENE | 4 | U | |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | UJ | C |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW21S-001 |
| samp_date | 1/7/2007 |
| lab_id | 0701033-07 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.8 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4 | U | |
| N-NITROSOMORPHOLINE | 1 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4 | U | |
| PENTACHLOROETHANE | 4 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | UJ | C |
| SAFROLE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW24S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.2 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.8 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.2 | U | |
| 1,3,5-TRINITROBENZENE | 3.8 | UJ | C |
| 1,3-DINITROBENZENE | 3.8 | U | |
| 1,4-NAPHTHOQUINONE | 1.2 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.2 | UJ | C |
| 1-NAPHTHYLAMINE | 1.2 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.2 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.2 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.2 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.2 | U | |
| 2,4-DICHLOROPHENOL | 1.2 | U | |
| 2,4-DIMETHYLPHENOL | 1.2 | U | |
| 2,4-DINITROPHENOL | 12 | U | |
| 2,4-DINITROTOLUENE | 1.2 | U | |
| 2,6-DICHLOROPHENOL | 1.2 | U | |
| 2,6-DINITROTOLUENE | 1.2 | U | |
| 2-ACETYLAMINOFLUORENE | 2.5 | U | |
| 2-CHLORONAPHTHALENE | 1.2 | U | |
| 2-CHLOROPHENOL | 1.2 | U | |
| 2-METHYLNAPHTHALENE | 1.2 | U | |
| 2-METHYLPHENOL | 1.2 | U | |
| 2-NAPHTHYLAMINE | 1.2 | U | |
| 2-NITROANILINE | 1.2 | U | |
| 2-NITROPHENOL | 1.2 | U | |
| 2-PICOLINE | 8.8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.2 | U | |
| 3,3'-DIMETHYLBENZIDINE | 52 | U | |
| 3-METHYLCHOLANTHRENE | 1.2 | UJ | C |
| 3-METHYLPHENOL | 1.2 | U | |
| 3-NITROANILINE | 1.2 | U | |

| | |
|---|---|
| nsample | OLFS4-MW24S-001 |
| samp_date | 1/6/2007 |
| lab_id | 0701033-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.2 | U | |
| 4-AMINOBIPHENYL | 2.5 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.2 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.2 | U | |
| 4-CHLOROANILINE | 1.2 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.2 | U | |
| 4-METHYLPHENOL | 1.2 | U | |
| 4-NITROANILINE | 1.2 | UJ | C |
| 4-NITROPHENOL | 6.2 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.2 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.2 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.2 | U | |
| ACENAPHTHENE | 1.2 | U | |
| ACENAPHTHYLENE | 1.2 | U | |
| ACETOPHENONE | 1.2 | U | |
| ANILINE | 1.2 | UJ | C |
| ANTHRACENE | 1.2 | U | |
| ARAMITE | 1.2 | U | |
| ATRAZINE | 1.2 | U | |
| BENZALDEHYDE | 1.2 | U | |
| BENZO(A)ANTHRACENE | 1.2 | U | |
| BENZO(A)PYRENE | 1.2 | U | |
| BENZO(B)FLUORANTHENE | 1.2 | U | |
| BENZO(G,H,I)PERYLENE | 1.2 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.2 | U | |
| BENZYL ALCOHOL | 1.2 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.2 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.2 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.2 | U | |
| BUTYL BENZYL PHTHALATE | 1.2 | U | |
| CAPROLACTAM | 1.2 | UJ | C |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW25S-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-05 | lab_id | 0701033-05 | lab_id | 0701033-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.2 | U | |
| CHLOROBENZILATE | 1.2 | U | |
| CHRYSENE | 1.2 | U | |
| DIALLATE | 1.2 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.2 | U | |
| DIBENZOFURAN | 1.2 | U | |
| DIETHYL PHTHALATE | 1.2 | U | |
| DIMETHOATE | 5 | U | |
| DIMETHYL PHTHALATE | 1.2 | U | |
| DI-N-BUTYL PHTHALATE | 1.2 | U | |
| DI-N-OCTYL PHTHALATE | 1.2 | U | |
| DIPHENYLAMINE | 1.2 | U | |
| ETHYL METHANE SULFONATE | 1.2 | U | |
| FLUORANTHENE | 1.2 | U | |
| FLUORENE | 1.2 | U | |
| HEXACHLOROBENZENE | 0.59 | U | |
| HEXACHLOROBUTADIENE | 1.2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.2 | U | |
| HEXACHLOROETHANE | 1.2 | U | |
| HEXACHLOROPHENE | 31 | UR | C |
| HEXACHLOROPROPENE | 5 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.2 | U | |
| ISODRIN | 2.5 | U | |
| ISOPHORONE | 1.2 | U | |
| ISOSAFROLE | 1.2 | U | |
| KEPONE | 1.2 | U | |
| METHAPYRILENE | 1.2 | UJ | C |
| METHYL METHANE SULFONATE | 1.2 | U | |
| NAPHTHALENE | 1.2 | U | |
| NITROBENZENE | 1.2 | U | |
| N-NITROSODIETHYLAMINE | 1.2 | U | |
| N-NITROSODIMETHYLAMINE | 1.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.2 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 1 | U | |
| N-NITROSODIPHENYLAMINE | 1.2 | U | |
| N-NITROSOMETHYLETHYLAMINE | 5 | U | |
| N-NITROSOMORPHOLINE | 1.2 | UJ | C |
| N-NITROSOPIPERIDINE | 1.2 | U | |
| N-NITROSOPYRROLIDINE | 1.2 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.8 | U | |
| O-TOLUIDINE | 5 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.2 | U | |
| PENTACHLOROBENZENE | 5 | U | |
| PENTACHLOROETHANE | 5 | U | |
| PENTACHLORONITROBENZENE | 5 | U | |
| PENTACHLOROPHENOL | 1.2 | U | |
| PHENACETIN | 1.2 | U | |
| PHENANTHRENE | 1.2 | U | |
| PHENOL | 1.2 | U | |
| PRONAMIDE | 1.2 | U | |
| PYRENE | 1.2 | U | |
| PYRIDINE | 1.2 | UJ | C |
| SAFROLE | 1.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.1 | UJ | C |
| 1,3-DINITROBENZENE | 3.1 | U | |
| 1,4-NAPHTHOQUINONE | 1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | UJ | C |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 1 | U | |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7.3 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 44 | U | |
| 3-METHYLCHOLANTHRENE | 1 | UJ | C |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW25S-001 | | nsample | OLFS4-MW25S-001 | | nsample | OLFS4-MW25S-001 | |
| samp_date | 1/6/2007 | | samp_date | 1/6/2007 | | samp_date | 1/6/2007 | |
| lab_id | 0701033-03 | | lab_id | 0701033-03 | | lab_id | 0701033-03 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | UJ | C |
| 4-NITROPHENOL | 5.2 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | U | |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | U | |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | U | |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 0.49 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | UJ | C |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.83 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | UJ | C |
| SAFROLE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW26D-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-04 | lab_id | 0701028-04 | lab_id | 0701028-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | UJ | C |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | UJ | C |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.3 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW27S-001 |
| samp_date | 1/5/2007 | samp_date | 1/7/2007 | samp_date | 1/7/2007 |
| lab_id | 0701028-04 | lab_id | 0701033-06 | lab_id | 0701033-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UC | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | U | |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW28S-001 |
| samp_date | 1/7/2007 | samp_date | 1/7/2007 | samp_date | 1/8/2007 |
| lab_id | 0701033-06 | lab_id | 0701033-06 | lab_id | 0701033-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW29D-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-01 | lab_id | 0701028-01 | lab_id | 0701028-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | UJ | C |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 47 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | UJ | C |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.6 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.4 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.52 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | UR | C |
| HEXACHLOROPROPENE | 4.4 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW29D-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.89 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.4 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.4 | U | |
| PENTACHLOROETHANE | 4.4 | U | |
| PENTACHLORONITROBENZENE | 4.4 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW30S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3 | UJ | C |
| 1,3-DINITROBENZENE | 3 | U | |
| 1,4-NAPHTHOQUINONE | 1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | U | |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | UJ | C |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 5.5 | | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 1 | U | |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 42 | U | |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW30S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | UJ | C |
| 4-AMINOBIPHENYL | 2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | U | |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | UJ | C |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1 | UJ | C |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/4/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701021-04 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | U | |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 4 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 0.47 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 25 | UR | C |
| HEXACHLOROPROPENE | 4 | U | |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2 | UJ | C |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.8 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4 | U | |
| N-NITROSOMORPHOLINE | 1 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4 | U | |
| PENTACHLOROETHANE | 4 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | U | |
| SAFROLE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | J | P |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 7.8 | J | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.6 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 46 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW31S-001 | nsample | OLFS4-MW31S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-06 | lab_id | 0701028-06 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.4 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.3 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.51 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 27 | UR | C |
| HEXACHLOROPROPENE | 4.3 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 42 | | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.87 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.3 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.3 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.3 | U | |
| PENTACHLOROETHANE | 4.3 | U | |
| PENTACHLORONITROBENZENE | 4.3 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW32S-001 | nsample | OLFS4-MW32S-001 | nsample | OLFS4-MW32S-001 |
| samp_date | 1/5/2007 | samp_date | 1/5/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-02 | lab_id | 0701028-02 | lab_id | 0701028-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | UJ | C |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 3.2 | | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.6 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 46 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | UJ | C |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.4 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.8 | J | CP |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.3 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.51 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 27 | UR | C |
| HEXACHLOROPROPENE | 4.3 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 68 | | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW32S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.87 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.3 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.3 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.3 | U | |
| PENTACHLOROETHANE | 4.3 | U | |
| PENTACHLORONITROBENZENE | 4.3 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | U | |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | UJ | C |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.8 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 47 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.6 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.4 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.52 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | UJ | C |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | U | |
| HEXACHLOROPROPENE | 4.4 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | UJ | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW33S-001 |
| samp_date | 1/4/2007 |
| lab_id | 0701021-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.89 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.4 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.4 | U | |
| PENTACHLOROETHANE | 4.4 | U | |
| PENTACHLORONITROBENZENE | 4.4 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW34S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.6 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 46 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW34S-001 | | nsample | OLFS4-MW34S-001 | | nsample | OLFS4-MW34S-001 | |
| samp_date | 1/8/2007 | | samp_date | 1/8/2007 | | samp_date | 1/8/2007 | |
| lab_id | 0701033-11 | | lab_id | 0701033-11 | | lab_id | 0701033-11 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.4 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.3 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.51 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 27 | UR | C |
| HEXACHLOROPROPENE | 4.3 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.87 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.3 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.3 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.3 | U | |
| PENTACHLOROETHANE | 4.3 | U | |
| PENTACHLORONITROBENZENE | 4.3 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001 |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/8/2007 |
| lab_id | 0701033-09 | lab_id | 0701033-09 | lab_id | 0701033-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.1 | UJ | C |
| 1,3-DINITROBENZENE | 3.1 | U | |
| 1,4-NAPHTHOQUINONE | 1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | UJ | C |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 1 | U | |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7.3 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 44 | U | |
| 3-METHYLCHOLANTHRENE | 1 | UJ | C |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | UJ | C |
| 4-NITROPHENOL | 5.2 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1 | U | |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | U | |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1 | U | |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 0.49 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | UJ | C |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001-D | nsample | OLFS4-MW35S-001-D |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/8/2007 |
| lab_id | 0701033-09 | lab_id | 0701033-10 | lab_id | 0701033-10 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.83 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | UJ | C |
| SAFROLE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | UJ | C |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.4 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | UJ | C |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | UJ | C |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | U | |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | UJ | C |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW35S-001-D |
| samp_date | 1/8/2007 |
| lab_id | 0701033-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.5 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | UR | C |
| HEXACHLOROPROPENE | 4.2 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | UJ | C |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW35S-001-D |
| samp_date | 1/8/2007 |
| lab_id | 0701033-10 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW35S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.2 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | UJ | C |
| SAFROLE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1.1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.3 | UJ | C |
| 1,3-DINITROBENZENE | 3.3 | U | |
| 1,4-NAPHTHOQUINONE | 1.1 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | UJ | C |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.2 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 1.1 | U | |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 7.6 | U | |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 46 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | UJ | C |
| 4-AMINOBIPHENYL | 2.2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.4 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 1.1 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 1.1 | U | |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 1.1 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 1.1 | U | |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 1.1 | U | |
| DIMETHOATE | 4.3 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 0.51 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 27 | UR | C |
| HEXACHLOROPROPENE | 4.3 | U | |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.2 | UR | C |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 1.1 | U | |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.87 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 4.3 | U | |
| N-NITROSOMORPHOLINE | 1.1 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 1.1 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.3 | U | |
| O-TOLUIDINE | 4.3 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.3 | U | |
| PENTACHLOROETHANE | 4.3 | U | |
| PENTACHLORONITROBENZENE | 4.3 | U | |
| PENTACHLOROPHENOL | 1.1 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW02D-001 | nsample | OLFS4-MW04D-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-01 | lab_id | 0701021-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.016 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0085 | U | |
| ANTHRACENE | 0.0095 | U | |
| BENZO(A)ANTHRACENE | 0.01 | U | |
| BENZO(A)PYRENE | 0.0095 | U | |
| BENZO(B)FLUORANTHENE | 0.016 | U | |
| BENZO(G,H,I)PERYLENE | 0.013 | U | |
| BENZO(K)FLUORANTHENE | 0.013 | U | |
| CHRYSENE | 0.009 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.012 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.018 | U | |
| NAPHTHALENE | 0.019 | U | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.01 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0088 | U | |
| ANTHRACENE | 0.0099 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0099 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0094 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | U | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.016 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0087 | U | |
| ANTHRACENE | 0.0097 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0097 | U | |
| BENZO(B)FLUORANTHENE | 0.016 | U | |
| BENZO(G,H,I)PERYLENE | 0.013 | U | |
| BENZO(K)FLUORANTHENE | 0.013 | U | |
| CHRYSENE | 0.0092 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.018 | U | |
| NAPHTHALENE | 0.019 | U | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW14D-001 | nsample | OLFS4-MW15S-001 |
| samp_date | 1/6/2007 | samp_date | 1/8/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-04RE | lab_id | 0701033-08RE | lab_id | 0701021-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.018 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0094 | UJ | E |
| ANTHRACENE | 0.01 | UJ | E |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | UJ | E |
| PHENANTHRENE | 0.016 | UJ | E |
| PYRENE | 0.012 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.017 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.009 | UJ | E |
| ANTHRACENE | 0.01 | UJ | E |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0096 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.02 | UJ | E |
| PHENANTHRENE | 0.015 | UJ | E |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | U | |
| 2-METHYLNAPHTHALENE | 0.018 | U | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0097 | U | |
| ANTHRACENE | 0.011 | U | |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.015 | U | |
| BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.022 | U | |
| PHENANTHRENE | 0.016 | U | |
| PYRENE | 0.012 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW25S-001 |
| samp_date | 1/7/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-07RE | lab_id | 0701033-05RE | lab_id | 0701033-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.018 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0097 | UJ | E |
| ANTHRACENE | 0.011 | UJ | E |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.015 | U | |
| BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.022 | UJ | E |
| PHENANTHRENE | 0.016 | UJ | E |
| PYRENE | 0.012 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.012 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.019 | UJ | E |
| ACENAPHTHENE | 0.012 | UJ | E |
| ACENAPHTHYLENE | 0.01 | UJ | E |
| ANTHRACENE | 0.011 | UJ | E |
| BENZO(A)ANTHRACENE | 0.018 | J | P |
| BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.019 | U | |
| BENZO(G,H,I)PERYLENE | 0.015 | U | |
| BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.027 | J | P |
| DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.038 | J | P |
| FLUORENE | 0.015 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.021 | U | |
| NAPHTHALENE | 0.022 | UJ | E |
| PHENANTHRENE | 0.016 | UJ | E |
| PYRENE | 0.045 | J | P |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.15 | | |
| 2-METHYLNAPHTHALENE | 0.036 | J | P |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0092 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | U | |
| PHENANTHRENE | 0.015 | U | |
| PYRENE | 0.011 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW28S-001 |
| samp_date | 1/5/2007 | samp_date | 1/7/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-04 | lab_id | 0701033-06RE | lab_id | 0701033-12RE |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0088 | U | |
| ANTHRACENE | 0.0099 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0099 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0094 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.12 | | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.018 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0094 | UJ | E |
| ANTHRACENE | 0.01 | UJ | E |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | UJ | E |
| PHENANTHRENE | 0.016 | UJ | E |
| PYRENE | 0.012 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.018 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0097 | UJ | E |
| ANTHRACENE | 0.011 | UJ | E |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.015 | U | |
| BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.022 | UJ | E |
| PHENANTHRENE | 0.016 | UJ | E |
| PYRENE | 0.012 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-01 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0088 | U | |
| ANTHRACENE | 0.0099 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0099 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0094 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.056 | | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 1.3 | | |
| 2-METHYLNAPHTHALENE | 2.6 | | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0092 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.046 | J | P |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | U | |
| PHENANTHRENE | 0.038 | J | P |
| PYRENE | 0.04 | J | P |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 3.2 | | |
| 2-METHYLNAPHTHALENE | 5.3 | | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.86 | | |
| ANTHRACENE | 0.0098 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0098 | U | |
| BENZO(B)FLUORANTHENE | 0.016 | U | |
| BENZO(G,H,I)PERYLENE | 0.013 | U | |
| BENZO(K)FLUORANTHENE | 0.013 | U | |
| CHRYSENE | 0.0093 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.018 | U | |
| NAPHTHALENE | 44 | J | L |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW32S-001 | nsample | OLFS4-MW33S-001 | nsample | OLFS4-MW34S-001 RE |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-02 | lab_id | 0701021-05 | lab_id | 0701033-11RE |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 1.1 | | |
| 2-METHYLNAPHTHALENE | 2.5 | | |
| ACENAPHTHENE | 0.014 | J | P |
| ACENAPHTHYLENE | 0.0092 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.028 | J | P |
| FLUORENE | 0.015 | J | P |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 79 | J | L |
| PHENANTHRENE | 0.037 | J | P |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.01 | U | |
| 2-METHYLNAPHTHALENE | 0.016 | U | |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0085 | U | |
| ANTHRACENE | 0.0095 | U | |
| BENZO(A)ANTHRACENE | 0.01 | U | |
| BENZO(A)PYRENE | 0.0095 | U | |
| BENZO(B)FLUORANTHENE | 0.016 | U | |
| BENZO(G,H,I)PERYLENE | 0.013 | U | |
| BENZO(K)FLUORANTHENE | 0.013 | U | |
| CHRYSENE | 0.009 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.012 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.018 | U | |
| NAPHTHALENE | 0.019 | U | |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.01 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.017 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0092 | UJ | E |
| ANTHRACENE | 0.01 | UJ | E |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.041 | J | P |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | UJ | E |
| PHENANTHRENE | 0.015 | UJ | E |
| PYRENE | 0.012 | J | P |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001-D | nsample | OLFS4-MW36S-001 |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/5/2007 |
| lab_id | 0701033-09RE | lab_id | 0701033-10RE | lab_id | 0701028-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.017 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0092 | UJ | E |
| ANTHRACENE | 0.01 | UJ | E |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | UJ | E |
| PHENANTHRENE | 0.015 | UJ | E |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | UJ | E |
| 2-METHYLNAPHTHALENE | 0.017 | UJ | E |
| ACENAPHTHENE | 0.011 | UJ | E |
| ACENAPHTHYLENE | 0.0092 | UJ | E |
| ANTHRACENE | 0.01 | UJ | E |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.014 | UJ | E |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.021 | UJ | E |
| PHENANTHRENE | 0.015 | UJ | E |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.011 | U | |
| 2-METHYLNAPHTHALENE | 0.017 | U | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0092 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.014 | U | |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.1 | | |
| PHENANTHRENE | 0.015 | U | |
| PYRENE | 0.011 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW02D-001 | nsample | OLFS4-MW04D-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-01 | lab_id | 0701021-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW14D-001 | nsample | OLFS4-MW15S-001 |
| samp_date | 1/6/2007 | samp_date | 1/8/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-04 | lab_id | 0701033-08 | lab_id | 0701021-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW25S-001 |
| samp_date | 1/7/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-07 | lab_id | 0701033-05 | lab_id | 0701033-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.15 | U | |
| AROCLOR-1221 | 0.15 | U | |
| AROCLOR-1232 | 0.15 | U | |
| AROCLOR-1242 | 0.15 | U | |
| AROCLOR-1248 | 0.15 | U | |
| AROCLOR-1254 | 0.15 | U | |
| AROCLOR-1260 | 0.15 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26D-001 | nsample | OLFS4-MW27S-001 | nsample | OLFS4-MW28S-001 |
| samp_date | 1/5/2007 | samp_date | 1/7/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-04 | lab_id | 0701033-06 | lab_id | 0701033-12 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-01 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW32S-001 | nsample | OLFS4-MW33S-001 | nsample | OLFS4-MW34S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-02 | lab_id | 0701021-05 | lab_id | 0701033-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001-D | nsample | OLFS4-MW36S-001 |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/5/2007 |
| lab_id | 0701033-09 | lab_id | 0701033-10 | lab_id | 0701028-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.12 | U | |
| AROCLOR-1221 | 0.12 | U | |
| AROCLOR-1232 | 0.12 | U | |
| AROCLOR-1242 | 0.12 | U | |
| AROCLOR-1248 | 0.12 | U | |
| AROCLOR-1254 | 0.12 | U | |
| AROCLOR-1260 | 0.12 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW01D2-001 | nsample | OLFS4-MW02D-001 | nsample | OLFS4-MW04D-001 |
| samp_date | 1/6/2007 | samp_date | 1/6/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-02 | lab_id | 0701033-01 | lab_id | 0701021-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.17 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW09S-001 | nsample | OLFS4-MW14D-001 | nsample | OLFS4-MW15S-001 |
| samp_date | 1/6/2007 | samp_date | 1/8/2007 | samp_date | 1/4/2007 |
| lab_id | 0701033-04 | lab_id | 0701033-08 | lab_id | 0701021-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.19 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.33 | J | P |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW21S-001 | nsample | OLFS4-MW24S-001 | nsample | OLFS4-MW25S-001 |
| samp_date | 1/7/2007 | samp_date | 1/6/2007 | samp_date | 1/6/2007 |
| lab_id | 0701033-07 | lab_id | 0701033-05 | lab_id | 0701033-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.21 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.19 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.17 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | |
|---|---|
| nsample | OLFS4-MW26D-001 |
| samp_date | 1/5/2007 |
| lab_id | 0701028-04 |
| qc_type | NM |
| units | MG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| | |
|---|---|
| nsample | OLFS4-MW27S-001 |
| samp_date | 1/7/2007 |
| lab_id | 0701033-06 |
| qc_type | NM |
| units | MG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| | |
|---|---|
| nsample | OLFS4-MW28S-001 |
| samp_date | 1/8/2007 |
| lab_id | 0701033-12 |
| qc_type | NM |
| units | MG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW29D-001 | nsample | OLFS4-MW30S-001 | nsample | OLFS4-MW31S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/5/2007 |
| lab_id | 0701028-01 | lab_id | 0701021-04 | lab_id | 0701028-06 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 3.7 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 8.9 | | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW32S-001 | nsample | OLFS4-MW33S-001 | nsample | OLFS4-MW34S-001 |
| samp_date | 1/5/2007 | samp_date | 1/4/2007 | samp_date | 1/8/2007 |
| lab_id | 0701028-02 | lab_id | 0701021-05 | lab_id | 0701033-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 6.3 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.19 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW003 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-001 | nsample | OLFS4-MW35S-001-D | nsample | OLFS4-MW36S-001 |
| samp_date | 1/8/2007 | samp_date | 1/8/2007 | samp_date | 1/5/2007 |
| lab_id | 0701033-09 | lab_id | 0701033-10 | lab_id | 0701028-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW35S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **MARCH 16, 2007** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |

**SUBJECT:** **ORGANIC DATA VALIDATION – VOC/SVOC/PCB/PRO**
**SAUFLEY – CTO 029**
**SDG – SAUFLEYS001**

**SAMPLES:** 9/Soil/

| | | |
|---|---|---|
| OLFS4-MW25-S-40 | OLFS4-MW26-S-25 | OLFS4-MW33S-26 |
| OLFS4-MW33S-5 | OLFS4-MW35S-29 | OLFS4-MW36S-25 |
| OLFS4-SB2-S-26 | OLFS4-SB3-S-26 | OLFS4-SB6-S-16 |

1/Aqueous/

Trip Blank 4307

Overview

The sample set for Saufley, CTO 029, SDG SAUFLEYS001, consists of nine soil environmental samples and one aqueous trip blank.

Every sample except for the trip blank was analyzed for target compound list (TCL) and appendix IX volatile organic compounds (VOC), TCL and appendix IX semi-volatile organic compounds (SVOC) and petroleum range organics (PRO). The trip blank was only analyzed for VOCs. Samples OLFS4-MW25-S-40 and OLFS4-MW26-S-25 were analyzed for polychlorinated biphenyls (PCB). The samples were collected by Tetra Tech NUS on December 7, 14, 15, 2006 and analyzed by Empirical Laboratories, LLC. VOC, SVOC and PCB analyses were conducted according to SW-846 Methods 8260B, 8270C and 8082, respectively. PRO analyses were conducted according to the Florida Petroleum Range Organics Method (FL-PRO).

VOC/SVOC, PCB, and PRO analyses were conducted using gas chromatography (GC) mass spectrometry (MS), GC/electron capture detector (ECD) and GC/flame ionization detector (FID) methodologies, respectively.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • GC/MS Tuning
  • Initial and Continuing Calibration
* • Blank Results
* • Surrogate Spike Recoveries
  • Blank Spike/Blank Spike Duplicate Results
  • Detection Limits
* • Compound Quantitation
  • Compound Identification

The (*) symbol indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

The following compounds were detected in the method blanks at the maximum concentrations listed below:

| Compound | Maximum Concentration | Blank Action Level |
|---|---|---|
| Acetone | 6.60 µg/kg | 66.0 µg/kg |
| 1,2,3-Trichlorobenzene | 0.71 µg/kg | 3.55 µg/kg |
| 1,2,4-Trichlorobenzene | 0.58 µg/kg | 2.90 µg/kg |

An action level of 10X the maximum contaminant concentration was established to evaluate the common laboratory contaminate acetone. An action level of 5X the maximum contaminate concentration was established to evaluate laboratory contamination for all other compounds. Acetone was qualified due to laboratory blank contamination.

The initial calibration relative response factors (RRFs) for 1,4-dioxane and isobutyl alcohol on instrument VOA1 on 10/24/06 were less than 0.05 affecting all soil samples. The non-detected results reported for 1,4-dioxane and isobutyl alcohol were qualified as unusable, "UR". All continuing calibration verification RRFs were less than 0.05 on instrument VOA1 for the aforementioned compounds.

The initial calibration RRF for acrolein on instrument VOA4 on 10/23/06 was less than 0.05 affecting Trip Blank 4307. The non-detected result reported for acrolein in TRIP BLANK 4307 was qualified as unusable, "UR".

The initial calibration RRFs for acetonitrile, 1,4-dioxane, isobutyl alcohol and propionitrile on instrument VOA4 on 10/24/06 was less than 0.05 affecting Trip Blank 4307. The non-detected results reported for the aforementioned compounds in TRIP BLANK 4307 were qualified as unusable, "UR".

The continuing calibration RRFs for acrolein, acetonitrile, 1,4-dioxane, isobutyl alcohol and propionitrile on instrument VOA4 on 12/27/06 at 9:35 and 10:29 were > 25 % affecting TRIP BLANK 4307. The non-detected results reported for the aforementioned compounds in TRIP BLANK 4307 were qualified as unusable, "UR".

The continuing calibration percent difference (%D) for methyl iodide on 12/16/06 at 11:00 was > 25% affecting samples OLFS4-MW25-S-40 and OLFS4-MW26-S-25. The non-detected results reported for methyl iodide in the aforementioned samples were qualified as estimated, "UJ".

The continuing calibration %Ds for acetone and methyl iodide on 12/27/06 at 11:42 were > 25% affecting samples OLFS4-MW33S-26, OLFS4-MW35S-29, OLFS4-MW36S-25, OLFS4-SB2-S-26, OLFS4-SB3-S-26 and OLFS4-SB6-S-16. The non-detected results reported for methyl iodide were qualified as estimated, "UJ". No validation action was taken upon acetone as all acetone results were previously qualified due to laboratory blank contamination.

The continuing calibration %Ds for acetone and 2-hexanone on 12/28/06 at 10:41 were > 25% affecting sample OLFS4-MW33S-5. The non-detected results reported for 2-hexanone were qualified as estimated, "UJ". No validation action was taken upon acetone because those results were previously qualified due to laboratory blank contamination.

The laboratory control sample duplicate (LCSD) percent recovery for acetone in sample V1PBLK1227 was greater than the upper quality control limit. No validation action was taken because the laboratory control sample (LCS) V1PBLK1227 yielded a percent recovery for acetone that was within quality control limits and all acetone results were previously qualified due to laboratory blank contamination.

The compounds trans-1,3-dichloropropene and 1,2,3-trichloropropane yielded percent recoveries greater than the respective upper quality control limits for LCS (V1PBLK1228). No validation action was taken because all results reported for the aforementioned compounds were non-detected.

The surrogate recovery for bromofluorobeneze (BFB) in sample OLFS4-MW33S-5 exceeded the upper quality control limit. Positive results reported for sample OLFS4-MW33S-5 were qualified as estimated, "J". Non-detected results are not affected by high surrogate recoveries.

Semivolatiles

The continuing calibration RRF for 4-nitroquinoline-1-oxide on 01/02/07 was less than 0.05 affecting all soil samples. The non-detected results reported for 4-nitroquinoline-1-oxide in the soil samples were qualified as unusable, "UR".

The continuing calibration %Ds for aniline, carbazole, 4-chloroaniline, 2,4-dinitrophenol, 2-nitroaniline, 3-nitroaniline and 4-nitrophenol on 01/02/07 at 08:38 were > 25% affecting all soil samples. The non-detected results reported for the aforementioned compounds were qualified as estimated, "UJ".

The continuing calibration %D for 1,3,5-trinitrobenzene on 01/02/07 at 09:13 was > 25% affecting all soil samples. The non-detected results reported for 1,3,5-trinitrobenzene were qualified as estimated, "UJ".

The continuing calibration %Ds for aramite, diallate, 3,3'-dimethylbenzidine, 1,4-naphthoquinone and N-nitrosomorpholine on 01/02/07 at 09:49 were > 25% affecting all soil samples. The non-detected results reported for the aforementioned compounds were qualified as estimated, "UJ".

The continuing calibration %Ds for 1,4-phenylenediamine and alpha, alpha-dimethyl-phenethylamine on 01/02/07 at 10:24 were > 25% affecting all soil samples. The non-detected results reported for 1,4-phenylenediamine were qualified as estimated, "UJ".

The LCS percent recovery for anthracene in sample SBLK1221BS1 was greater than the upper quality control limit affecting all soil samples. No validation action was taken because all anthracene results were reported as non-detected.

The LCS and LCSD percent recoveries for benzaldehyde in sample SBLK1221BS1 were less than 10% affecting all soil samples. All of the non-detected results reported for benzaldehyde were qualified as rejected, "UR".

The LCS and LCSD percent recoveries for caprolactam in sample SBLK1221BS1 were greater than the upper quality control limit affecting all soil samples. No validation action was taken because the positive result reported for caprolactum in sample OLFS4-MW33S-5 was qualified as rejected, "R", due to false identification and the remaining caprolactum results were reported as non-detected.

The LCSD percent recoveries for 4-chlorophenyl-phenylether, chrysene, 2,4-dinitrotoluene, 2,4,5-trichlorophenol and 2,4,6-trichlorophenolin in sample SBLK1221BS1 were greater than the respective upper quality control limits of those compounds. No validation action was taken because all results reported for the aforementioned compounds were non-detected.

The positive caprolactum result reported for sample OLFS4-MW33S-5 was qualified as rejected, "R", because inspection of mass spectra revealed that this target compound was incorrectly identified.

Polychlorinated Biphenyls

No data was qualified.

Petroleum Range Organics

No data was qualified.

Additional Comments

Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated, "J".

Originally, non-detected results for all fractions were incorrectly reported at Reporting Limits (RL) rather than Method Detection Limits (MDL) in the database. The database was corrected by a database specialist.

Executive Summary

**Laboratory Performance:** Acetone was qualified due to laboratory blank contamination. Several VOC and SVOC compounds were qualified due to calibration noncompliance. Benzaldehyde was qualified due to LCS noncompliance. A positive result for caprolactum was rejected due to false identification in one sample.

**Other Factors Affecting Data Quality:** Several compounds were qualified due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Data Review", October 1999, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Environmental Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

## PROJ_NO: 00389

SDG: SAUFLEYS001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | TRIPBLANK 4307 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.14 | U | |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 1 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 6.1 | J | P |
| ACETONITRILE | 1 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | TRIPBLANK 4307 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.08 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.3 | U | |
| CHLOROMETHANE | 0.4 | U | |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 1 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.28 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 0.2 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | TRIPBLANK 4307 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-12 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW25-S-40 | nsample | OLFS4-MW25-S-40 | nsample | OLFS4-MW25-S-40 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612084-02 | lab_id | 0612084-02 | lab_id | 0612084-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 88.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.42 | U | |
| 1,1,1-TRICHLOROETHANE | 1.2 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.57 | U | |
| 1,1,2-TRICHLOROETHANE | 0.46 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.73 | U | |
| 1,1-DICHLOROETHANE | 0.72 | U | |
| 1,1-DICHLOROETHENE | 1.6 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.56 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.93 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.24 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.6 | U | |
| 1,2-DIBROMOETHANE | 0.57 | U | |
| 1,2-DICHLOROBENZENE | 0.49 | U | |
| 1,2-DICHLOROETHANE | 0.61 | U | |
| 1,2-DICHLOROPROPANE | 0.61 | U | |
| 1,3-DICHLOROBENZENE | 1.1 | U | |
| 1,4-DICHLOROBENZENE | 0.73 | U | |
| 1,4-DIOXANE | 66 | UR | C |
| 2-BUTANONE | 1.8 | U | |
| 2-HEXANONE | 3 | U | |
| 3-CHLOROPROPENE | 0.66 | U | |
| 4-METHYL-2-PENTANONE | 0.77 | U | |
| ACETONE | 15 | U | A |
| ACETONITRILE | 0.66 | U | |
| ACROLEIN | 6.9 | U | |
| ACRYLONITRILE | 1.8 | U | |
| BENZENE | 0.62 | U | |
| BROMODICHLOROMETHANE | 0.4 | U | |
| BROMOFORM | 1.3 | U | |
| BROMOMETHANE | 0.95 | U | |
| CARBON DISULFIDE | 1.7 | U | |
| CARBON TETRACHLORIDE | 1.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 3.3 | U | |
| CHLORODIBROMOMETHANE | 0.45 | U | |
| CHLOROETHANE | 1.4 | U | |
| CHLOROFORM | 0.73 | U | |
| CHLOROMETHANE | 0.69 | U | |
| CHLOROPRENE | 0.66 | U | |
| CIS-1,2-DICHLOROETHENE | 1.6 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.66 | U | |
| CYCLOHEXANE | 0.72 | U | |
| DIBROMOMETHANE | 0.54 | U | |
| DICHLORODIFLUOROMETHANE | 1.4 | U | |
| ETHYL METHACRYLATE | 0.34 | U | |
| ETHYLBENZENE | 0.99 | U | |
| ISOBUTANOL | 66 | UR | C |
| ISOPROPYLBENZENE | 1.2 | U | |
| METHACRYLONITRILE | 0.66 | U | |
| METHYL ACETATE | 2.1 | U | |
| METHYL CYCLOHEXANE | 0.4 | U | |
| METHYL IODIDE | 1.1 | UJ | C |
| METHYL METHACRYLATE | 0.6 | U | |
| METHYL TERT-BUTYL ETHER | 0.42 | U | |
| METHYLENE CHLORIDE | 0.82 | U | |
| M-XYLENE | 2.5 | J | P |
| O-XYLENE | 0.93 | U | |
| PROPIONITRILE | 0.66 | U | |
| STYRENE | 0.46 | U | |
| TETRACHLOROETHENE | 1.3 | U | |
| TOLUENE | 1.1 | U | |
| TOTAL XYLENES | 2.4 | J | P |
| TRANS-1,2-DICHLOROETHENE | 1.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.42 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 11 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 1.1 | U | |
| TRICHLOROFLUOROMETHANE | 1.2 | U | |
| VINYL ACETATE | 0.73 | U | |
| VINYL CHLORIDE | 1.4 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW26-S-25 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612084-03 | lab_id | 0612084-03 | lab_id | 0612084-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 95.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.38 | U | |
| 1,1,1-TRICHLOROETHANE | 1 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.41 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.64 | U | |
| 1,1-DICHLOROETHANE | 0.63 | U | |
| 1,1-DICHLOROETHENE | 1.4 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.49 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.82 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.21 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.4 | U | |
| 1,2-DIBROMOETHANE | 0.5 | U | |
| 1,2-DICHLOROBENZENE | 0.43 | U | |
| 1,2-DICHLOROETHANE | 0.54 | U | |
| 1,2-DICHLOROPROPANE | 0.54 | U | |
| 1,3-DICHLOROBENZENE | 0.98 | U | |
| 1,4-DICHLOROBENZENE | 0.64 | U | |
| 1,4-DIOXANE | 59 | UR | C |
| 2-BUTANONE | 1.6 | U | |
| 2-HEXANONE | 2.7 | U | |
| 3-CHLOROPROPENE | 0.59 | U | |
| 4-METHYL-2-PENTANONE | 0.68 | U | |
| ACETONE | 10 | U | A |
| ACETONITRILE | 0.59 | U | |
| ACROLEIN | 6.1 | U | |
| ACRYLONITRILE | 1.6 | U | |
| BENZENE | 0.55 | U | |
| BROMODICHLOROMETHANE | 0.35 | U | |
| BROMOFORM | 1.2 | U | |
| BROMOMETHANE | 0.84 | U | |
| CARBON DISULFIDE | 1.5 | U | |
| CARBON TETRACHLORIDE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.9 | U | |
| CHLORODIBROMOMETHANE | 0.4 | U | |
| CHLOROETHANE | 1.3 | U | |
| CHLOROFORM | 0.64 | U | |
| CHLOROMETHANE | 0.61 | U | |
| CHLOROPRENE | 0.59 | U | |
| CIS-1,2-DICHLOROETHENE | 1.4 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.59 | U | |
| CYCLOHEXANE | 0.63 | U | |
| DIBROMOMETHANE | 0.48 | U | |
| DICHLORODIFLUOROMETHANE | 1.3 | U | |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.88 | U | |
| ISOBUTANOL | 59 | UR | C |
| ISOPROPYLBENZENE | 1 | U | |
| METHACRYLONITRILE | 0.59 | U | |
| METHYL ACETATE | 1.9 | U | |
| METHYL CYCLOHEXANE | 0.35 | U | |
| METHYL IODIDE | 0.97 | UJ | C |
| METHYL METHACRYLATE | 0.53 | U | |
| METHYL TERT-BUTYL ETHER | 0.38 | U | |
| METHYLENE CHLORIDE | 0.73 | U | |
| M-XYLENE | 1.8 | U | |
| O-XYLENE | 0.82 | U | |
| PROPIONITRILE | 0.59 | U | |
| STYRENE | 0.41 | U | |
| TETRACHLOROETHENE | 1.1 | U | |
| TOLUENE | 1 | U | |
| TOTAL XYLENES | 0.82 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.3 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.38 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 9.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 1 | U | |
| TRICHLOROFLUOROMETHANE | 1.1 | U | |
| VINYL ACETATE | 0.64 | U | |
| VINYL CHLORIDE | 1.3 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW33S-26 | nsample | OLFS4-MW33S-26 | nsample | OLFS4-MW33S-26 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-02 | lab_id | 0612148-02 | lab_id | 0612148-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 96.0 | Pct_Solids | 96.0 | Pct_Solids | 96.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.34 | U | |
| 1,1,1-TRICHLOROETHANE | 0.97 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.46 | U | |
| 1,1,2-TRICHLOROETHANE | 0.38 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.59 | U | |
| 1,1-DICHLOROETHANE | 0.58 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.45 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.75 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.46 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.49 | U | |
| 1,2-DICHLOROPROPANE | 0.49 | U | |
| 1,3-DICHLOROBENZENE | 0.9 | U | |
| 1,4-DICHLOROBENZENE | 0.59 | U | |
| 1,4-DIOXANE | 54 | UR | C |
| 2-BUTANONE | 1.8 | J | P |
| 2-HEXANONE | 2.5 | U | |
| 3-CHLOROPROPENE | 0.54 | U | |
| 4-METHYL-2-PENTANONE | 0.62 | U | |
| ACETONE | 7.6 | U | A |
| ACETONITRILE | 0.54 | U | |
| ACROLEIN | 5.6 | U | |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.5 | U | |
| BROMODICHLOROMETHANE | 0.32 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.77 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.94 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.7 | U | |
| CHLORODIBROMOMETHANE | 0.36 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.59 | U | |
| CHLOROMETHANE | 0.56 | U | |
| CHLOROPRENE | 0.54 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.54 | U | |
| CYCLOHEXANE | 0.58 | U | |
| DIBROMOMETHANE | 0.44 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.28 | U | |
| ETHYLBENZENE | 0.8 | U | |
| ISOBUTANOL | 54 | UR | C |
| ISOPROPYLBENZENE | 0.94 | U | |
| METHACRYLONITRILE | 0.54 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.32 | U | |
| METHYL IODIDE | 0.89 | UJ | C |
| METHYL METHACRYLATE | 0.48 | U | |
| METHYL TERT-BUTYL ETHER | 0.34 | U | |
| METHYLENE CHLORIDE | 0.66 | U | |
| M-XYLENE | 1.6 | U | |
| O-XYLENE | 0.75 | U | |
| PROPIONITRILE | 0.54 | U | |
| STYRENE | 0.38 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.92 | U | |
| TOTAL XYLENES | 0.75 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.34 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.91 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.59 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW33S-5 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 89.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.9 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.43 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHANE | 0.54 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.7 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.43 | U | |
| 1,2-DICHLOROBENZENE | 0.37 | U | |
| 1,2-DICHLOROETHANE | 0.46 | U | |
| 1,2-DICHLOROPROPANE | 0.46 | U | |
| 1,3-DICHLOROBENZENE | 0.84 | U | |
| 1,4-DICHLOROBENZENE | 0.55 | U | |
| 1,4-DIOXANE | 50 | UR | C |
| 2-BUTANONE | 1.5 | J | PR |
| 2-HEXANONE | 2.3 | UJ | C |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 0.58 | U | |
| ACETONE | 10 | U | A |
| ACETONITRILE | 0.5 | U | |
| ACROLEIN | 5.2 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.47 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.72 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.88 | U | |

| | |
|---|---|
| nsample | OLFS4-MW33S-5 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 89.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.55 | U | |
| CHLOROMETHANE | 0.52 | U | |
| CHLOROPRENE | 0.5 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.5 | U | |
| CYCLOHEXANE | 0.54 | U | |
| DIBROMOMETHANE | 0.41 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.75 | U | |
| ISOBUTANOL | 50 | UR | C |
| ISOPROPYLBENZENE | 0.88 | U | |
| METHACRYLONITRILE | 0.5 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.83 | U | |
| METHYL METHACRYLATE | 0.45 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.62 | U | |
| M-XYLENE | 1.5 | U | |
| O-XYLENE | 0.7 | U | |
| PROPIONITRILE | 0.5 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.97 | U | |
| TOLUENE | 0.86 | U | |
| TOTAL XYLENES | 0.7 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8 | U | |

| | |
|---|---|
| nsample | OLFS4-MW33S-5 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 89.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.85 | U | |
| TRICHLOROFLUOROMETHANE | 0.95 | U | |
| VINYL ACETATE | 0.55 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-29 | nsample | OLFS4-MW35S-29 | nsample | OLFS4-MW35S-29 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-03 | lab_id | 0612148-03 | lab_id | 0612148-03 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 94.0 | Pct_Solids | 94.0 | Pct_Solids | 94.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.32 | U | |
| 1,1,1-TRICHLOROETHANE | 0.91 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.35 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHANE | 0.55 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.42 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.71 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.44 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.47 | U | |
| 1,2-DICHLOROPROPANE | 0.47 | U | |
| 1,3-DICHLOROBENZENE | 0.85 | U | |
| 1,4-DICHLOROBENZENE | 0.56 | U | |
| 1,4-DIOXANE | 51 | UR | C |
| 2-BUTANONE | 6.3 | J | P |
| 2-HEXANONE | 2.3 | U | |
| 3-CHLOROPROPENE | 0.51 | U | |
| 4-METHYL-2-PENTANONE | 0.59 | U | |
| ACETONE | 24 | U | A |
| ACETONITRILE | 0.51 | U | |
| ACROLEIN | 5.3 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.48 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.73 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.89 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.5 | U | |
| CHLORODIBROMOMETHANE | 0.34 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.56 | U | |
| CHLOROMETHANE | 0.53 | U | |
| CHLOROPRENE | 0.51 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.51 | U | |
| CYCLOHEXANE | 0.55 | U | |
| DIBROMOMETHANE | 0.42 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.26 | U | |
| ETHYLBENZENE | 0.76 | U | |
| ISOBUTANOL | 51 | UR | C |
| ISOPROPYLBENZENE | 0.89 | U | |
| METHACRYLONITRILE | 0.51 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.84 | UJ | C |
| METHYL METHACRYLATE | 0.46 | U | |
| METHYL TERT-BUTYL ETHER | 0.32 | U | |
| METHYLENE CHLORIDE | 0.63 | U | |
| M-XYLENE | 1.5 | U | |
| O-XYLENE | 0.71 | U | |
| PROPIONITRILE | 0.51 | U | |
| STYRENE | 0.35 | U | |
| TETRACHLOROETHENE | 0.98 | U | |
| TOLUENE | 0.87 | U | |
| TOTAL XYLENES | 0.71 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.32 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.86 | U | |
| TRICHLOROFLUOROMETHANE | 0.96 | U | |
| VINYL ACETATE | 0.56 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW36S-25 | nsample | OLFS4-MW36S-25 | nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-04 | lab_id | 0612148-04 | lab_id | 0612148-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 95.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.35 | U | |
| 1,1,1-TRICHLOROETHANE | 0.98 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.47 | U | |
| 1,1,2-TRICHLOROETHANE | 0.38 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.6 | U | |
| 1,1-DICHLOROETHANE | 0.59 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.46 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.76 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.2 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.47 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.5 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.92 | U | |
| 1,4-DICHLOROBENZENE | 0.6 | U | |
| 1,4-DIOXANE | 55 | UR | C |
| 2-BUTANONE | 1.5 | U | |
| 2-HEXANONE | 2.5 | U | |
| 3-CHLOROPROPENE | 0.55 | U | |
| 4-METHYL-2-PENTANONE | 0.63 | U | |
| ACETONE | 7.8 | U | A |
| ACETONITRILE | 0.55 | U | |
| ACROLEIN | 5.7 | U | |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.51 | U | |
| BROMODICHLOROMETHANE | 0.33 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.79 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.96 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.7 | U | |
| CHLORODIBROMOMETHANE | 0.37 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.6 | U | |
| CHLOROMETHANE | 0.57 | U | |
| CHLOROPRENE | 0.55 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.55 | U | |
| CYCLOHEXANE | 0.59 | U | |
| DIBROMOMETHANE | 0.45 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.28 | U | |
| ETHYLBENZENE | 0.82 | U | |
| ISOBUTANOL | 55 | UR | C |
| ISOPROPYLBENZENE | 0.96 | U | |
| METHACRYLONITRILE | 0.55 | U | |
| METHYL ACETATE | 1.8 | U | |
| METHYL CYCLOHEXANE | 0.33 | U | |
| METHYL IODIDE | 0.91 | UJ | C |
| METHYL METHACRYLATE | 0.49 | U | |
| METHYL TERT-BUTYL ETHER | 0.35 | U | |
| METHYLENE CHLORIDE | 0.68 | U | |
| M-XYLENE | 1.6 | U | |
| O-XYLENE | 0.76 | U | |
| PROPIONITRILE | 0.55 | U | |
| STYRENE | 0.38 | U | |
| TETRACHLOROETHENE | 1.1 | U | |
| TOLUENE | 0.94 | U | |
| TOTAL XYLENES | 0.76 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.35 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.8 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.93 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.6 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB2-S-26 | nsample | OLFS4-SB2-S-26 | nsample | OLFS4-SB2-S-26 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-02 | lab_id | 0612161-02 | lab_id | 0612161-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 88.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.33 | U | |
| 1,1,1-TRICHLOROETHANE | 0.93 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.44 | U | |
| 1,1,2-TRICHLOROETHANE | 0.36 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.57 | U | |
| 1,1-DICHLOROETHANE | 0.56 | U | |
| 1,1-DICHLOROETHENE | 1.2 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.43 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.72 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.18 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 | U | |
| 1,2-DIBROMOETHANE | 0.44 | U | |
| 1,2-DICHLOROBENZENE | 0.38 | U | |
| 1,2-DICHLOROETHANE | 0.47 | U | |
| 1,2-DICHLOROPROPANE | 0.47 | U | |
| 1,3-DICHLOROBENZENE | 0.86 | U | |
| 1,4-DICHLOROBENZENE | 0.57 | U | |
| 1,4-DIOXANE | 52 | UR | C |
| 2-BUTANONE | 1.4 | U | |
| 2-HEXANONE | 2.4 | U | |
| 3-CHLOROPROPENE | 0.52 | U | |
| 4-METHYL-2-PENTANONE | 0.6 | U | |
| ACETONE | 8 | U | A |
| ACETONITRILE | 0.52 | U | |
| ACROLEIN | 5.4 | U | |
| ACRYLONITRILE | 1.4 | U | |
| BENZENE | 0.48 | U | |
| BROMODICHLOROMETHANE | 0.31 | U | |
| BROMOFORM | 1 | U | |
| BROMOMETHANE | 0.74 | U | |
| CARBON DISULFIDE | 1.3 | U | |
| CARBON TETRACHLORIDE | 0.91 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.6 | U | |
| CHLORODIBROMOMETHANE | 0.35 | U | |
| CHLOROETHANE | 1.1 | U | |
| CHLOROFORM | 0.57 | U | |
| CHLOROMETHANE | 0.54 | U | |
| CHLOROPRENE | 0.52 | U | |
| CIS-1,2-DICHLOROETHENE | 1.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.52 | U | |
| CYCLOHEXANE | 0.56 | U | |
| DIBROMOMETHANE | 0.42 | U | |
| DICHLORODIFLUOROMETHANE | 1.1 | U | |
| ETHYL METHACRYLATE | 0.27 | U | |
| ETHYLBENZENE | 0.77 | U | |
| ISOBUTANOL | 52 | UR | C |
| ISOPROPYLBENZENE | 0.91 | U | |
| METHACRYLONITRILE | 0.52 | U | |
| METHYL ACETATE | 1.6 | U | |
| METHYL CYCLOHEXANE | 0.31 | U | |
| METHYL IODIDE | 0.86 | UJ | C |
| METHYL METHACRYLATE | 0.46 | U | |
| METHYL TERT-BUTYL ETHER | 0.33 | U | |
| METHYLENE CHLORIDE | 0.64 | U | |
| M-XYLENE | 1.5 | U | |
| O-XYLENE | 0.72 | U | |
| PROPIONITRILE | 0.52 | U | |
| STYRENE | 0.36 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.89 | U | |
| TOTAL XYLENES | 0.72 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.33 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.88 | U | |
| TRICHLOROFLUOROMETHANE | 0.98 | U | |
| VINYL ACETATE | 0.57 | U | |
| VINYL CHLORIDE | 1.1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-SB3-S-26 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.35 | U | |
| 1,1,1-TRICHLOROETHANE | 0.97 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.46 | U | |
| 1,1,2-TRICHLOROETHANE | 0.38 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.6 | U | |
| 1,1-DICHLOROETHANE | 0.58 | U | |
| 1,1-DICHLOROETHENE | 1.3 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.45 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.76 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.19 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.3 | U | |
| 1,2-DIBROMOETHANE | 0.46 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.5 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.91 | U | |
| 1,4-DICHLOROBENZENE | 0.6 | U | |
| 1,4-DIOXANE | 54 | UR | C |
| 2-BUTANONE | 1.5 | U | |
| 2-HEXANONE | 2.5 | U | |
| 3-CHLOROPROPENE | 0.54 | U | |
| 4-METHYL-2-PENTANONE | 0.63 | U | |
| ACETONE | 7.2 | U | A |
| ACETONITRILE | 0.54 | U | |
| ACROLEIN | 5.6 | U | |
| ACRYLONITRILE | 1.5 | U | |
| BENZENE | 0.51 | U | |
| BROMODICHLOROMETHANE | 0.32 | U | |
| BROMOFORM | 1.1 | U | |
| BROMOMETHANE | 0.78 | U | |
| CARBON DISULFIDE | 1.4 | U | |
| CARBON TETRACHLORIDE | 0.95 | U | |

| | |
|---|---|
| nsample | OLFS4-SB3-S-26 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.7 | U | |
| CHLORODIBROMOMETHANE | 0.37 | U | |
| CHLOROETHANE | 1.2 | U | |
| CHLOROFORM | 0.6 | U | |
| CHLOROMETHANE | 0.56 | U | |
| CHLOROPRENE | 0.54 | U | |
| CIS-1,2-DICHLOROETHENE | 1.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.54 | U | |
| CYCLOHEXANE | 0.58 | U | |
| DIBROMOMETHANE | 0.44 | U | |
| DICHLORODIFLUOROMETHANE | 1.2 | U | |
| ETHYL METHACRYLATE | 0.28 | U | |
| ETHYLBENZENE | 0.81 | U | |
| ISOBUTANOL | 54 | UR | C |
| ISOPROPYLBENZENE | 0.95 | U | |
| METHACRYLONITRILE | 0.54 | U | |
| METHYL ACETATE | 1.7 | U | |
| METHYL CYCLOHEXANE | 0.32 | U | |
| METHYL IODIDE | 0.9 | UJ | C |
| METHYL METHACRYLATE | 0.49 | U | |
| METHYL TERT-BUTYL ETHER | 0.35 | U | |
| METHYLENE CHLORIDE | 0.67 | U | |
| M-XYLENE | 1.6 | U | |
| O-XYLENE | 0.76 | U | |
| PROPIONITRILE | 0.54 | U | |
| STYRENE | 0.38 | U | |
| TETRACHLOROETHENE | 1 | U | |
| TOLUENE | 0.93 | U | |
| TOTAL XYLENES | 0.76 | U | |
| TRANS-1,2-DICHLOROETHENE | 1.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.35 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 8.7 | U | |

| | |
|---|---|
| nsample | OLFS4-SB3-S-26 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.92 | U | |
| TRICHLOROFLUOROMETHANE | 1 | U | |
| VINYL ACETATE | 0.6 | U | |
| VINYL CHLORIDE | 1.2 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-SB6-S-16 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 92.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.29 | U | |
| 1,1,1-TRICHLOROETHANE | 0.82 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.39 | U | |
| 1,1,2-TRICHLOROETHANE | 0.32 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.5 | U | |
| 1,1-DICHLOROETHANE | 0.49 | U | |
| 1,1-DICHLOROETHENE | 1.1 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.38 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.64 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.16 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 | U | |
| 1,2-DIBROMOETHANE | 0.39 | U | |
| 1,2-DICHLOROBENZENE | 0.34 | U | |
| 1,2-DICHLOROETHANE | 0.42 | U | |
| 1,2-DICHLOROPROPANE | 0.42 | U | |
| 1,3-DICHLOROBENZENE | 0.76 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 45 | UR | C |
| 2-BUTANONE | 1.3 | U | |
| 2-HEXANONE | 2.1 | U | |
| 3-CHLOROPROPENE | 0.45 | U | |
| 4-METHYL-2-PENTANONE | 0.53 | U | |
| ACETONE | 6.9 | U | A |
| ACETONITRILE | 0.45 | U | |
| ACROLEIN | 4.7 | U | |
| ACRYLONITRILE | 1.3 | U | |
| BENZENE | 0.43 | U | |
| BROMODICHLOROMETHANE | 0.27 | U | |
| BROMOFORM | 0.91 | U | |
| BROMOMETHANE | 0.65 | U | |
| CARBON DISULFIDE | 1.2 | U | |
| CARBON TETRACHLORIDE | 0.8 | U | |

| | |
|---|---|
| nsample | OLFS4-SB6-S-16 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 92.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 2.3 | U | |
| CHLORODIBROMOMETHANE | 0.31 | U | |
| CHLOROETHANE | 1 | U | |
| CHLOROFORM | 0.5 | U | |
| CHLOROMETHANE | 0.47 | U | |
| CHLOROPRENE | 0.45 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.45 | U | |
| CYCLOHEXANE | 0.49 | U | |
| DIBROMOMETHANE | 0.37 | U | |
| DICHLORODIFLUOROMETHANE | 1 | U | |
| ETHYL METHACRYLATE | 0.24 | U | |
| ETHYLBENZENE | 0.68 | U | |
| ISOBUTANOL | 45 | UR | C |
| ISOPROPYLBENZENE | 0.8 | U | |
| METHACRYLONITRILE | 0.45 | U | |
| METHYL ACETATE | 1.4 | U | |
| METHYL CYCLOHEXANE | 0.27 | U | |
| METHYL IODIDE | 0.75 | UJ | C |
| METHYL METHACRYLATE | 0.41 | U | |
| METHYL TERT-BUTYL ETHER | 0.29 | U | |
| METHYLENE CHLORIDE | 0.56 | U | |
| M-XYLENE | 1.4 | U | |
| O-XYLENE | 0.64 | U | |
| PROPIONITRILE | 0.45 | U | |
| STYRENE | 0.32 | U | |
| TETRACHLOROETHENE | 0.88 | U | |
| TOLUENE | 0.78 | U | |
| TOTAL XYLENES | 0.64 | U | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.29 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 7.2 | U | |

| | |
|---|---|
| nsample | OLFS4-SB6-S-16 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 92.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.77 | U | |
| TRICHLOROFLUOROMETHANE | 0.86 | U | |
| VINYL ACETATE | 0.5 | U | |
| VINYL CHLORIDE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW25-S-40 | nsample | OLFS4-MW25-S-40 | nsample | OLFS4-MW25-S-40 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612084-02 | lab_id | 0612084-02 | lab_id | 0612084-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 88.0 | Pct_Solids | 88.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | UJ | C |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 110 | UJ | C |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 44 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | UJ | C |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 170 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |
| 3-NITROANILINE | 110 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | UJ | C |
| ACENAPHTHENE | 44 | U | |
| ACENAPHTHYLENE | 44 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 44 | U | |
| ARAMITE | 110 | UJ | C |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UR | E |
| BENZO(A)ANTHRACENE | 44 | U | |
| BENZO(A)PYRENE | 44 | U | |
| BENZO(B)FLUORANTHENE | 44 | U | |
| BENZO(G,H,I)PERYLENE | 44 | U | |
| BENZO(K)FLUORANTHENE | 44 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 44 | UJ | C |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 44 | U | |
| DIALLATE | 110 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 44 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 44 | U | |
| FLUORENE | 44 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 44 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 44 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW25-S-40 |
| samp_date | 12/7/2006 |
| lab_id | 0612084-02 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 88.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | UJ | C |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 44 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 44 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-MW26-S-25 |
| samp_date | 12/7/2006 |
| lab_id | 0612084-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | UJ | C |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 100 | UJ | C |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | UJ | C |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |
| 3-NITROANILINE | 100 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW26-S-25 |
| samp_date | 12/7/2006 |
| lab_id | 0612084-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | UJ | C |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UR | E |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW33S-26 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/14/2006 |
| lab_id | 0612084-03 | lab_id | 0612084-03 | lab_id | 0612148-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 95.0 | Pct_Solids | 95.0 | Pct_Solids | 96.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 41 | UJ | C |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | UJ | C |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | UJ | C |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 100 | UJ | C |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 41 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | UJ | C |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 150 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |
| 3-NITROANILINE | 100 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW33S-26 | nsample | OLFS4-MW33S-26 | nsample | OLFS4-MW33S-26 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-02 | lab_id | 0612148-02 | lab_id | 0612148-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 96.0 | Pct_Solids | 96.0 | Pct_Solids | 96.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | UJ | C |
| ACENAPHTHENE | 41 | U | |
| ACENAPHTHYLENE | 41 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 41 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UR | E |
| BENZO(A)ANTHRACENE | 41 | U | |
| BENZO(A)PYRENE | 41 | U | |
| BENZO(B)FLUORANTHENE | 41 | U | |
| BENZO(G,H,I)PERYLENE | 41 | U | |
| BENZO(K)FLUORANTHENE | 41 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 41 | UJ | C |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 41 | U | |
| DIALLATE | 100 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 41 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 41 | U | |
| FLUORENE | 41 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 41 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 41 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | UJ | C |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 41 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 41 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW33S-5 | nsample | OLFS4-MW33S-5 | nsample | OLFS4-MW33S-5 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-01 | lab_id | 0612148-01 | lab_id | 0612148-01 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 89.0 | Pct_Solids | 89.0 | Pct_Solids | 89.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 340 | J | P |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | UJ | C |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 110 | UJ | C |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 1500 | | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | UJ | C |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |
| 3-NITROANILINE | 110 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | UJ | C |
| ACENAPHTHENE | 44 | U | |
| ACENAPHTHYLENE | 44 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 44 | U | |
| ARAMITE | 110 | UJ | C |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UR | E |
| BENZO(A)ANTHRACENE | 44 | U | |
| BENZO(A)PYRENE | 44 | U | |
| BENZO(B)FLUORANTHENE | 44 | U | |
| BENZO(G,H,I)PERYLENE | 44 | U | |
| BENZO(K)FLUORANTHENE | 44 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 1600 | R | Q |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 44 | UJ | C |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 44 | U | |
| DIALLATE | 110 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 44 | U | |
| DIBENZOFURAN | 190 | J | P |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 44 | U | |
| FLUORENE | 170 | J | P |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 44 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 220 | J | P |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW33S-5 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-01 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 89.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | UJ | C |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 75 | J | P |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 44 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-MW35S-29 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 94.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | UJ | C |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 100 | UJ | C |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | UJ | C |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |
| 3-NITROANILINE | 100 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW35S-29 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-03 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 94.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | UJ | C |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UR | E |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW35S-29 | nsample | OLFS4-MW35S-29 | nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-03 | lab_id | 0612148-03 | lab_id | 0612148-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 94.0 | Pct_Solids | 94.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 42 | UJ | C |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE - | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | UJ | C |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 100 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 100 | U | |
| 1,2,4-TRICHLOROBENZENE | 100 | U | |
| 1,3,5-TRINITROBENZENE | 100 | UJ | C |
| 1,3-DINITROBENZENE | 100 | U | |
| 1,4-NAPHTHOQUINONE | 100 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 100 | UJ | C |
| 1-NAPHTHYLAMINE | 100 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 100 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 100 | U | |
| 2,4,5-TRICHLOROPHENOL | 100 | U | |
| 2,4,6-TRICHLOROPHENOL | 100 | U | |
| 2,4-DICHLOROPHENOL | 100 | U | |
| 2,4-DIMETHYLPHENOL | 100 | U | |
| 2,4-DINITROPHENOL | 100 | UJ | C |
| 2,4-DINITROTOLUENE | 100 | U | |
| 2,6-DICHLOROPHENOL | 100 | U | |
| 2,6-DINITROTOLUENE | 100 | U | |
| 2-ACETYLAMINOFLUORENE | 100 | U | |
| 2-CHLORONAPHTHALENE | 100 | U | |
| 2-CHLOROPHENOL | 100 | U | |
| 2-METHYLNAPHTHALENE | 42 | U | |
| 2-METHYLPHENOL | 100 | U | |
| 2-NAPHTHYLAMINE | 100 | U | |
| 2-NITROANILINE | 100 | UJ | C |
| 2-NITROPHENOL | 100 | U | |
| 2-PICOLINE | 100 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 100 | UJ | C |
| 3-METHYLCHOLANTHRENE | 100 | U | |
| 3-METHYLPHENOL | 100 | U | |
| 3-NITROANILINE | 100 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 100 | U | |
| 4-AMINOBIPHENYL | 100 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 100 | U | |
| 4-CHLORO-3-METHYLPHENOL | 100 | U | |
| 4-CHLOROANILINE | 100 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 100 | U | |
| 4-METHYLPHENOL | 100 | U | |
| 4-NITROANILINE | 100 | U | |
| 4-NITROPHENOL | 100 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 100 | UR | C |
| 5-NITRO-O-TOLUIDINE | 100 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 100 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 100 | UJ | C |
| ACENAPHTHENE | 42 | U | |
| ACENAPHTHYLENE | 42 | U | |
| ACETOPHENONE | 100 | U | |
| ANILINE | 100 | UJ | C |
| ANTHRACENE | 42 | U | |
| ARAMITE | 100 | UJ | C |
| ATRAZINE | 100 | U | |
| BENZALDEHYDE | 100 | UR | E |
| BENZO(A)ANTHRACENE | 42 | U | |
| BENZO(A)PYRENE | 42 | U | |
| BENZO(B)FLUORANTHENE | 42 | U | |
| BENZO(G,H,I)PERYLENE | 42 | U | |
| BENZO(K)FLUORANTHENE | 42 | U | |
| BENZYL ALCOHOL | 100 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 100 | U | |
| BIS(2-CHLOROETHYL)ETHER | 100 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 100 | U | |
| BUTYL BENZYL PHTHALATE | 100 | U | |
| CAPROLACTAM | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 42 | UJ | C |
| CHLOROBENZILATE | 100 | U | |
| CHRYSENE | 42 | U | |
| DIALLATE | 100 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 42 | U | |
| DIBENZOFURAN | 100 | U | |
| DIETHYL PHTHALATE | 100 | U | |
| DIMETHOATE | 100 | U | |
| DIMETHYL PHTHALATE | 100 | U | |
| DI-N-BUTYL PHTHALATE | 100 | U | |
| DI-N-OCTYL PHTHALATE | 100 | U | |
| DIPHENYLAMINE | 100 | U | |
| ETHYL METHANE SULFONATE | 100 | U | |
| FLUORANTHENE | 42 | U | |
| FLUORENE | 42 | U | |
| HEXACHLOROBENZENE | 100 | U | |
| HEXACHLOROBUTADIENE | 100 | U | |
| HEXACHLOROCYCLOPENTADIENE | 100 | U | |
| HEXACHLOROETHANE | 100 | U | |
| HEXACHLOROPHENE | 100 | U | |
| HEXACHLOROPROPENE | 100 | U | |
| INDENO(1,2,3-CD)PYRENE | 42 | U | |
| ISODRIN | 100 | U | |
| ISOPHORONE | 100 | U | |
| ISOSAFROLE | 100 | U | |
| KEPONE | 100 | U | |
| METHAPYRILENE | 100 | U | |
| METHYL METHANE SULFONATE | 100 | U | |
| NAPHTHALENE | 42 | U | |
| NITROBENZENE | 100 | U | |
| N-NITROSODIETHYLAMINE | 100 | U | |
| N-NITROSODIMETHYLAMINE | 100 | U | |

| | |
|---|---|
| nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 |
| lab_id | 0612148-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 95.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 100 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 100 | U | |
| N-NITROSODIPHENYLAMINE | 100 | U | |
| N-NITROSOMETHYLETHYLAMINE | 100 | U | |
| N-NITROSOMORPHOLINE | 100 | UJ | C |
| N-NITROSOPIPERIDINE | 100 | U | |
| N-NITROSOPYRROLIDINE | 100 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 100 | U | |
| O-TOLUIDINE | 100 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 100 | U | |
| PENTACHLOROBENZENE | 100 | U | |
| PENTACHLOROETHANE | 100 | U | |
| PENTACHLORONITROBENZENE | 100 | U | |
| PENTACHLOROPHENOL | 100 | U | |
| PHENACETIN | 100 | U | |
| PHENANTHRENE | 42 | U | |
| PHENOL | 100 | U | |
| PRONAMIDE | 100 | U | |
| PYRENE | 42 | U | |
| PYRIDINE | 100 | U | |
| SAFROLE | 100 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-SB2-S-26 | | nsample | OLFS4-SB2-S-26 | | nsample | OLFS4-SB2-S-26 | |
| samp_date | 12/15/2006 | | samp_date | 12/15/2006 | | samp_date | 12/15/2006 | |
| lab_id | 0612161-02 | | lab_id | 0612161-02 | | lab_id | 0612161-02 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/KG | | units | UG/KG | | units | UG/KG | |
| Pct_Solids | 88.0 | | Pct_Solids | 88.0 | | Pct_Solids | 88.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | UJ | C |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 110 | UJ | C |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 45 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | UJ | C |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 170 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |
| 3-NITROANILINE | 110 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | UJ | C |
| ACENAPHTHENE | 45 | U | |
| ACENAPHTHYLENE | 45 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 45 | U | |
| ARAMITE | 110 | UJ | C |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UR | E |
| BENZO(A)ANTHRACENE | 45 | U | |
| BENZO(A)PYRENE | 45 | U | |
| BENZO(B)FLUORANTHENE | 45 | U | |
| BENZO(G,H,I)PERYLENE | 45 | U | |
| BENZO(K)FLUORANTHENE | 45 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 45 | UJ | C |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 45 | U | |
| DIALLATE | 110 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 45 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 45 | U | |
| FLUORENE | 45 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 45 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 45 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB2-S-26 | nsample | OLFS4-SB3-S-26 | nsample | OLFS4-SB3-S-26 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-02 | lab_id | 0612161-04 | lab_id | 0612161-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 91.0 | Pct_Solids | 91.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | UJ | C |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 45 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 45 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | UJ | C |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 110 | UJ | C |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 43 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | UJ | C |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |
| 3-NITROANILINE | 110 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | UJ | C |
| ACENAPHTHENE | 43 | U | |
| ACENAPHTHYLENE | 43 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 43 | U | |
| ARAMITE | 110 | UJ | C |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UR | E |
| BENZO(A)ANTHRACENE | 43 | U | |
| BENZO(A)PYRENE | 43 | U | |
| BENZO(B)FLUORANTHENE | 43 | U | |
| BENZO(G,H,I)PERYLENE | 43 | U | |
| BENZO(K)FLUORANTHENE | 43 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-SB3-S-26 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 43 | UJ | C |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 43 | U | |
| DIALLATE | 110 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 43 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 43 | U | |
| FLUORENE | 43 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 43 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL.METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 43 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-SB3-S-26 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-04 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 91.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | UJ | C |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 43 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 43 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

| | |
|---|---|
| nsample | OLFS4-SB6-S-16 |
| samp_date | 12/15/2006 |
| lab_id | 0612161-09 |
| qc_type | NM |
| units | UG/KG |
| Pct_Solids | 92.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 110 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 110 | U | |
| 1,2,4-TRICHLOROBENZENE | 110 | U | |
| 1,3,5-TRINITROBENZENE | 110 | UJ | C |
| 1,3-DINITROBENZENE | 110 | U | |
| 1,4-NAPHTHOQUINONE | 110 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 110 | UJ | C |
| 1-NAPHTHYLAMINE | 110 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 110 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 110 | U | |
| 2,4,5-TRICHLOROPHENOL | 110 | U | |
| 2,4,6-TRICHLOROPHENOL | 110 | U | |
| 2,4-DICHLOROPHENOL | 110 | U | |
| 2,4-DIMETHYLPHENOL | 110 | U | |
| 2,4-DINITROPHENOL | 110 | UJ | C |
| 2,4-DINITROTOLUENE | 110 | U | |
| 2,6-DICHLOROPHENOL | 110 | U | |
| 2,6-DINITROTOLUENE | 110 | U | |
| 2-ACETYLAMINOFLUORENE | 110 | U | |
| 2-CHLORONAPHTHALENE | 110 | U | |
| 2-CHLOROPHENOL | 110 | U | |
| 2-METHYLNAPHTHALENE | 43 | U | |
| 2-METHYLPHENOL | 110 | U | |
| 2-NAPHTHYLAMINE | 110 | U | |
| 2-NITROANILINE | 110 | UJ | C |
| 2-NITROPHENOL | 110 | U | |
| 2-PICOLINE | 110 | U | |
| 3,3'-DICHLOROBENZIDINE | 160 | U | |
| 3,3'-DIMETHYLBENZIDINE | 110 | UJ | C |
| 3-METHYLCHOLANTHRENE | 110 | U | |
| 3-METHYLPHENOL | 110 | U | |
| 3-NITROANILINE | 110 | UJ | C |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB6-S-16 | nsample | OLFS4-SB6-S-16 | nsample | OLFS4-SB6-S-16 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-09 | lab_id | 0612161-09 | lab_id | 0612161-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG | units | UG/KG |
| Pct_Solids | 92.0 | Pct_Solids | 92.0 | Pct_Solids | 92.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 110 | U | |
| 4-AMINOBIPHENYL | 110 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 110 | U | |
| 4-CHLORO-3-METHYLPHENOL | 110 | U | |
| 4-CHLOROANILINE | 110 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 110 | U | |
| 4-METHYLPHENOL | 110 | U | |
| 4-NITROANILINE | 110 | U | |
| 4-NITROPHENOL | 110 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 110 | UR | C |
| 5-NITRO-O-TOLUIDINE | 110 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 110 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 110 | UJ | C |
| ACENAPHTHENE | 43 | U | |
| ACENAPHTHYLENE | 43 | U | |
| ACETOPHENONE | 110 | U | |
| ANILINE | 110 | UJ | C |
| ANTHRACENE | 43 | U | |
| ARAMITE | 110 | UJ | C |
| ATRAZINE | 110 | U | |
| BENZALDEHYDE | 110 | UR | E |
| BENZO(A)ANTHRACENE | 43 | U | |
| BENZO(A)PYRENE | 43 | U | |
| BENZO(B)FLUORANTHENE | 43 | U | |
| BENZO(G,H,I)PERYLENE | 43 | U | |
| BENZO(K)FLUORANTHENE | 43 | U | |
| BENZYL ALCOHOL | 110 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 110 | U | |
| BIS(2-CHLOROETHYL)ETHER | 110 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 110 | U | |
| BUTYL BENZYL PHTHALATE | 110 | U | |
| CAPROLACTAM | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 43 | UJ | C |
| CHLOROBENZILATE | 110 | U | |
| CHRYSENE | 43 | U | |
| DIALLATE | 110 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 43 | U | |
| DIBENZOFURAN | 110 | U | |
| DIETHYL PHTHALATE | 110 | U | |
| DIMETHOATE | 110 | U | |
| DIMETHYL PHTHALATE | 110 | U | |
| DI-N-BUTYL PHTHALATE | 110 | U | |
| DI-N-OCTYL PHTHALATE | 110 | U | |
| DIPHENYLAMINE | 110 | U | |
| ETHYL METHANE SULFONATE | 110 | U | |
| FLUORANTHENE | 43 | U | |
| FLUORENE | 43 | U | |
| HEXACHLOROBENZENE | 110 | U | |
| HEXACHLOROBUTADIENE | 110 | U | |
| HEXACHLOROCYCLOPENTADIENE | 110 | U | |
| HEXACHLOROETHANE | 110 | U | |
| HEXACHLOROPHENE | 110 | U | |
| HEXACHLOROPROPENE | 110 | U | |
| INDENO(1,2,3-CD)PYRENE | 43 | U | |
| ISODRIN | 110 | U | |
| ISOPHORONE | 110 | U | |
| ISOSAFROLE | 110 | U | |
| KEPONE | 110 | U | |
| METHAPYRILENE | 110 | U | |
| METHYL METHANE SULFONATE | 110 | U | |
| NAPHTHALENE | 43 | U | |
| NITROBENZENE | 110 | U | |
| N-NITROSODIETHYLAMINE | 110 | U | |
| N-NITROSODIMETHYLAMINE | 110 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 110 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 110 | U | |
| N-NITROSODIPHENYLAMINE | 110 | U | |
| N-NITROSOMETHYLETHYLAMINE | 110 | U | |
| N-NITROSOMORPHOLINE | 110 | UJ | C |
| N-NITROSOPIPERIDINE | 110 | U | |
| N-NITROSOPYRROLIDINE | 110 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 110 | U | |
| O-TOLUIDINE | 110 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 110 | U | |
| PENTACHLOROBENZENE | 110 | U | |
| PENTACHLOROETHANE | 110 | U | |
| PENTACHLORONITROBENZENE | 110 | U | |
| PENTACHLOROPHENOL | 110 | U | |
| PHENACETIN | 110 | U | |
| PHENANTHRENE | 43 | U | |
| PHENOL | 110 | U | |
| PRONAMIDE | 110 | U | |
| PYRENE | 43 | U | |
| PYRIDINE | 110 | U | |
| SAFROLE | 110 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: PEST/PCB

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW25-S-40 | nsample | OLFS4-MW26-S-25 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612084-02 | lab_id | 0612084-03 |
| qc_type | NM | qc_type | NM |
| units | UG/KG | units | UG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.6 | U | |
| AROCLOR-1221 | 4.6 | U | |
| AROCLOR-1232 | 4.6 | U | |
| AROCLOR-1242 | 4.6 | U | |
| AROCLOR-1248 | 4.6 | U | |
| AROCLOR-1254 | 4.6 | U | |
| AROCLOR-1260 | 4.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 4.3 | U | |
| AROCLOR-1221 | 4.3 | U | |
| AROCLOR-1232 | 4.3 | U | |
| AROCLOR-1242 | 4.3 | U | |
| AROCLOR-1248 | 4.3 | U | |
| AROCLOR-1254 | 4.3 | U | |
| AROCLOR-1260 | 4.3 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW25-S-40 | nsample | OLFS4-MW26-S-25 | nsample | OLFS4-MW33S-26 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/14/2006 |
| lab_id | 0612084-02 | lab_id | 0612084-03 | lab_id | 0612148-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 95.0 | Pct_Solids | 96.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW33S-5 | nsample | OLFS4-MW35S-29 | nsample | OLFS4-MW36S-25 |
| samp_date | 12/14/2006 | samp_date | 12/14/2006 | samp_date | 12/14/2006 |
| lab_id | 0612148-01 | lab_id | 0612148-03 | lab_id | 0612148-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 89.0 | Pct_Solids | 94.0 | Pct_Solids | 95.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 730 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7.2 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYS001 MEDIA: SOIL DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-SB2-S-26 | nsample | OLFS4-SB3-S-26 | nsample | OLFS4-SB6-S-16 |
| samp_date | 12/15/2006 | samp_date | 12/15/2006 | samp_date | 12/15/2006 |
| lab_id | 0612161-02 | lab_id | 0612161-04 | lab_id | 0612161-09 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/KG | units | MG/KG | units | MG/KG |
| Pct_Solids | 88.0 | Pct_Solids | 91.0 | Pct_Solids | 92.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7.3 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 7.3 | U | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **GERRY WALKER** **DATE:** **MARCH 17, 2007**

**FROM:** **THOMAS JACKMAN** **COPIES:** **DV FILE**

**SUBJECT:** **ORGANIC DATA VALIDATION- VOA/SVOA/PAHS/PCB/TPH(C8-C40)**
**SAUFLEY CTO029**
**SDG SAUFLEYW001**

**SAMPLES:** 17/Aqueous

| | |
|---|---|
| OLFS4-MW03S-001 | OLFS4-MW16S-001 |
| OLFS4-MW05S-001 | OLFS4-MW19S-001 |
| OLFS4-MW06S-001 | TRIP BLANK 4305 |
| OLFS4-MW07S-001 | TRIP BLANK 4306 |
| OLFS4-MW08S-001 | TRIP BLANK 4309 |
| OLFS4-MW08S-001-D | |

OVERVIEW

The sample set for CTO 029 Saufley, SDG SaufleyW001 consists of three (3) trip blanks and fourteen (14) groundwater samples. The samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOC), semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and Florida Petroleum Range Organics, [TPH (C08-C40)]. One field duplicate pair (MW08S/MW08S-D) was included in this SDG.

The samples were collected by Tetra Tech NUS, Inc. on December 6, 7, and 8, 2006 and analyzed by Empirical Laboratories of Nashville, Tennessee. The samples were also analyzed for 1,2-Dibromormethane (EDB) by PEL Laboratories of Tampa, Florida. The analyses were conducted in accordance with SW-846 Methods 8260B, 8270C, 8270C SIM, 8082, modified method 8015M, and Method 8011 (for EDB) analysis and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

| | |
|---|---|
| * | Data completeness |
| | Holding times |
| * | GC/MS Tuning |
| | Initial/continuing calibrations |
| | Field/Laboratory method blank results |
| * | Surrogate Recoveries |
| * | Matrix Spike/Matrix Spike Duplicate Results |
| | Laboratory Control Spike/Laboratory Control Duplicate Spike Results |
| * | Internal Standard Recoveries |
| * | Field Duplicate Precision |
| * | Compound Quantitation |
| * | Compound Identification |
| * | Detection Limits |

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

**Volatiles**

Relative response factors (RRFs) for 1,4-dioxane, acetonitrile, acrolein, isobutanol, and propionitrile were less than the 0.05 quality control limit in the initial and continuing calibrations. Therefore, nondetected results for these analytes were qualified as rejected, "UR", in all samples.

The following compounds were detected in method, trip, or rinsate blanks:

| Compound | Maximum Concentration | Blank Action Level |
|---|---|---|
| Chloroform[1] | 0.24 ug/L | 1.2 ug/L |
| Chloromethane[1] | 0.34 ug/L | 1.7 ug/L |
| Acetone[2] | 6.8 ug/L | 68 ug/L |

(1) – Detected in laboratory blanks.
(2) – Detected in all trip blanks.

An action level of 5X the maximum contaminant concentration was used for chloroform and chloromethane to evaluate laboratory or field contamination. An action level of 10X the maximum blank concentration was used for acetone, a common laboratory contaminant. Dilution factors and sample aliquots were taken into consideration during the application of all action levels, if applicable.

The continuing calibration had %Ds greater than the 25% quality control criterion for acrolein and chloromethane on 12/15/06 @19:10 on instrument VOA-4. Nondetected results for acrolein were qualified as rejected "UR" because of low RRFs, as discussed above. Positive results for chloromethane were previously qualified "U" because of laboratory blank contamination

The LCS recovery for chloromethane in LCS sample V4BLK1215ELCS analyzed on 12/15/05 @20:14 on instrument VOA-4 slightly exceeded the upper quality control limit. No validation actions were taken for chloromethane because it was either not positively detected in any samples or positive results were qualified on the basis of blank contamination as discussed above.

**1,2-Dibromoethane (EDB)**

Holding times were exceeded in the analyses of all samples by 1 or 2 days. Nondetected results for EDB were qualified as estimated, "UJ".

In the MS/MSD analysis, the relative percent difference (RPD) for EDB exceeded the quality control limit. No data were qualified on the basis of the RPD because the MS/MSD recoveries were acceptable. In addition, the LCS/LCSD recoveries and RPD were acceptable.

**Semivolatiles**

Relative response factors (RRFs) for 4-nitroquinoline-1-oxide were less than the 0.05 quality control limit in the initial and continuing calibrations. Nondetected results for this analyte were qualified as rejected, "UR", in all samples.

The continuing calibration had %Ds greater than the 25% quality control criterion for aniline, benzaldehyde, carbazole, 2-nitroaniline, and 3-nitroaniline on 12/27/06 @12:56 on instrument BNA1. Nondetected results for these analytes in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had the %D greater than the 25% quality control criterion for hexachloropropene and 1,3,5-trinitrobenzene on 12/27/07 @13:32 on instrument BNA1. Nondetected results for this analyte in samples

associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had %Ds greater than the 25% quality control criterion for methyl methanesulfonate, 1,4-naphthoquinoine, 4-nitroquinoline-1-oxide, N-nitrosomethylethylamine, N-nitrosomorpholine, N-nitrosopyrrolidine, and 2-picoline on 12/27/07 @14:08 on instrument BNA1. Nondetected results for these analytes, with the exception of 4-nitroquinoline-1-oxide in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had the %D greater than the 25% quality control criterion for a,a-dimethyl-phenethylamine 12/27/07 @14:44 on instrument BNA1. Nondetected results for this analyte in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had %Ds greater than the 25% quality control criterion for aniline, 4-chloroaniline, carbazole, 2-nitroaniline, and 3-nitroaniline on 12/28/06 @13:09 on instrument BNA1. Nondetected results for these analytes in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had %Ds greater than the 25% quality control criterion for hexachloropropene, isodrine, and kepone on 12/28/07 @13:45 on instrument BNA1. Nondetected results for these analytes in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had %Ds greater than the 25% quality control criterion for diallate, 3,3'-dimethylbenzidine, 1,4-naphthtoquinoine, 4-nitroquinoline-1-oxide, N-nitrosomethylethylamine, N-nitrosomorpholine, and N-nitrosopyrrolidine on 12/28/07 @14:22 on instrument BNA1. Nondetected results for these analytes in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The continuing calibration had %Ds greater than the 25% quality control criterion for dimethoate, a,a-dimethyl-phenethylamine, and p-phenylenediamine on 12/28/07 @14:58 on instrument BNA1. Nondetected results for these analytes in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

The Laboratory control sample (LCS) recovery for Sample SBLK1211BW1LCS analyzed on 12/27/06 @15:55 on instrument BNA1 for 1,1-biphenyl was zero (0) percent. Nondetected results for 1,1-biphenyl were qualified as rejected, "UR", in samples associated with this LCS.

The Laboratory control sample (LCS) recovery for Sample SBLK1211BW1LCS analyzed on 12/27/06 @15:55 on instrument BNA1 for bis(2-chloroethoxy)methane was slightly below the quality control range. No results were qualified on the basis of the marginal LCS recovery.

The Laboratory control sample (LCS) recovery for Sample SBLK1213BW1LCS analyzed on 12/28/06 @15:33 on instrument BNA1 for 1,1-biphenyl was high. No results were qualified on the basis of the LCS recovery because 1,1-biphenyl was not positively detected in the one sample associated with this LCS.

The MSD recocvery for 1,1-biphenyl exceeded the upper quality control limit. No validation actions were taken on the basis of the MSD recovery because 1,1-biphenyl was not positively detected in the unspiked sample (MW03S-001).

The MSD recocvery for bis(2-chloroethoxy)methane was slightly below the lower quality control limit. No validation actions were taken on the basis of the MSD recovery because according to the National Functional Guidelines data are not to be qualified on the basis of MS/MSD results alone.

**Polycyclic Aromatic Hydrocarbons (PAHs)**

The continuing calibration had the %D for benzo(g,h,i)perylene greater than the 25% quality control criterion on 12/12/06 @13:28 on instrument BNA3. Nondetected results for this analyte in samples associated with this calibration were qualified as estimated, "UJ". The direction of bias could not be determined.

Sample OLFS4-MW05S-001 was diluted (5X) and reanalyzed because the concentrations of naphthalene and 2-methylnaphthalene exceeded the calibration range (flagged "L" by the laboratory on the Form 1s). The results for these analytes in this sample reported in the qualified analytical results (Appendix A) were taken from the reanalysis. All other results for this sample are reported from the initial undiluted analysis.

**Polychlorinated Biphenyls (PCBs)**

Quality control criteria were met for all parameters evaluated.

**Total Petroleum Hydrocarbons (TPH, C8-C40)**

Quality control criteria were met for all parameters evaluated.

Additional Comments:

Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, J.

The sample ID for sample OLFS4-MW085 (Laboratory ID # 0612081-01) appears to have been incorrectly transcribed from the Chain of Custody. The correct ID for this sample is OLFS4-MW08S. All Form 1s with the incorrect ID were corrected by the reviewer. The database was also revised

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Several volatile and semivolatile compounds exceeded the initial and/or continuing calibration %RSD, %D and/or minimum RRF criteria.

**Other Issues Affecting Data Quality:** None

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99), and the Department of Defense Quality System Manual (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DOD QSM guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Thomas Jackman
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**Data Qualifier Key:**

| | | |
|---|---|---|
| U | - | Value is a nondetect as reported by the laboratory or ositive result is considered to be an artifact of blank contamination and should not be considered present. |
| J | - | Positive result is considered estimated, "J", as a result of validation noncompliances. |
| UJ | - | Quantitation limit is considered estimated, "UJ", as a result of technical noncompliance. |
| UR | - | Nondetected result is considered rejected, "UR", as a result of severe technical noncompliance. |

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**Data Qualifier Key:**

| | | |
|---|---|---|
| U | - | Value is a nondetect as reported by the laboratory or ositive result is considered to be an artifact of blank contamination and should not be considered present. |
| J | - | Positive result is considered estimated, "J", as a result of validation noncompliances. |
| UJ | - | Quantitation limit is considered estimated, "UJ", as a result of technical noncompliance. |
| UR | - | Nondetected result is considered rejected, "UR", as a result of severe technical noncompliance. |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW03S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | B |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | J | P |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW03S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.23 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW03S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW06S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | B |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.26 | J | P |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW06S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.32 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW06S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW07S-001 |
| samp_date | 12/8/2006 |
| lab_id | 0612095-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.38 | J | P |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW07S-001 |
| samp_date | 12/8/2006 |
| lab_id | 0612095-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 1.1 | | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 1.6 | J | P |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.29 | J | P |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.39 | J | P |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 2.2 | | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.31 | J | P |
| O-XYLENE | 0.54 | J | P |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.24 | J | P |
| TOLUENE | 0.46 | J | P |
| TOTAL XYLENES | 0.83 | J | P |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW07S-001 |
| samp_date | 12/8/2006 |
| lab_id | 0612095-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW08S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | B |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.93 | J | P |
| BROMODICHLOROMETHANE | 0.54 | J | P |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW08S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.38 | J | P |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 0.18 | U | A |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.16 | J | P |
| ISOBUTANOL | 10 | UJ | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.5 | J | P |
| O-XYLENE | 0.26 | J | P |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.87 | J | P |
| TOTAL XYLENES | 0.73 | J | P |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW08S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW08S-001-D |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-02 | lab_id | 0612081-02 | lab_id | 0612081-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | OLFS4-MW08S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | B |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.66 | J | P |
| BROMODICHLOROMETHANE | 0.24 | J | P |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 1.3 | | |
| CHLOROMETHANE | 0.18 | U | A |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.3 | J | P |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.54 | J | P |
| TOTAL XYLENES | 0.28 | J | P |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW-16S-001 | nsample | OLFS4-MW-16S-001 | nsample | OLFS4-MW-16S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-05 | lab_id | 0612081-05 | lab_id | 0612081-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | B |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.19 | J | P |
| BROMODICHLOROMETHANE | 0.29 | J | P |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.38 | J | P |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.36 | J | P |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.61 | J | P |
| TOTAL XYLENES | 0.34 | J | P |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW-19S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.18 | J | P |
| BROMODICHLOROMETHANE | 0.36 | J | P |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW-19S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.35 | J | P |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 0.18 | U | A |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.26 | J | P |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW-19S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 5.2 | | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 1.1 | U | B |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 4.9 | | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | A |
| CHLOROMETHANE | 0.18 | U | A |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 77 | | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.41 | J | P |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 4.6 | | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 1.5 | | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 21 | | |
| O-XYLENE | 1.3 | | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 1.1 | | |
| TOTAL XYLENES | 21 | | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.27 | J | P |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | TRIP BLANK 4305 | | nsample | TRIP BLANK 4305 | | nsample | TRIP BLANK 4305 | |
| samp_date | 12/8/2006 | | samp_date | 12/8/2006 | | samp_date | 12/8/2006 | |
| lab_id | 0612095-01 | | lab_id | 0612095-01 | | lab_id | 0612095-01 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 6.8 | J | P |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | TRIP BLANK 4306 | nsample | TRIP BLANK 4306 | nsample | TRIP BLANK 4306 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/6/2006 |
| lab_id | 0612069-02 | lab_id | 0612069-02 | lab_id | 0612069-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 5.5 | J | P |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | TRIP BLANK 4309 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.19 | U | |
| 1,1,1-TRICHLOROETHANE | 0.15 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.22 | U | |
| 1,1,2-TRICHLOROETHANE | 0.17 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.22 | U | |
| 1,1-DICHLOROETHANE | 0.15 | U | |
| 1,1-DICHLOROETHENE | 0.42 | U | |
| 1,2,3-TRICHLOROBENZENE | 0.16 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.31 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.14 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.28 | U | |
| 1,2-DIBROMOETHANE | 0.0076 | UJ | H |
| 1,2-DICHLOROBENZENE | 0.17 | U | |
| 1,2-DICHLOROETHANE | 0.15 | U | |
| 1,2-DICHLOROPROPANE | 0.18 | U | |
| 1,3-DICHLOROBENZENE | 0.21 | U | |
| 1,4-DICHLOROBENZENE | 0.12 | U | |
| 1,4-DIOXANE | 20 | UR | C |
| 2-BUTANONE | 1.2 | U | |
| 2-HEXANONE | 0.83 | U | |
| 3-CHLOROPROPENE | 0.2 | U | |
| 4-METHYL-2-PENTANONE | 1.4 | U | |
| ACETONE | 5.8 | J | P |
| ACETONITRILE | 5 | UR | C |
| ACROLEIN | 5 | UR | C |
| ACRYLONITRILE | 0.95 | U | |
| BENZENE | 0.11 | U | |
| BROMODICHLOROMETHANE | 0.24 | U | |
| BROMOFORM | 0.24 | U | |
| BROMOMETHANE | 0.33 | U | |
| CARBON DISULFIDE | 0.13 | U | |
| CARBON TETRACHLORIDE | 0.14 | U | |

| | |
|---|---|
| nsample | TRIP BLANK 4309 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZENE | 0.28 | U | |
| CHLORODIBROMOMETHANE | 0.2 | U | |
| CHLOROETHANE | 0.38 | U | |
| CHLOROFORM | 0.15 | U | |
| CHLOROMETHANE | 2 | UJ | C |
| CHLOROPRENE | 0.2 | U | |
| CIS-1,2-DICHLOROETHENE | 0.44 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.13 | U | |
| CYCLOHEXANE | 0.18 | U | |
| DIBROMOMETHANE | 0.14 | U | |
| DICHLORODIFLUOROMETHANE | 0.24 | U | |
| ETHYL METHACRYLATE | 0.21 | U | |
| ETHYLBENZENE | 0.14 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.25 | U | |
| METHACRYLONITRILE | 0.2 | U | |
| METHYL ACETATE | 0.87 | U | |
| METHYL CYCLOHEXANE | 0.2 | U | |
| METHYL IODIDE | 0.19 | U | |
| METHYL METHACRYLATE | 0.35 | U | |
| METHYL TERT-BUTYL ETHER | 0.17 | U | |
| METHYLENE CHLORIDE | 0.26 | U | |
| M-XYLENE | 0.26 | U | |
| O-XYLENE | 0.21 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.22 | U | |
| TETRACHLOROETHENE | 0.14 | U | |
| TOLUENE | 0.18 | U | |
| TOTAL XYLENES | 0.21 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.4 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.22 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.6 | U | |

| | |
|---|---|
| nsample | TRIP BLANK 4309 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.28 | U | |
| TRICHLOROFLUOROMETHANE | 0.15 | U | |
| VINYL ACETATE | 1.3 | U | |
| VINYL CHLORIDE | 0.19 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW03S-001 | | nsample | OLFS4-MW03S-001 | | nsample | OLFS4-MW03S-001 | |
| samp_date | 12/6/2006 | | samp_date | 12/6/2006 | | samp_date | 12/6/2006 | |
| lab_id | 0612069-03 | | lab_id | 0612069-03 | | lab_id | 0612069-03 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 1 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.1 | U | |
| 1,3-DINITROBENZENE | 3.1 | U | |
| 1,4-NAPHTHOQUINONE | 10 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 10 | UJ | C |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 26 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 7.3 | U | |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 52 | UJ | C |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 26 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 10 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5.2 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 10 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 10 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 1 | U | |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 10 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 10 | UJ | C |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 1 | U | |
| DIMETHOATE | 10 | UJ | C |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 1 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 26 | U | |
| HEXACHLOROPROPENE | 10 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 10 | UJ | C |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 10 | UJ | C |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 1 | U | |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW03S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-03 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.83 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 10 | UJ | C |
| N-NITROSOMORPHOLINE | 10 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 10 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 1 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | U | |
| SAFROLE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW06S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5.3 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 11 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 26 | UJ | C |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 11 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 26 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW06S-001 |
| samp_date | 12/6/2006 |
| lab_id | 0612069-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 11 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 11 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 5.3 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/8/2006 |
| lab_id | 0612069-01 | lab_id | 0612069-01 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 11 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | U | |
| HEXACHLOROPROPENE | 11 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 5.3 | UJ | C |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 11 | UJ | C |
| N-NITROSOMORPHOLINE | 11 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 11 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5.7 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.4 | UJ | C |
| 1,3-DINITROBENZENE | 3.4 | U | |
| 1,4-NAPHTHOQUINONE | 11 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.3 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 28 | UJ | C |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 11 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 48 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 28 | UJ | C |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW07S-001 | nsample | OLFS4-MW07S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/8/2006 | samp_date | 12/8/2006 | samp_date | 12/8/2006 |
| lab_id | 0612095-02 | lab_id | 0612095-02 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.3 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.7 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 11 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.3 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 11 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 5.7 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.2 | J | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 11 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.6 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 28 | U | |
| HEXACHLOROPROPENE | 11 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.3 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 5.7 | UJ | C |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.91 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 11 | UJ | C |
| N-NITROSOMORPHOLINE | 11 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 11 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.4 | U | |
| O-TOLUIDINE | 4.6 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.6 | U | |
| PENTACHLOROETHANE | 4.6 | U | |
| PENTACHLORONITROBENZENE | 4.6 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW085-001 | | nsample | OLFS4-MW085-001 | | nsample | OLFS4-MW085-001 | |
| samp_date | 12/7/2006 | | samp_date | 12/7/2006 | | samp_date | 12/7/2006 | |
| lab_id | 0612081-01 | | lab_id | 0612081-01 | | lab_id | 0612081-01 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5.3 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 10 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | U | |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 26 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 10 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 44 | U | |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 26 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 10 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 5.3 | UJ | C |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 10 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 10 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 1 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 26 | U | |
| HEXACHLOROPROPENE | 10 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 5.3 | UJ | C |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW085-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.84 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 10 | UJ | C |
| N-NITROSOMORPHOLINE | 10 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 10 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 10 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | U | |
| SAFROLE | 1 | U | |

| | |
|---|---|
| nsample | OLFS4-MW08S-001-D |
| samp_date | 12/7/2006 |
| lab_id | 0612081-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | OLFS4-MW08S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5.3 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3.2 | U | |
| 1,2,4-TRICHLOROBENZENE | 1.1 | U | |
| 1,3,5-TRINITROBENZENE | 3.2 | UJ | C |
| 1,3-DINITROBENZENE | 3.2 | U | |
| 1,4-NAPHTHOQUINONE | 11 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1.1 | U | |
| 1-NAPHTHYLAMINE | 1.1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1.1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1.1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1.1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1.1 | U | |
| 2,4-DICHLOROPHENOL | 1.1 | U | |
| 2,4-DIMETHYLPHENOL | 1.1 | U | |
| 2,4-DINITROPHENOL | 11 | U | |
| 2,4-DINITROTOLUENE | 1.1 | U | |
| 2,6-DICHLOROPHENOL | 1.1 | U | |
| 2,6-DINITROTOLUENE | 1.1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1.1 | U | |
| 2-CHLOROPHENOL | 1.1 | U | |
| 2-METHYLNAPHTHALENE | 1.1 | U | |
| 2-METHYLPHENOL | 1.1 | U | |
| 2-NAPHTHYLAMINE | 1.1 | U | |
| 2-NITROANILINE | 26 | UJ | C |
| 2-NITROPHENOL | 1.1 | U | |
| 2-PICOLINE | 11 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1.1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 45 | U | |
| 3-METHYLCHOLANTHRENE | 1.1 | U | |
| 3-METHYLPHENOL | 1.1 | U | |
| 3-NITROANILINE | 26 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW08S-001-D |
| samp_date | 12/7/2006 |
| lab_id | 0612081-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | OLFS4-MW08S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1.1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1.1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1.1 | U | |
| 4-CHLOROANILINE | 1.1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1.1 | U | |
| 4-METHYLPHENOL | 1.1 | U | |
| 4-NITROANILINE | 1.1 | U | |
| 4-NITROPHENOL | 5.3 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 11 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1.1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 11 | UJ | C |
| ACENAPHTHENE | 1.1 | U | |
| ACENAPHTHYLENE | 1.1 | U | |
| ACETOPHENONE | 1.1 | U | |
| ANILINE | 1.1 | UJ | C |
| ANTHRACENE | 1.1 | U | |
| ARAMITE | 1.1 | U | |
| ATRAZINE | 1.1 | U | |
| BENZALDEHYDE | 5.3 | UJ | C |
| BENZO(A)ANTHRACENE | 1.1 | U | |
| BENZO(A)PYRENE | 1.1 | U | |
| BENZO(B)FLUORANTHENE | 1.1 | U | |
| BENZO(G,H,I)PERYLENE | 1.1 | U | |
| BENZO(K)FLUORANTHENE | 1.1 | U | |
| BENZYL ALCOHOL | 1.1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1.1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1.1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.1 | U | |
| BUTYL BENZYL PHTHALATE | 1.1 | U | |
| CAPROLACTAM | 1.1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-02 | lab_id | 0612081-02 | lab_id | 0612081-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 11 | UJ | C |
| CHLOROBENZILATE | 1.1 | U | |
| CHRYSENE | 1.1 | U | |
| DIALLATE | 1.1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1.1 | U | |
| DIBENZOFURAN | 1.1 | U | |
| DIETHYL PHTHALATE | 11 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1.1 | U | |
| DI-N-BUTYL PHTHALATE | 1.1 | U | |
| DI-N-OCTYL PHTHALATE | 1.1 | U | |
| DIPHENYLAMINE | 1.1 | U | |
| ETHYL METHANE SULFONATE | 1.1 | U | |
| FLUORANTHENE | 1.1 | U | |
| FLUORENE | 1.1 | U | |
| HEXACHLOROBENZENE | 1.1 | U | |
| HEXACHLOROBUTADIENE | 1.1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1.1 | U | |
| HEXACHLOROETHANE | 1.1 | U | |
| HEXACHLOROPHENE | 26 | U | |
| HEXACHLOROPROPENE | 11 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1.1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1.1 | U | |
| ISOSAFROLE | 1.1 | U | |
| KEPONE | 1.1 | U | |
| METHAPYRILENE | 1.1 | U | |
| METHYL METHANE SULFONATE | 5.3 | UJ | C |
| NAPHTHALENE | 1.1 | U | |
| NITROBENZENE | 1.1 | U | |
| N-NITROSODIETHYLAMINE | 1.1 | U | |
| N-NITROSODIMETHYLAMINE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1.1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.85 | U | |
| N-NITROSODIPHENYLAMINE | 1.1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 11 | UJ | C |
| N-NITROSOMORPHOLINE | 11 | UJ | C |
| N-NITROSOPIPERIDINE | 1.1 | U | |
| N-NITROSOPYRROLIDINE | 11 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.2 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1.1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 11 | U | |
| PHENACETIN | 1.1 | U | |
| PHENANTHRENE | 1.1 | U | |
| PHENOL | 1.1 | U | |
| PRONAMIDE | 1.1 | U | |
| PYRENE | 1.1 | U | |
| PYRIDINE | 1.1 | U | |
| SAFROLE | 1.1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3 | UJ | C |
| 1,3-DINITROBENZENE | 3 | U | |
| 1,4-NAPHTHOQUINONE | 10 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | U | |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 7.9 | J | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 25 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 10 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 42 | U | |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 25 | UJ | C |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW5S-001 | nsample | OLFS4-MW5S-001 | nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-04 | lab_id | 0612081-04 | lab_id | 0612081-04 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 10 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 5 | UJ | C |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1.4 | J | |
| BUTYL BENZYL PHTHALATE | 1.6 | J | |
| CAPROLACTAM | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 10 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 10 | U | |
| DIMETHOATE | 4 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 1 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 25 | U | |
| HEXACHLOROPROPENE | 10 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 5 | UJ | C |
| NAPHTHALENE | 13 | | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.8 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 10 | UJ | C |
| N-NITROSOMORPHOLINE | 10 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 10 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4 | U | |
| PENTACHLOROETHANE | 4 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 10 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | U | |
| SAFROLE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLSF4-MW-16S-001 | nsample | OLSF4-MW-16S-001 | nsample | OLSF4-MW-16S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-05 | lab_id | 0612081-05 | lab_id | 0612081-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5.2 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3.1 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3.1 | UJ | C |
| 1,3-DINITROBENZENE | 3.1 | U | |
| 1,4-NAPHTHOQUINONE | 10 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | U | |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2.1 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 26 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 10 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 44 | U | |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 26 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2.1 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5.2 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2.1 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 10 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 5.2 | UJ | C |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1.6 | J | |
| CAPROLACTAM | 3.6 | J | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 10 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 10 | U | |
| DIMETHOATE | 4.2 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1.4 | J | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 1 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 26 | U | |
| HEXACHLOROPROPENE | 10 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2.1 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 5.2 | UJ | C |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLSF4-MW-16S-001 | | nsample | OLSF4-MW-19S-001 | | nsample | OLSF4-MW-19S-001 | |
| samp_date | 12/7/2006 | | samp_date | 12/7/2006 | | samp_date | 12/7/2006 | |
| lab_id | 0612081-05 | | lab_id | 0612081-06 | | lab_id | 0612081-06 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | | | Pct_Solids | | | Pct_Solids | | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.83 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 10 | UJ | C |
| N-NITROSOMORPHOLINE | 10 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 10 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3.1 | U | |
| O-TOLUIDINE | 4.2 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4.2 | U | |
| PENTACHLOROETHANE | 4.2 | U | |
| PENTACHLORONITROBENZENE | 4.2 | U | |
| PENTACHLOROPHENOL | 10 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | U | |
| SAFROLE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 5 | UR | E |
| 1,2,4,5-TETRACHLOROBENZENE | 3 | U | |
| 1,2,4-TRICHLOROBENZENE | 1 | U | |
| 1,3,5-TRINITROBENZENE | 3 | UJ | C |
| 1,3-DINITROBENZENE | 3 | U | |
| 1,4-NAPHTHOQUINONE | 10 | UJ | C |
| 1,4-PHENYLENEDIAMINE | 1 | U | |
| 1-NAPHTHYLAMINE | 1 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 1 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 1 | U | |
| 2,4,5-TRICHLOROPHENOL | 1 | U | |
| 2,4,6-TRICHLOROPHENOL | 1 | U | |
| 2,4-DICHLOROPHENOL | 1 | U | |
| 2,4-DIMETHYLPHENOL | 1 | U | |
| 2,4-DINITROPHENOL | 10 | U | |
| 2,4-DINITROTOLUENE | 1 | U | |
| 2,6-DICHLOROPHENOL | 1 | U | |
| 2,6-DINITROTOLUENE | 1 | U | |
| 2-ACETYLAMINOFLUORENE | 2 | U | |
| 2-CHLORONAPHTHALENE | 1 | U | |
| 2-CHLOROPHENOL | 1 | U | |
| 2-METHYLNAPHTHALENE | 1 | U | |
| 2-METHYLPHENOL | 1 | U | |
| 2-NAPHTHYLAMINE | 1 | U | |
| 2-NITROANILINE | 25 | UJ | C |
| 2-NITROPHENOL | 1 | U | |
| 2-PICOLINE | 10 | UJ | C |
| 3,3'-DICHLOROBENZIDINE | 1 | U | |
| 3,3'-DIMETHYLBENZIDINE | 42 | U | |
| 3-METHYLCHOLANTHRENE | 1 | U | |
| 3-METHYLPHENOL | 1 | U | |
| 3-NITROANILINE | 25 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 1 | U | |
| 4-AMINOBIPHENYL | 2 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 1 | U | |
| 4-CHLORO-3-METHYLPHENOL | 1 | U | |
| 4-CHLOROANILINE | 1 | U | |
| 4-CHLOROPHENYL PHENYL ETHER | 1 | U | |
| 4-METHYLPHENOL | 1 | U | |
| 4-NITROANILINE | 1 | U | |
| 4-NITROPHENOL | 5 | U | |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 2 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 1 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 10 | UJ | C |
| ACENAPHTHENE | 1 | U | |
| ACENAPHTHYLENE | 1 | U | |
| ACETOPHENONE | 1 | U | |
| ANILINE | 1 | UJ | C |
| ANTHRACENE | 1 | U | |
| ARAMITE | 1 | U | |
| ATRAZINE | 1 | U | |
| BENZALDEHYDE | 5 | UJ | C |
| BENZO(A)ANTHRACENE | 1 | U | |
| BENZO(A)PYRENE | 1 | U | |
| BENZO(B)FLUORANTHENE | 1 | U | |
| BENZO(G,H,I)PERYLENE | 1 | U | |
| BENZO(K)FLUORANTHENE | 1 | U | |
| BENZYL ALCOHOL | 1 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 1 | U | |
| BIS(2-CHLOROETHYL)ETHER | 1 | U | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1 | U | |
| BUTYL BENZYL PHTHALATE | 1 | U | |
| CAPROLACTAM | 4.4 | J | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: OS

| | | | |
|---|---|---|---|
| nsample | OLSF4-MW-19S-001 | nsample | OLSF4-MW-19S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-06 | lab_id | 0612081-06 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CARBAZOLE | 10 | UJ | C |
| CHLOROBENZILATE | 1 | U | |
| CHRYSENE | 1 | U | |
| DIALLATE | 1 | U | |
| DIBENZO(A,H)ANTHRACENE | 1 | U | |
| DIBENZOFURAN | 1 | U | |
| DIETHYL PHTHALATE | 10 | U | |
| DIMETHOATE | 4 | U | |
| DIMETHYL PHTHALATE | 1 | U | |
| DI-N-BUTYL PHTHALATE | 1 | U | |
| DI-N-OCTYL PHTHALATE | 1 | U | |
| DIPHENYLAMINE | 1 | U | |
| ETHYL METHANE SULFONATE | 1 | U | |
| FLUORANTHENE | 1 | U | |
| FLUORENE | 1 | U | |
| HEXACHLOROBENZENE | 1 | U | |
| HEXACHLOROBUTADIENE | 1 | U | |
| HEXACHLOROCYCLOPENTADIENE | 1 | U | |
| HEXACHLOROETHANE | 1 | U | |
| HEXACHLOROPHENE | 25 | U | |
| HEXACHLOROPROPENE | 10 | UJ | C |
| INDENO(1,2,3-CD)PYRENE | 1 | U | |
| ISODRIN | 2 | U | |
| ISOPHORONE | 1 | U | |
| ISOSAFROLE | 1 | U | |
| KEPONE | 1 | U | |
| METHAPYRILENE | 1 | U | |
| METHYL METHANE SULFONATE | 5 | UJ | C |
| NAPHTHALENE | 1 | U | |
| NITROBENZENE | 1 | U | |
| N-NITROSODIETHYLAMINE | 1 | U | |
| N-NITROSODIMETHYLAMINE | 1 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSO-DI-N-BUTYLAMINE | 1 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 0.8 | U | |
| N-NITROSODIPHENYLAMINE | 1 | U | |
| N-NITROSOMETHYLETHYLAMINE | 10 | UJ | C |
| N-NITROSOMORPHOLINE | 10 | UJ | C |
| N-NITROSOPIPERIDINE | 1 | U | |
| N-NITROSOPYRROLIDINE | 10 | UJ | C |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 4 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 1 | U | |
| PENTACHLOROBENZENE | 4 | U | |
| PENTACHLOROETHANE | 4 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 10 | U | |
| PHENACETIN | 1 | U | |
| PHENANTHRENE | 1 | U | |
| PHENOL | 1 | U | |
| PRONAMIDE | 1 | U | |
| PYRENE | 1 | U | |
| PYRIDINE | 1 | U | |
| SAFROLE | 1 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PAH

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW03S-001 | nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/8/2006 |
| lab_id | 0612069-03 | lab_id | 0612069-01 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.02 | J | P |
| 2-METHYLNAPHTHALENE | 0.034 | J | P |
| ACENAPHTHENE | 0.01 | U | |
| ACENAPHTHYLENE | 0.0087 | U | |
| ANTHRACENE | 0.0097 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.0097 | U | |
| BENZO(B)FLUORANTHENE | 0.016 | U | |
| BENZO(G,H,I)PERYLENE | 0.051 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.013 | U | |
| CHRYSENE | 0.0092 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.012 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.018 | U | |
| NAPHTHALENE | 0.05 | J | P |
| PHENANTHRENE | 0.014 | U | |
| PYRENE | 0.011 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.029 | J | P |
| 2-METHYLNAPHTHALENE | 0.054 | J | P |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0094 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.056 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.063 | | |
| PHENANTHRENE | 0.016 | U | |
| PYRENE | 0.012 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.5 | | |
| 2-METHYLNAPHTHALENE | 0.51 | | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0092 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.054 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.027 | J | P |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.16 | | |
| PHENANTHRENE | 0.033 | J | P |
| PYRENE | 0.011 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PAH

| | |
|---|---|
| nsample | OLFS4-MW08S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-01 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.17 | | |
| 2-METHYLNAPHTHALENE | 0.32 | | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0092 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.054 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0098 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.37 | | |
| PHENANTHRENE | 0.021 | J | P |
| PYRENE | 0.011 | U | |

| | |
|---|---|
| nsample | OLFS4-MW08S-001-D |
| samp_date | 12/7/2006 |
| lab_id | 0612081-02 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | OLFS4-MW08S-001 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.035 | J | P |
| 2-METHYLNAPHTHALENE | 0.058 | | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0094 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.056 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.014 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.089 | | |
| PHENANTHRENE | 0.02 | J | P |
| PYRENE | 0.014 | J | P |

| | |
|---|---|
| nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 8.6 | | |
| ACENAPHTHENE | 0.012 | U | |
| ACENAPHTHYLENE | 0.01 | U | |
| ANTHRACENE | 0.011 | U | |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.011 | U | |
| BENZO(B)FLUORANTHENE | 0.019 | U | |
| BENZO(G,H,I)PERYLENE | 0.059 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.015 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.014 | U | |
| FLUORANTHENE | 0.014 | U | |
| FLUORENE | 0.1 | | |
| INDENO(1,2,3-CD)PYRENE | 0.021 | U | |
| PHENANTHRENE | 0.039 | J | P |
| PYRENE | 0.012 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PAH

| | |
|---|---|
| nsample | OLFS4-MW5S-001-DL |
| samp_date | 12/7/2006 |
| lab_id | 0612081-04 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 2-METHYLNAPHTHALENE | 12 | | |
| NAPHTHALENE | 20 | | |

| | |
|---|---|
| nsample | OLSF4-MW-16S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-05 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.046 | J | P |
| 2-METHYLNAPHTHALENE | 0.063 | | |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.0094 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.012 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.018 | U | |
| BENZO(G,H,I)PERYLENE | 0.056 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.01 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.013 | U | |
| FLUORENE | 0.02 | J | P |
| INDENO(1,2,3-CD)PYRENE | 0.02 | U | |
| NAPHTHALENE | 0.1 | | |
| PHENANTHRENE | 0.068 | | |
| PYRENE | 0.012 | U | |

| | |
|---|---|
| nsample | OLSF4-MW-19S-001 |
| samp_date | 12/7/2006 |
| lab_id | 0612081-06 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1-METHYLNAPHTHALENE | 0.015 | J | P |
| 2-METHYLNAPHTHALENE | 0.025 | J | P |
| ACENAPHTHENE | 0.011 | U | |
| ACENAPHTHYLENE | 0.009 | U | |
| ANTHRACENE | 0.01 | U | |
| BENZO(A)ANTHRACENE | 0.011 | U | |
| BENZO(A)PYRENE | 0.01 | U | |
| BENZO(B)FLUORANTHENE | 0.017 | U | |
| BENZO(G,H,I)PERYLENE | 0.053 | UJ | C |
| BENZO(K)FLUORANTHENE | 0.014 | U | |
| CHRYSENE | 0.0096 | U | |
| DIBENZO(A,H)ANTHRACENE | 0.013 | U | |
| FLUORANTHENE | 0.012 | U | |
| FLUORENE | 0.013 | U | |
| INDENO(1,2,3-CD)PYRENE | 0.019 | U | |
| NAPHTHALENE | 0.044 | J | P |
| PHENANTHRENE | 0.015 | U | |
| PYRENE | 0.011 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW03S-001 | nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/8/2006 |
| lab_id | 0612069-03 | lab_id | 0612069-01 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.14 | U | |
| AROCLOR-1221 | 0.14 | U | |
| AROCLOR-1232 | 0.14 | U | |
| AROCLOR-1242 | 0.14 | U | |
| AROCLOR-1248 | 0.14 | U | |
| AROCLOR-1254 | 0.14 | U | |
| AROCLOR-1260 | 0.14 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW08S-001 | nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW-16S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-01 | lab_id | 0612081-02 | lab_id | 0612081-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW-19S-001 | nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-06 | lab_id | 0612081-04 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.12 | U | |
| AROCLOR-1221 | 0.12 | U | |
| AROCLOR-1232 | 0.12 | U | |
| AROCLOR-1242 | 0.12 | U | |
| AROCLOR-1248 | 0.12 | U | |
| AROCLOR-1254 | 0.12 | U | |
| AROCLOR-1260 | 0.12 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| AROCLOR-1016 | 0.13 | U | |
| AROCLOR-1221 | 0.13 | U | |
| AROCLOR-1232 | 0.13 | U | |
| AROCLOR-1242 | 0.13 | U | |
| AROCLOR-1248 | 0.13 | U | |
| AROCLOR-1254 | 0.13 | U | |
| AROCLOR-1260 | 0.13 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW03S-001 | nsample | OLFS4-MW06S-001 | nsample | OLFS4-MW07S-001 |
| samp_date | 12/6/2006 | samp_date | 12/6/2006 | samp_date | 12/8/2006 |
| lab_id | 0612069-03 | lab_id | 0612069-01 | lab_id | 0612095-02 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

## PROJ_NO: 00389

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW08S-001 | nsample | OLFS4-MW08S-001-D | nsample | OLFS4-MW-16S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-01 | lab_id | 0612081-02 | lab_id | 0612081-05 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L | units | MG/L |
| Pct_Solids | | Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | OLFS4-MW08S-001 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

**PROJ_NO: 00389**

SDG: SAUFLEYW001 MEDIA: WATER DATA FRACTION: PET

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW-19S-001 | nsample | OLFS4-MW5S-001 |
| samp_date | 12/7/2006 | samp_date | 12/7/2006 |
| lab_id | 0612081-06 | lab_id | 0612081-04 |
| qc_type | NM | qc_type | NM |
| units | MG/L | units | MG/L |
| Pct_Solids | | Pct_Solids | |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.18 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TPH (C08-C40) | 0.75 | | |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

| | | | |
|---|---|---|---|
| **TO:** | **G. WALKER** | **DATE:** | **AUGUST 17, 2007** |
| **FROM:** | **MATTHEW D. KRAUS** | **COPIES:** | **DV FILE** |
| **SUBJECT:** | **INORGANIC DATA VALIDATION – TAL METALS**<br>**SAUFLEY – CTO 029**<br>**SDG – CTO29-1** | | |
| **SAMPLES:** | 11/Aqueous/ | | |

| | | |
|---|---|---|
| OLFS4-MW37-0607 | OLFS4-MW37-0607-D | OLFS4-MW38-0607 |
| OLFS4-MW39-0607 | OLFS4-MW40-0607 | OLFS4-MW41-0607 |
| OLFS4-MW42-0607 | OLFS4-MW43-0607 | OLFS4-MW44-0607 |
| OLFS4-MW45-0607 | OLFS4-MW46-0607 | |

Overview

The sample set for Saufley, CTO 029, SDG CTO29-1, consists of eleven aqueous environmental samples. One field duplicate pair (OLFS4-MW37-0607 / OLFS4-MW37-0607-D) is included in this SDG.

Samples were collected by Tetra Tech NUS on June 12-14, 2007 and analyzed by Katahdin Analytical Services for target analyte list (TAL) metals. Metals analyses (expect mercury) were conducted using SW846 method 6010B. Mercury analyses were conducted using SW846 method 7470A.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
• Calibration Recoveries
• Laboratory Method/Preparation Blank Analyses
* • ICP Interference Check Sample Results
• Matrix Spike Recoveries
* • Laboratory Duplicate Precision
* • Laboratory Control Sample Recoveries
• ICP Serial Dilution Results
* • Field Duplicate Precision
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Calibration Recoveries

The continuing calibration percent recovery (%R) for zinc on 06/26/07 at 16:24 was greater then the upper quality control limit (110 %R) affecting samples OLFS4-MW38-0607, OLFS4-MW39-0607, OLFS4-MW41-0607, OLFS4-MW45-0607 and OLFS4-MW46-0607. The positive result reported for zinc in sample OLFS4-MW41-0607 was qualified as estimated, "J". No zinc data was qualified for the other affected samples because those samples were qualified due to laboratory blank contamination.

Laboratory Method/Preparation Blank Analyses

Laboratory method/preparation blank contaminants were detected at the following maximum concentrations:

| Analyte | Maximum Concentration | Blank Action Level |
|---|---|---|
| Antimony | 1.81 µg/L | 9.05 µg/L |
| Arsenic | 1.91 µg/L | 9.55 µg/L |
| Barium | 0.66 µg/L | 3.30 µg/L |
| Chromium [1] | 0.50 µg/L | 2.51 µg/L |
| Chromium [2] | 0.404 µg/L | 2.02 µg/L |
| Cobalt | 0.29 µg/L | 1.45 µg/L |
| Copper | 5.25 µg/L | 26.2 µg/L |
| Iron [1] | 7.14 µg/L | 35.7 µg/L |
| Mercury [1] | 0.033 µg/L | 0.16 µg/L |
| Magnesium | 8.56 µg/L | 42.8 µg/L |
| Nickel | 0.51 µg/L | 2.55 µg/L |
| Selenium [2] | 1.677 µg/L | 8.38 µg/L |
| Sodium [1] | 28.17 µg/L | 140 µg/L |
| Sodium [2] | 24.84 µg/L | 124 µg/L |
| Thallium | 1.55 µg/L | 7.75 µg/L |
| Vanadium [1] | 0.50 µg/L | 2.50 µg/L |
| Vanadium [2] | 0.373 µg/L | 1.86 µg/L |
| Zinc [1] | 1.970 µg/L | 9.85 µg/L |
| Zinc [2] | 2.170 µg/L | 10.8 µg/L |

[1] Maximum contaminant concentration detected in the laboratory prep blank affecting Samples OLFS4-MW42-0607, OLFS4-MW43-0607, and OLFS4-MW44-0607.

[2] Maximum contaminant concentration detected in the laboratory prep blank affecting all samples except OLFS4-MW42-0607, OLFS4-MW43-0607, and OLFS4-MW44-0607.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Antimony, arsenic, chromium, copper, mercury, nickel, selenium, thallium, vanadium, and zinc were qualified due to laboratory blank contamination.

Matrix Spike Recoveries

The matrix spike (MS) and matrix spike duplicate (MSD) analyses of samples OLFS4-MW40-0607 and OLFS4-MW43-0607 yielded %Rs for aluminum greater than the upper quality control limit (125%) affecting all samples. Positive results reported for aluminum were qualified as estimated, "J".

Notes

Sample results for copper were greater than 50X the instrument detection limit (IDL) for samples OLFS4-MW40-0607 and OLFS4-MW43-0607 and the serial dilutions of those samples did not agree within a ten percent difference (%D) of the respective sample results. No validation action was taken because all copper results were previously qualified due to laboratory blank contamination.

One of the ten coolers received was slightly above the standard 2-6°C temperature range at 9.1°C. The laboratory report documentation does not specify whether or not the metals samples were in that cooler; however, even if the metals samples were contained in that cooler the analytical results would not be affected because the samples were properly preserved.

The laboratory ran matrix spike duplicates instead of sample duplicates to evaluate laboratory duplicate precision.

The relative percent differences of aluminum and chromium were greater than the upper quality control limit (30% RPD) for the field duplicate pair (OLFS4-MW37-0607 / OLFS4-MW37-0607-D). However, those sample and duplicate results did not exceed 5X the CRDL of aluminum or chromium and the difference between the sample and duplicate results were within the range of +/- 2X each respective CRDL. Therefore, no validation action was required.

Executive Summary

**Laboratory Performance:** Zinc was qualified due to a calibration noncompliance. Several results were qualified due to laboratory blank contamination.

**Other Factors Affecting Data Quality:** Aluminum was qualified due to a matrix spike recovery noncompliance.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Review", October 2004, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Matthew D. Kraus
Environmental Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607 | nsample | OLFS4-MW37-0607-D | nsample | OLFS4-MW38-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-003 | lab_id | SA3013-005 | lab_id | SA3013-009 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW37-0607 | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 65.1 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 2.3 | U | A |
| BARIUM | 62.1 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 4180 | | |
| CHROMIUM | 5.4 | | |
| COBALT | 6.3 | | |
| COPPER | 4.9 | U | A |
| IRON | 708 | | |
| LEAD | 0.91 | U | |
| MAGNESIUM | 3860 | | |
| MANGANESE | 310 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 8.7 | | |
| POTASSIUM | 2010 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 4250 | | |
| THALLIUM | 0.84 | U | A |
| VANADIUM | 0.58 | U | A |
| ZINC | 10 | U | A |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 31.3 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 0.83 | U | |
| BARIUM | 61.8 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 4290 | | |
| CHROMIUM | 2.8 | | |
| COBALT | 7 | | |
| COPPER | 3.8 | U | A |
| IRON | 668 | | |
| LEAD | 1.8 | | |
| MAGNESIUM | 3980 | | |
| MANGANESE | 340 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 8.3 | | |
| POTASSIUM | 1940 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 4210 | | |
| THALLIUM | 1.2 | U | A |
| VANADIUM | 0.7 | U | A |
| ZINC | 9.7 | U | A |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 215 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 1.8 | U | A |
| BARIUM | 48.4 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 10200 | | |
| CHROMIUM | 6.2 | | |
| COBALT | 11.8 | | |
| COPPER | 4.2 | U | A |
| IRON | 1060 | | |
| LEAD | 0.91 | U | |
| MAGNESIUM | 2780 | | |
| MANGANESE | 1460 | | |
| MERCURY | 0.04 | U | A |
| NICKEL | 6.5 | | |
| POTASSIUM | 2100 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 11400 | | |
| THALLIUM | 0.71 | U | |
| VANADIUM | 1 | U | A |
| ZINC | 7.4 | U | A |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW39-0607 | nsample | OLFS4-MW40-0607 | nsample | OLFS4-MW41-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-007 | lab_id | SA3013-001 | lab_id | SA3013-011 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 116 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 0.83 | U | |
| BARIUM | 30.5 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 11000 | | |
| CHROMIUM | 9.3 | | |
| COBALT | 2.5 | | |
| COPPER | 2 | U | A |
| IRON | 285 | | |
| LEAD | 0.91 | U | |
| MAGNESIUM | 1980 | | |
| MANGANESE | 410 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 9.3 | | |
| POTASSIUM | 1430 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 9580 | | |
| THALLIUM | 0.71 | U | |
| VANADIUM | 1 | U | A |
| ZINC | 4.6 | U | A |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 335 | J | D |
| ANTIMONY | 1.5 | U | A |
| ARSENIC | 1.4 | U | A |
| BARIUM | 16.6 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 2450 | | |
| CHROMIUM | 22.1 | | |
| COBALT | 3.1 | | |
| COPPER | 13.6 | U | A |
| IRON | 608 | | |
| LEAD | 1.4 | | |
| MAGNESIUM | 789 | | |
| MANGANESE | 221 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 12.8 | | |
| POTASSIUM | 545 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 2870 | | |
| THALLIUM | 0.79 | U | A |
| VANADIUM | 1.8 | U | A |
| ZINC | 12 | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1100 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 0.95 | U | A |
| BARIUM | 16.4 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 3080 | | |
| CHROMIUM | 3.5 | | |
| COBALT | 3.6 | | |
| COPPER | 9.7 | U | A |
| IRON | 1340 | | |
| LEAD | 1.6 | | |
| MAGNESIUM | 816 | | |
| MANGANESE | 270 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 2.5 | U | A |
| POTASSIUM | 737 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 7580 | | |
| THALLIUM | 1.3 | U | A |
| VANADIUM | 2.7 | | |
| ZINC | 12.1 | J | C |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: M

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW42-0607 | nsample | OLFS4-MW43-0607 | nsample | OLFS4-MW44-0607 |
| samp_date | 6/14/2007 | samp_date | 6/14/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-019 | lab_id | SA3013-021 | lab_id | SA3013-017 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 40.2 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 0.85 | U | A |
| BARIUM | 16.8 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 14700 | | |
| CHROMIUM | 1.5 | U | A |
| COBALT | 1.7 | | |
| COPPER | 0.93 | U | A |
| IRON | 58.6 | | |
| LEAD | 0.91 | U | |
| MAGNESIUM | 1780 | | |
| MANGANESE | 108 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 1.6 | U | A |
| POTASSIUM | 814 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 3660 | | |
| THALLIUM | 0.73 | U | A |
| VANADIUM | 0.66 | U | A |
| ZINC | 4.9 | U | A |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 1070 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 2 | U | A |
| BARIUM | 74.6 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 47400 | | |
| CHROMIUM | 3.1 | | |
| COBALT | 5.4 | | |
| COPPER | 9.1 | U | A |
| IRON | 967 | | |
| LEAD | 1.4 | | |
| MAGNESIUM | 6960 | | |
| MANGANESE | 1150 | | |
| MERCURY | 1.1 | | |
| NICKEL | 2.8 | | |
| POTASSIUM | 5520 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 20400 | | |
| THALLIUM | 1.5 | U | A |
| VANADIUM | 1.2 | U | A |
| ZINC | 8.8 | U | A |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 73.2 | J | D |
| ANTIMONY | 1.7 | U | A |
| ARSENIC | 2 | U | A |
| BARIUM | 93.2 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 48300 | | |
| CHROMIUM | 9.1 | | |
| COBALT | 6.7 | | |
| COPPER | 1.2 | U | A |
| IRON | 128 | | |
| LEAD | 0.91 | U | |
| MAGNESIUM | 5520 | | |
| MANGANESE | 1160 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 9.6 | | |
| POTASSIUM | 6270 | | |
| SELENIUM | 1.5 | U | |
| SILVER | 0.46 | U | |
| SODIUM | 12400 | | |
| THALLIUM | 1.4 | U | A |
| VANADIUM | 0.57 | U | A |
| ZINC | 6.8 | U | A |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: M

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-013 | lab_id | SA3013-015 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 366 | J | D |
| ANTIMONY | 1.3 | U | A |
| ARSENIC | 2.2 | U | A |
| BARIUM | 119 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 93400 | | |
| CHROMIUM | 7.2 | | |
| COBALT | 5.3 | | |
| COPPER | 11.2 | U | A |
| IRON | 624 | | |
| LEAD | 0.92 | | |
| MAGNESIUM | 8260 | | |
| MANGANESE | 1190 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 7.3 | | |
| POTASSIUM | 11200 | | |
| SELENIUM | 2.3 | U | A |
| SILVER | 0.46 | U | |
| SODIUM | 43500 | | |
| THALLIUM | 1.1 | U | A |
| VANADIUM | 1.9 | U | A |
| ZINC | 6.9 | U | A |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| ALUMINUM | 494 | J | D |
| ANTIMONY | 0.87 | U | |
| ARSENIC | 0.97 | U | A |
| BARIUM | 96 | | |
| BERYLLIUM | 0.12 | U | |
| CADMIUM | 0.1 | U | |
| CALCIUM | 90700 | | |
| CHROMIUM | 330 | | |
| COBALT | 9.3 | | |
| COPPER | 15.9 | U | A |
| IRON | 2080 | | |
| LEAD | 1.6 | | |
| MAGNESIUM | 8240 | | |
| MANGANESE | 1120 | | |
| MERCURY | 0.01 | U | |
| NICKEL | 174 | | |
| POTASSIUM | 26800 | | |
| SELENIUM | 1.7 | U | A |
| SILVER | 0.46 | U | |
| SODIUM | 58700 | | |
| THALLIUM | 0.71 | U | |
| VANADIUM | 3.7 | | |
| ZINC | 7.9 | U | A |

**Tetra Tech NUS** **INTERNAL CORRESPONDENCE**

**TO:** **MR. G. WALKER** **DATE:** **AUGUST 20, 2007**

**FROM:** **EDWARD SEDLMYER** **COPIES:** **DV FILE**

**SUBJECT:** **ORGANIC DATA VALIDATION- VOA/EDB/SVOC/PCB/TPH**
**CTO 029, SAUFLEY**
**SDG CTO29-1**

**SAMPLES:** 12/Aqueous

| | | |
|---|---|---|
| OLFS4-MW37-0607 | OLFS4-MW37-0607-D | OLFS4-MW38-0607 |
| OLFS4-MW39-0607 | OLFS4-MW40-0607 | OLFS4-MW41-0607 |
| OLFS4-MW42-0607 | OLFS4-MW43-0607 | OLFS4-MW44-0607 |
| OLFS4-MW45-0607 | OLFS4-MW46-0607 | TRIP BLANK |

OVERVIEW

The sample set for CTO 029, Saufley, SDG CTO29-1 consists of one (1) trip blank and eleven (11) aqueous environmental samples. The following field duplicate pair was associated with this SDG: OLFS4-MW37-0607 / OLFS4-MW37-0607-D. The samples were analyzed for volatile organic compounds (VOCs), 1,2-dibromoethane (EDB), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH). The trip blank was analyzed for VOCs only.

The samples were collected by TetraTech NUS on June 12, 13, and 14, 2007 and analyzed by Empirical Laboratories. All analyses were conducted in accordance with SW-846 Methods 8260B, 8270C, 8082, EPA Method 504.1, and FL-PRO analysis and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

| | |
|---|---|
| * | Data completeness |
| * | Holding times |
| * | GC/MS Tuning |
| | Initial and continuing calibration |
| * | Blank results |
| | Surrogate spike recoveries |
| * | Internal standard recoveries |
| | Blank Spike/Blank Spike Duplicate Results |
| | Matrix Spike/Matrix Spike Duplicate Results |
| * | Detection Limits |
| * | Field Duplicate Results |
| * | Compound Quantitation |
| * | Compound Identification |

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles

The following compound was detected in the trip blank at the maximum concentration listed below:

| Compound | Maximum Concentration | Blank Action Level |
|---|---|---|
| Methylene chloride | 0.5 ug/L | 5 ug/L |

An action level of 10X the maximum contaminant concentration was established to evaluate laboratory contamination for methylene chloride. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. No qualification of the data was necessary because methylene chloride was not detected in any samples.

Initial calibration relative response factors (RRFs) were less than the 0.05 quality control limit for acetonitrile, 1,4-dioxane, and isobutanol on instrument GCMS-S, on 06/22/07. Only non-detected results were reported for the aforementioned compounds and these were rejected (UR) in all samples, except OLFS4-MW37-0607, OLFS4-MW37-0607-D, OLFS4-MW39-0607, and OLFS4-MW40-0607 because these samples were not associated with this initial calibration.

Calibration verification RRFs were less than the 0.05 quality control limit for acetonitrile, 1,4-dioxane and isobutanol on instrument GCMS-S, on 06/25/07, @09:26. No action was taken on this basis because only quality control (QC) samples were associated with this continuing calibration and QC samples are not qualified.

Continuing calibration analyzed on instrument GCMS-S on 06/25/07 @09:26 had percent differences (%Ds) greater than the 25% quality control limit for chloroethane and 1,2-dibromo-3-chloropropane. No action was taken on this basis because only QC samples were associated with this continuing calibration and QC samples are not qualified.

Calibration verification RRFs were less than the 0.05 quality control limit for acetonitrile, 1,4-dioxane, and isobutanol on instrument GCMS-S, on 06/25/07, @06:38. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument GCMS-S on 06/26/07 @06:38 had percent differences (%Ds) greater than the 25% quality control limit for 1,2-dibromo-3-chloropropane, acrolein, acrylonitrile, propionitrile, ethyl methacrylate, methacrylonitrile, methyl methacrylate, trans-1,4-dichloro-2-butene, and methyl acetate. The non-detected results for the aforementioned compounds in the affected samples were qualified as estimated, (UJ).

Initial calibration relative response factors (RRFs) were less than the 0.05 quality control limit for 1,4-dioxane, isobutanol, and propionitrile on instrument GCMS-T, on 06/19/07. Only non-detected results were reported for the aforementioned compounds and these were rejected (UR) in samples OLFS4-MW37-0607, OLFS4-MW37-0607-D, OLFS4-MW39-0607, and OLFS4-MW40-0607.

An initial calibration analyzed on instrument GCMS-T on 06/19/07 had a relative standard deviation (%RSD) greater than the 30% quality control limit for trichlorofluoromethane. Only non-detected results were reported for this compound and these were qualified as estimated (UJ) in samples OLFS4-MW37-0607, OLFS4-MW37-0607-D, OLFS4-MW39-0607, and OLFS4-MW40-0607.

Calibration verification RRFs were less than the 0.05 quality control limit for 1,4-dioxane, isobutanol, and propionitrile on instrument GCMS-T, on 06/23/07, @21:37. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

A continuing calibration analyzed on instrument GCMS-T, on 06/23/07, @21:37 had %Ds greater than the 25% quality control limit for dichlorodifluoromethane, 4-methyl-2-pentanone, and 2-hexanone. The non-detected results for the aforementioned compounds were qualified as estimated (UJ) in the affected samples.

The laboratory control sample (LCS) associated with batch WG40398 had percent recoveries greater than the quality control limit for dichlorodifluoromethane and iodomethane. No action was taken on this basis because the results for dichlorodifluoromethane and iodomethane were nondetected in the associated samples.

The laboratory control sample (LCS) associated with batch WG40451 had a percent recovery greater than the quality control limit for vinyl acetate. No action was taken on this basis because the results for vinyl acetate were nondetected in the associated samples.

The laboratory control sample (LCS) associated with batch WG40493 had percent recoveries greater than the quality control limit for vinyl acetate, 1,2-dibromo-3-chloropropane, naphthalene, and 1,2,3-trichlorobenzene. No action was taken on this basis because the results for the aforementioned compounds were nondetected in the associated samples.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample OLFS4-MW40-0607 had percent recoveries greater than the quality control limit for 1,2-dibromo-3-chloropropane and 1,4-dioxane. No action was taken on this basis because the aforementioned compounds were not detected in sample OLFS4-MW40-0607.

Acetone was not detected in any laboratory method blanks or in the trip blank but it was detected in all samples except sample OLFS4-MW41-0607 and the trip blank. Despite the absence of acetone in the associated blanks, this compound is a common laboratory contaminant and is suspected to be an artifact of the analytical procedure. Therefore, positive acetone results in all samples were qualified as estimated, J.

Semivolatiles

Hexachlorophene was included in the laboratories calibration standard mixtures but was not detected in any standards. The non-detected results for hexachlorophene were rejected (UR) in all samples.

Initial calibration analyzed on instrument GCMS-U on 06/04/07 had a %RSD greater than the 30% quality control limit for a,a-dimethylphenethylamine, p-phenylenediamine, and 4-nitroquinoline-1-oxide. Only non-detected results for p-phenylenediamine reported and these results were qualified as estimated (UJ) in all samples. The non-detected results for 4-nitroquinoline-1-oxide and p-phenylenediamine, a,a-dimethylphenethylamine were rejected (UR) due to continuing calibration RRF noncomplinaces and/or laboratory control sample noncompliances respectively.

Calibration verification RRFs were less than the 0.05 quality control limit for p-phenylenediamine, 4-nitroquinoline-1-oxide and 3-nitroaniline on instrument GCMS-U, on 06/25/07, @09:58. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument GCMS-U on 06/25/07 @09:58 had %Ds greater than the 25% quality control limit for methpyrilene, aramite, 3,3'-dimethylbenzidine, aniline, bis(2-chloroethyl)ether, 4-chloroaniline, 2,4-dinitrophenol, 4-nitrophenol, 4-nitroaniline, 3,3'-dichlorobenzidine, and bis(2-ethylhexyl)phthalate. The non-detected results for all of the aforementioned compounds, except aramite, were qualified as estimated (UJ), in the affected samples. Aramite was qualified due to a more severe laboratory control sample noncompliance.

Calibration verification RRFs were less than the 0.05 quality control limit for 4-nitroquinoline-1-oxide, and 3-nitroaniline on instrument GCMS-U, on 06/26/07, @10:38. The non-detected results for the aforementioned compounds were rejected (UR), in the affected samples.

Continuing calibration analyzed on instrument GCMS-U on 06/26/07 @10:38 had %Ds greater than the 25% quality control limit for methpyrilene, aramite, chlorobenzilate, 3,3'-dimethylbenzidine, bis(2-chloroethyl)ether, 4-chloroaniline, 2,4-dinitrophenol, 4-nitrophenol, 4-nitroaniline, carbazole, butylbenzylphthalate, 3,3'-dichlorobenzidine, bis(2-ethylhexyl)phthalate, and di-n-octylphthalate. The non-detected results for all of the aforementioned compounds, except aramite, were qualified as estimated (UJ), in the affected samples. Aramite was qualified due to a more severe laboratory control sample noncompliance.

The surrogates 2-fluorophenol and nitrobenzene-d5 had percent recoveries less than the quality control limit for sample OLFS4-MW37-0607-D. No action was taken on this basis because only one surrogate per fraction was outside of control limits.

The surrogates 2-fluorophenol and 2,4,6-tribromophenol had percent recoveries less than the quality control limit for sample OLFS4-MW38-0607. The nondetected acid compounds were qualified as estimated (UJ) in sample OLFS4-MW38-0607.

The MS/MSD performed on sample OLFS4-MW40-0607 had percent recoveries greater than the quality control limit for 2-naphthylamine, N-nitrosodiphenylamine, 3,3'-dimethylbenzidine, and 3,3'-dichlorobenzidine. The compounds benzaldehyde and 1,4-naphthoquinone had low recoveries. No action was taken on this basis because the aforementioned compounds were not detected in sample OLFS4-MW40-0607.

The MS/MSD performed on sample OLFS4-MW40-0607 had zero percent recoveries for a,a-dimethylphenethylamine, p-phenylenediamine, aramite, and hexachlorophene. The nondetected results for the aforementioned compounds have been rejected (UR) in sample OLFS4-MW40-0607.

The LCS associated with batch WG40233 had percent recoveries greater than the quality control limit for 2-naphthylamine, N-nitrosodiphenylamine, 3,3'-dimethylbenzidine, 3,3'-dichlorobenzidine, and bis(2-ethylhexyl)phthalate. No action was taken on this basis because the aforementioned compounds were not detected in any associated samples.

The LCS associated with batch WG40233 had zero percent recovery for a,a-dimethylphenethylamine, 1,4-naphthoquinone, aramite, p-phenylenediamine, and hexachlorophene. The nondetected results for the aforementioned compounds were qualified in all samples except OLFS4-MW42-0607, OLFS4-MW43-0607, and OLFS4-MW44-0607.

The LCS associated with batch WG40249 had percent recoveries greater than the quality control limit for 2-naphthylamine, N-nitrosodiphenylamine, 4-aminobiphenyl, methapyrilene, 3,3'-dimethylbenzidine, and 3,3'-dichlorobenzidine. The compound dimethoate had a low recovery and nondetected results in the associated samples were qualified as estimated, (UJ). No action was taken on this basis because the aforementioned compounds were not detected in any associated samples.

The LCS associated with batch WG40249 had zero percent recovery for a,a-dimethylphenethylamine, 1,4-naphthoquinone, aramite, p-phenylenediamine, and hexachlorophene. The nondetected results for the aforementioned compounds were qualified in samples OLFS4-MW42-0607, OLFS4-MW43-0607, and OLFS4-MW44-0607.

PCBs

Calibration verification %Ds exceeded the 15% quality control limit for several individual Aroclor-1016 and Aroclor-1260 peaks for the primary and secondary columns on instrument GC06, on 06/20/07, at 18:36. The average percent difference (%D) of the peaks was less than the 15% quality control limit on the primary column. No action was taken on this basis because only QC samples were associated with this continuing calibration.

Calibration verification %Ds exceeded the 15% quality control limit for several individual Aroclor-1016 and Aroclor-1260 peaks for the primary and secondary columns on instrument GC06, on 06/28/07, at 13:10. The average percent difference (%D) of the peaks was less than the 15% quality control limit on the primary and secondary columns. No action was taken on this basis because no PCBs were detected in the associated samples.

Calibration verification %Ds exceeded the 15% quality control limit for all individual Aroclor-1260 peaks for the primary column on instrument GC06, on 06/29/07, at 04:00. The average percent difference (%D) of the Aroclor-1260 peaks was less than the 15% quality control limit on the secondary column. No action was taken on this basis because no PCBs were detected in the associated samples.

Florida-PRO

The MS/MSD performed on sample OLFS4-MW40-0607 had percent recoveries greater than the quality control limit for TPH. No action was taken on this basis because TPH was not detected in sample OLFS4-MW40-0607.

The surrogate o-terphenyl had a percent recovery greater than the quality control limit for sample OLFS4-MW44-0607. The positive result has been qualified as estimated (J) for sample OLFS4-MW44-0607.

Continuing calibration %Ds exceeded the 25% quality control limit for the C-38 and C-40 peaks on instrument GC12, on 06/29/07, at 04:47. No action was taken on this basis because the average percent difference was less than the 25% quality control limit.

EDB

The surrogate tetrachloro-m-xylene had percent recoveries greater than the quality control limit on the primary and confirmation columns for samples OLFS4-MW37-0607, OLFS4-MW38-0607, OLFS4-MW40-0607, OLFS4-MW41-0607, OLFS4-MW43-0607, OLFS4-MW44-0607, OLFS4-MW45-0607, and OLFS4-MW46-0607. No action was taken on this basis because EDB was not detected in the associated samples.

The surrogate tetrachloro-m-xylene had percent recoveries greater than the quality control limit on the primary column for samples OLFS4-MW39-0607 and OLFS4-MW42-0607. No action was taken on this basis because EDB was not detected in the associated samples.

The MS/MSD performed on sample OLFS4-MW40-0607 had a percent recovery less than the quality control limit for EDB in the MSD. No action was taken on this basis because the MS had an acceptable recovery.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated "J", due to uncertainty near the detection limit.

The compound EDB was reported in both the VOC and EDB fractions. No action was taken on this basis.

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Qualifications were made on initial and continuing calibration of several VOC and SVOC compounds that failed to comply with quality control criteria (%RSDs, %Ds, and RRFs). The VOC and SVOC fractions had several LCS non-compliances.

**Other Factors Affecting Data Quality:** The VOC, SVOC, TPH, and EDB fractions had matrix spike non-compliances. The SVOC, TPH, and EDB fractions had surrogate non-compliances.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999), and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM."

Tetra Tech NUS

Edward Sedlmyer
Chemist/Data Validator

Tetra Tech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607 | nsample | OLFS4-MW37-0607 | nsample | OLFS4-MW37-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/12/2007 |
| lab_id | SA3013-3 | lab_id | SA3013-3 | lab_id | SA3013-3 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | U | |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | UJ | C |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | UJ | C |
| ACETONE | 6 | J | A |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | U | |
| ACRYLONITRILE | 2 | U | |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | UJ | C |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | U | |
| METHYL ACETATE | 0.9 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | U | |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | UJ | C |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607-D | nsample | OLFS4-MW37-0607-D | nsample | OLFS4-MW37-0607-D |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/12/2007 |
| lab_id | SA3013-5 | lab_id | SA3013-5 | lab_id | SA3013-5 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW37-0607 | DUP_OF: | OLFS4-MW37-0607 | DUP_OF: | OLFS4-MW37-0607 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | U | |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | UJ | C |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | UJ | C |
| ACETONE | 8 | J | A |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | U | |
| ACRYLONITRILE | 2 | U | |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | UJ | C |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | U | |
| METHYL ACETATE | 0.9 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | U | |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | UJ | C |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW38-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-9 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 4 | J | C |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 5 | J | AP |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 1 | | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW38-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-9 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.7 | J | P |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW38-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-9 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW39-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-7 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | U | |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | UJ | C |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | UJ | C |
| ACETONE | 4 | J | AP |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | U | |
| ACRYLONITRILE | 2 | U | |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.6 | J | P |
| BROMOFORM | 0.4 | J | P |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW39-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-7 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.5 | J | P |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 3 | | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | UJ | C |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | U | |
| METHYL ACETATE | 0.9 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | U | |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | U | |

| | |
|---|---|
| nsample | OLFS4-MW39-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-7 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | UJ | C |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW40-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-1 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | U | |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | UJ | C |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | UJ | C |
| ACETONE | 4 | J | AP |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | U | |
| ACRYLONITRILE | 2 | U | |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW40-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-1 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | UJ | C |
| ETHYL METHACRYLATE | 0.3 | U | |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | U | |
| METHYL ACETATE | 0.9 | U | |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | U | |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UR | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | U | |

| | |
|---|---|
| nsample | OLFS4-MW40-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-1 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | UJ | C |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | OLFS4-MW41-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 3 | U | |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW41-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| | |
|---|---|
| nsample | OLFS4-MW41-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-11 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW42-0607 | nsample | OLFS4-MW42-0607 | nsample | OLFS4-MW42-0607 |
| samp_date | 6/14/2007 | samp_date | 6/14/2007 | samp_date | 6/14/2007 |
| lab_id | SA3013-19 | lab_id | SA3013-19 | lab_id | SA3013-19 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 3 | J | AP |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW43-0607 | | nsample | OLFS4-MW43-0607 | | nsample | OLFS4-MW43-0607 | |
| samp_date | 6/14/2007 | | samp_date | 6/14/2007 | | samp_date | 6/14/2007 | |
| lab_id | SA3013-21 | | lab_id | SA3013-21 | | lab_id | SA3013-21 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 7 | J | A |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW44-0607 | nsample | OLFS4-MW44-0607 | nsample | OLFS4-MW44-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-17 | lab_id | SA3013-17 | lab_id | SA3013-17 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 6 | J | A |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.8 | J | P |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW45-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-13 | lab_id | SA3013-13 | lab_id | SA3013-13 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 10 | J | A |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW46-0607 | nsample | OLFS4-MW46-0607 | nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-15 | lab_id | SA3013-15 | lab_id | SA3013-15 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 22 | J | A |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | J | P |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.4 | U | |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OV

| | |
|---|---|
| nsample | TRIP BLANK |
| samp_date | 6/14/2007 |
| lab_id | SA3013-23 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1,1,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,1-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | U | |
| 1,1,2-TRICHLOROETHANE | 0.4 | U | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHANE | 0.4 | U | |
| 1,1-DICHLOROETHENE | 0.4 | U | |
| 1,2,3-TRICHLOROPROPANE | 0.4 | U | |
| 1,2,4-TRICHLOROBENZENE | 0.3 | U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.7 | UJ | C |
| 1,2-DIBROMOETHANE | 0.3 | U | |
| 1,2-DICHLOROBENZENE | 0.4 | U | |
| 1,2-DICHLOROETHANE | 0.3 | U | |
| 1,2-DICHLOROPROPANE | 0.5 | U | |
| 1,3-DICHLOROBENZENE | 0.4 | U | |
| 1,4-DICHLOROBENZENE | 0.5 | U | |
| 1,4-DIOXANE | 12 | UR | C |
| 2-BUTANONE | 2 | U | |
| 2-HEXANONE | 1 | U | |
| 3-CHLOROPROPENE | 0.5 | U | |
| 4-METHYL-2-PENTANONE | 2 | U | |
| ACETONE | 3 | U | |
| ACETONITRILE | 16 | UR | C |
| ACROLEIN | 3 | UJ | C |
| ACRYLONITRILE | 2 | UJ | C |
| BENZENE | 0.4 | U | |
| BROMODICHLOROMETHANE | 0.3 | U | |
| BROMOFORM | 0.3 | U | |
| BROMOMETHANE | 0.9 | U | |
| CARBON DISULFIDE | 0.5 | U | |
| CARBON TETRACHLORIDE | 0.4 | U | |
| CHLOROBENZENE | 0.4 | U | |

| | |
|---|---|
| nsample | TRIP BLANK |
| samp_date | 6/14/2007 |
| lab_id | SA3013-23 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLORODIBROMOMETHANE | 0.3 | U | |
| CHLOROETHANE | 0.5 | U | |
| CHLOROFORM | 0.4 | U | |
| CHLOROMETHANE | 0.6 | U | |
| CHLOROPRENE | 0.3 | U | |
| CIS-1,2-DICHLOROETHENE | 0.3 | U | |
| CIS-1,3-DICHLOROPROPENE | 0.4 | U | |
| CYCLOHEXANE | 0.6 | U | |
| DIBROMOMETHANE | 0.4 | U | |
| DICHLORODIFLUOROMETHANE | 0.4 | U | |
| ETHYL METHACRYLATE | 0.3 | UJ | C |
| ETHYLBENZENE | 0.4 | U | |
| ISOBUTANOL | 10 | UR | C |
| ISOPROPYLBENZENE | 0.5 | U | |
| M+P-XYLENES | 1 | U | |
| METHACRYLONITRILE | 3 | UJ | C |
| METHYL ACETATE | 0.9 | UJ | C |
| METHYL CYCLOHEXANE | 0.3 | U | |
| METHYL IODIDE | 0.4 | U | |
| METHYL METHACRYLATE | 0.3 | UJ | C |
| METHYL TERT-BUTYL ETHER | 0.6 | U | |
| METHYLENE CHLORIDE | 0.5 | J | P |
| O-XYLENE | 0.4 | U | |
| PENTACHLOROETHANE | 0.3 | U | |
| PROPIONITRILE | 5 | UJ | C |
| STYRENE | 0.3 | U | |
| TETRACHLOROETHENE | 0.5 | U | |
| TOLUENE | 0.3 | U | |
| TOTAL XYLENES | 1 | U | |
| TRANS-1,2-DICHLOROETHENE | 0.5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 0.2 | U | |
| TRANS-1,4-DICHLORO-2-BUTENE | 0.5 | UJ | C |

| | |
|---|---|
| nsample | TRIP BLANK |
| samp_date | 6/14/2007 |
| lab_id | SA3013-23 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| TRICHLOROETHENE | 0.5 | U | |
| TRICHLOROFLUOROMETHANE | 0.4 | U | |
| VINYL ACETATE | 0.4 | U | |
| VINYL CHLORIDE | 0.4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607 | | nsample | OLFS4-MW37-0607 | | nsample | OLFS4-MW37-0607 | |
| samp_date | 6/12/2007 | | samp_date | 6/12/2007 | | samp_date | 6/12/2007 | |
| lab_id | SA3013-3 | | lab_id | SA3013-3 | | lab_id | SA3013-3 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW37-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-3 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

| | |
|---|---|
| nsample | OLFS4-MW37-0607-D |
| samp_date | 6/12/2007 |
| lab_id | SA3013-5 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW37-0607 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 3 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 22 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 4 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 8 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 8 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 6 | U | |
| 3-NITROANILINE | 4 | UR | C |

| | |
|---|---|
| nsample | OLFS4-MW37-0607-D |
| samp_date | 6/12/2007 |
| lab_id | SA3013-5 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW37-0607 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 3 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 15 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 15 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 2 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 3 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 3 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW37-0607-D |
| samp_date | 6/12/2007 |
| lab_id | SA3013-5 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW37-0607 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 7 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 4 | U | |
| DIBENZO(A,H)ANTHRACENE | 7 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 3 | U | |
| DIMETHOATE | 7 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 2 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| | |
|---|---|
| nsample | OLFS4-MW37-0607-D |
| samp_date | 6/12/2007 |
| lab_id | SA3013-5 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | OLFS4-MW37-0607 |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 5 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 8 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 6 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

| | |
|---|---|
| nsample | OLFS4-MW38-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-9 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 3 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | UJ | R |
| 2,4,5-TRICHLOROPHENOL | 7 | UJ | R |
| 2,4,6-TRICHLOROPHENOL | 7 | UJ | R |
| 2,4-DICHLOROPHENOL | 7 | UJ | R |
| 2,4-DIMETHYLPHENOL | 7 | UJ | R |
| 2,4-DINITROPHENOL | 22 | UJ | CR |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | UJ | R |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 4 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 8 | UJ | R |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | UJ | R |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | UJ | R |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 8 | UJ | R |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 6 | U | |
| 3-NITROANILINE | 4 | UR | C |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW38-0607 | | nsample | OLFS4-MW38-0607 | | nsample | OLFS4-MW38-0607 | |
| samp_date | 6/13/2007 | | samp_date | 6/13/2007 | | samp_date | 6/13/2007 | |
| lab_id | SA3013-9 | | lab_id | SA3013-9 | | lab_id | SA3013-9 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | UJ | R |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | UJ | R |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 3 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 15 | UJ | CR |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 15 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 2 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 3 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 3 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 7 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 4 | U | |
| DIBENZO(A,H)ANTHRACENE | 7 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 3 | U | |
| DIMETHOATE | 7 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 2 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 5 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | UJ | R |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 8 | UJ | R |
| PRONAMIDE | 5 | U | |
| PYRENE | 6 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW39-0607 | nsample | OLFS4-MW39-0607 | nsample | OLFS4-MW39-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/12/2007 |
| lab_id | SA3013-7 | lab_id | SA3013-7 | lab_id | SA3013-7 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW39-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-7 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

| | |
|---|---|
| nsample | OLFS4-MW40-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-1 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| | |
|---|---|
| nsample | OLFS4-MW40-0607 |
| samp_date | 6/12/2007 |
| lab_id | SA3013-1 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | DE |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | DE |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW40-0607 | nsample | OLFS4-MW40-0607 | nsample | OLFS4-MW41-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-1 | lab_id | SA3013-1 | lab_id | SA3013-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CDE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 7 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW41-0607 | | nsample | OLFS4-MW41-0607 | | nsample | OLFS4-MW41-0607 | |
| samp_date | 6/13/2007 | | samp_date | 6/13/2007 | | samp_date | 6/13/2007 | |
| lab_id | SA3013-11 | | lab_id | SA3013-11 | | lab_id | SA3013-11 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 6 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 4 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 4 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 3 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 8 | U | |
| ISODRIN | 5 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 18 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 4 | U | |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| nsample | OLFS4-MW42-0607 | | nsample | OLFS4-MW42-0607 | | nsample | OLFS4-MW42-0607 | |
| samp_date | 6/14/2007 | | samp_date | 6/14/2007 | | samp_date | 6/14/2007 | |
| lab_id | SA3013-19 | | lab_id | SA3013-19 | | lab_id | SA3013-19 | |
| qc_type | NM | | qc_type | NM | | qc_type | NM | |
| units | UG/L | | units | UG/L | | units | UG/L | |
| Pct_Solids | 0.0 | | Pct_Solids | 0.0 | | Pct_Solids | 0.0 | |
| DUP_OF: | | | DUP_OF: | | | DUP_OF: | | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 3 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | E |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 7 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 24 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 4 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 12 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 6 | U | |
| ANILINE | 6 | UJ | C |
| ANTHRACENE | 4 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | U | |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | U | |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 4 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | UJ | E |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | U | |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 3 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 8 | U | |
| ISODRIN | 5 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW42-0607 |
| samp_date | 6/14/2007 |
| lab_id | SA3013-19 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 18 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW43-0607 |
| samp_date | 6/14/2007 |
| lab_id | SA3013-21 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | E |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| | |
|---|---|
| nsample | OLFS4-MW43-0607 |
| samp_date | 6/14/2007 |
| lab_id | SA3013-21 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | UJ | C |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | U | |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW43-0607 |
| samp_date | 6/14/2007 |
| lab_id | SA3013-21 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | U | |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | UJ | E |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | U | |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| | |
|---|---|
| nsample | OLFS4-MW43-0607 |
| samp_date | 6/14/2007 |
| lab_id | SA3013-21 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

| | |
|---|---|
| nsample | OLFS4-MW44-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-17 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | E |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 6 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 8 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 6 | U | |
| 3-NITROANILINE | 4 | UR | C |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW44-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-17 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 5 | U | |
| ANILINE | 6 | UJ | C |
| ANTHRACENE | 3 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | U | |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW44-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-17 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | U | |
| CHRYSENE | 3 | U | |
| DIALLATE | 4 | U | |
| DIBENZO(A,H)ANTHRACENE | 7 | U | |
| DIBENZOFURAN | 3 | U | |
| DIETHYL PHTHALATE | 3 | U | |
| DIMETHOATE | 8 | UJ | E |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | U | |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 2 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 7 | U | |
| ISODRIN | 4 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| | |
|---|---|
| nsample | OLFS4-MW44-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-17 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 5 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 17 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 3 | U | |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW45-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-13 | lab_id | SA3013-13 | lab_id | SA3013-13 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 3 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 7 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 24 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 4 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 12 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 6 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 4 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 4 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 3 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 8 | U | |
| ISODRIN | 5 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | |
|---|---|
| nsample | OLFS4-MW45-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-13 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 18 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 4 | U | |

| | |
|---|---|
| nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-15 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 1,1-BIPHENYL | 3 | U | |
| 1,2,4,5-TETRACHLOROBENZENE | 4 | U | |
| 1,2,4-TRICHLOROBENZENE | 2 | U | |
| 1,3,5-TRINITROBENZENE | 6 | U | |
| 1,3-DINITROBENZENE | 5 | U | |
| 1,4-NAPHTHOQUINONE | 4 | UR | E |
| 1,4-PHENYLENEDIAMINE | 5 | UR | CE |
| 1-NAPHTHYLAMINE | 3 | U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 4 | U | |
| 2,3,4,6-TETRACHLOROPHENOL | 7 | U | |
| 2,4,5-TRICHLOROPHENOL | 7 | U | |
| 2,4,6-TRICHLOROPHENOL | 7 | U | |
| 2,4-DICHLOROPHENOL | 7 | U | |
| 2,4-DIMETHYLPHENOL | 7 | U | |
| 2,4-DINITROPHENOL | 23 | UJ | C |
| 2,4-DINITROTOLUENE | 4 | U | |
| 2,6-DICHLOROPHENOL | 8 | U | |
| 2,6-DINITROTOLUENE | 4 | U | |
| 2-ACETYLAMINOFLUORENE | 5 | U | |
| 2-CHLORONAPHTHALENE | 3 | U | |
| 2-CHLOROPHENOL | 9 | U | |
| 2-METHYLNAPHTHALENE | 4 | U | |
| 2-METHYLPHENOL | 8 | U | |
| 2-NAPHTHYLAMINE | 4 | U | |
| 2-NITROANILINE | 3 | U | |
| 2-NITROPHENOL | 7 | U | |
| 2-PICOLINE | 3 | U | |
| 3&4-METHYLPHENOL | 9 | U | |
| 3,3'-DICHLOROBENZIDINE | 4 | UJ | C |
| 3,3'-DIMETHYLBENZIDINE | 6 | UJ | C |
| 3-METHYLCHOLANTHRENE | 7 | U | |
| 3-NITROANILINE | 4 | UR | C |

| | |
|---|---|
| nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 |
| lab_id | SA3013-15 |
| qc_type | NM |
| units | UG/L |
| Pct_Solids | 0.0 |
| DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| 4,6-DINITRO-2-METHYLPHENOL | 11 | U | |
| 4-AMINOBIPHENYL | 4 | U | |
| 4-BROMOPHENYL PHENYL ETHER | 3 | U | |
| 4-CHLORO-3-METHYLPHENOL | 10 | U | |
| 4-CHLOROANILINE | 5 | UJ | C |
| 4-CHLOROPHENYL PHENYL ETHER | 4 | U | |
| 4-NITROANILINE | 5 | UJ | C |
| 4-NITROPHENOL | 16 | UJ | C |
| 4-NITROQUINOLINE-1-OXIDE | 10 | UR | C |
| 5-NITRO-O-TOLUIDINE | 5 | U | |
| 7,12-DIMETHYLBENZ(A)ANTHRACENE | 4 | U | |
| A,A-DIMETHYLPHENETHYLAMINE | 16 | UR | E |
| ACENAPHTHENE | 3 | U | |
| ACENAPHTHYLENE | 3 | U | |
| ACETOPHENONE | 6 | U | |
| ANILINE | 6 | U | |
| ANTHRACENE | 4 | U | |
| ARAMITE | 8 | UR | E |
| ATRAZINE | 5 | U | |
| BENZALDEHYDE | 5 | U | |
| BENZO(A)ANTHRACENE | 3 | U | |
| BENZO(A)PYRENE | 3 | U | |
| BENZO(B)FLUORANTHENE | 4 | U | |
| BENZO(G,H,I)PERYLENE | 8 | U | |
| BENZO(K)FLUORANTHENE | 5 | U | |
| BENZYL ALCOHOL | 9 | U | |
| BIS(2-CHLOROETHOXY)METHANE | 4 | U | |
| BIS(2-CHLOROETHYL)ETHER | 4 | UJ | C |
| BIS(2-ETHYLHEXYL)PHTHALATE | 8 | UJ | C |
| BUTYL BENZYL PHTHALATE | 6 | UJ | C |
| CAPROLACTAM | 9 | U | |
| CARBAZOLE | 4 | UJ | C |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OS

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW46-0607 | nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-15 | lab_id | SA3013-15 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| CHLOROBENZILATE | 8 | UJ | C |
| CHRYSENE | 3 | U | |
| DIALLATE | 5 | U | |
| DIBENZO(A,H)ANTHRACENE | 8 | U | |
| DIBENZOFURAN | 4 | U | |
| DIETHYL PHTHALATE | 4 | U | |
| DIMETHOATE | 8 | U | |
| DIMETHYL PHTHALATE | 4 | U | |
| DI-N-BUTYL PHTHALATE | 7 | U | |
| DI-N-OCTYL PHTHALATE | 5 | UJ | C |
| ETHYL METHANE SULFONATE | 7 | U | |
| FLUORANTHENE | 8 | U | |
| FLUORENE | 3 | U | |
| HEXACHLOROBENZENE | 3 | U | |
| HEXACHLOROBUTADIENE | 3 | U | |
| HEXACHLOROCYCLOPENTADIENE | 3 | U | |
| HEXACHLOROETHANE | 3 | U | |
| HEXACHLOROPHENE | 5 | UR | CE |
| HEXACHLOROPROPENE | 3 | U | |
| INDENO(1,2,3-CD)PYRENE | 8 | U | |
| ISODRIN | 5 | U | |
| ISOPHORONE | 3 | U | |
| ISOSAFROLE | 5 | U | |
| METHAPYRILENE | 9 | UJ | C |
| METHYL METHANE SULFONATE | 7 | U | |
| NAPHTHALENE | 3 | U | |
| NITROBENZENE | 2 | U | |
| N-NITROSODIETHYLAMINE | 4 | U | |
| N-NITROSODIMETHYLAMINE | 5 | U | |
| N-NITROSO-DI-N-BUTYLAMINE | 8 | U | |
| N-NITROSO-DI-N-PROPYLAMINE | 4 | U | |
| N-NITROSODIPHENYLAMINE | 5 | U | |

| Parameter | Result | Val Qual | Qual Code |
|---|---|---|---|
| N-NITROSOMETHYLETHYLAMINE | 6 | U | |
| N-NITROSOMORPHOLINE | 4 | U | |
| N-NITROSOPIPERIDINE | 3 | U | |
| N-NITROSOPYRROLIDINE | 6 | U | |
| O,O,O-TRIETHYL PHOSPHOROTHIOATE | 3 | U | |
| O-TOLUIDINE | 10 | U | |
| P-(DIMETHYLAMINO)AZOBENZENE | 6 | U | |
| PENTACHLOROBENZENE | 3 | U | |
| PENTACHLORONITROBENZENE | 4 | U | |
| PENTACHLOROPHENOL | 18 | U | |
| PHENACETIN | 6 | U | |
| PHENANTHRENE | 3 | U | |
| PHENOL | 9 | U | |
| PRONAMIDE | 5 | U | |
| PYRENE | 7 | U | |
| PYRIDINE | 2 | U | |
| SAFROLE | 4 | U | |

## PROJ_NO: 00389

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607 | nsample | OLFS4-MW37-0607-D | nsample | OLFS4-MW38-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-3 | lab_id | SA3013-5 | lab_id | SA3013-9 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW37-0607 | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.38 | U | U | |
| AROCLOR-1221 | 0.16 | U | U | |
| AROCLOR-1232 | 0.27 | U | U | |
| AROCLOR-1242 | 0.2 | U | U | |
| AROCLOR-1248 | 0.18 | U | U | |
| AROCLOR-1254 | 0.24 | U | U | |
| AROCLOR-1260 | 0.26 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.38 | U | U | |
| AROCLOR-1221 | 0.16 | U | U | |
| AROCLOR-1232 | 0.27 | U | U | |
| AROCLOR-1242 | 0.2 | U | U | |
| AROCLOR-1248 | 0.18 | U | U | |
| AROCLOR-1254 | 0.24 | U | U | |
| AROCLOR-1260 | 0.26 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.41 | U | U | |
| AROCLOR-1221 | 0.17 | U | U | |
| AROCLOR-1232 | 0.28 | U | U | |
| AROCLOR-1242 | 0.21 | U | U | |
| AROCLOR-1248 | 0.19 | U | U | |
| AROCLOR-1254 | 0.26 | U | U | |
| AROCLOR-1260 | 0.28 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW39-0607 | nsample | OLFS4-MW40-0607 | nsample | OLFS4-MW41-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-7 | lab_id | SA3013-1 | lab_id | SA3013-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.42 | U | U | |
| AROCLOR-1221 | 0.18 | U | U | |
| AROCLOR-1232 | 0.29 | U | U | |
| AROCLOR-1242 | 0.22 | U | U | |
| AROCLOR-1248 | 0.2 | U | U | |
| AROCLOR-1254 | 0.26 | U | U | |
| AROCLOR-1260 | 0.28 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.4 | U | U | |
| AROCLOR-1221 | 0.17 | U | U | |
| AROCLOR-1232 | 0.28 | U | U | |
| AROCLOR-1242 | 0.21 | U | U | |
| AROCLOR-1248 | 0.19 | U | U | |
| AROCLOR-1254 | 0.25 | U | U | |
| AROCLOR-1260 | 0.27 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.41 | U | U | |
| AROCLOR-1221 | 0.18 | U | U | |
| AROCLOR-1232 | 0.29 | U | U | |
| AROCLOR-1242 | 0.22 | U | U | |
| AROCLOR-1248 | 0.2 | U | U | |
| AROCLOR-1254 | 0.26 | U | U | |
| AROCLOR-1260 | 0.28 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW42-0607 | nsample | OLFS4-MW43-0607 | nsample | OLFS4-MW44-0607 |
| samp_date | 6/14/2007 | samp_date | 6/14/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-19 | lab_id | SA3013-21 | lab_id | SA3013-17 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.41 | U | U | |
| AROCLOR-1221 | 0.17 | U | U | |
| AROCLOR-1232 | 0.28 | U | U | |
| AROCLOR-1242 | 0.21 | U | U | |
| AROCLOR-1248 | 0.19 | U | U | |
| AROCLOR-1254 | 0.26 | U | U | |
| AROCLOR-1260 | 0.28 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.4 | U | U | |
| AROCLOR-1221 | 0.17 | U | U | |
| AROCLOR-1232 | 0.28 | U | U | |
| AROCLOR-1242 | 0.21 | U | U | |
| AROCLOR-1248 | 0.19 | U | U | |
| AROCLOR-1254 | 0.25 | U | U | |
| AROCLOR-1260 | 0.27 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.38 | U | U | |
| AROCLOR-1221 | 0.16 | U | U | |
| AROCLOR-1232 | 0.27 | U | U | |
| AROCLOR-1242 | 0.2 | U | U | |
| AROCLOR-1248 | 0.18 | U | U | |
| AROCLOR-1254 | 0.24 | U | U | |
| AROCLOR-1260 | 0.26 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PEST/PCB

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-13 | lab_id | SA3013-15 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.39 | U | U | |
| AROCLOR-1221 | 0.17 | U | U | |
| AROCLOR-1232 | 0.27 | U | U | |
| AROCLOR-1242 | 0.2 | U | U | |
| AROCLOR-1248 | 0.19 | U | U | |
| AROCLOR-1254 | 0.24 | U | U | |
| AROCLOR-1260 | 0.26 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| AROCLOR-1016 | 0.41 | U | U | |
| AROCLOR-1221 | 0.18 | U | U | |
| AROCLOR-1232 | 0.29 | U | U | |
| AROCLOR-1242 | 0.22 | U | U | |
| AROCLOR-1248 | 0.2 | U | U | |
| AROCLOR-1254 | 0.26 | U | U | |
| AROCLOR-1260 | 0.28 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607 | nsample | OLFS4-MW37-0607-D | nsample | OLFS4-MW38-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-3 | lab_id | SA3013-5 | lab_id | SA3013-9 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW37-0607 | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW39-0607 | nsample | OLFS4-MW40-0607 | nsample | OLFS4-MW41-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-7 | lab_id | SA3013-1 | lab_id | SA3013-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 290 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PET

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW42-0607RA2 | nsample | OLFS4-MW43-0607RA | nsample | OLFS4-MW44-0607RA2 |
| samp_date | 6/14/2007 | samp_date | 6/14/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-19RA2 | lab_id | SA3013-21RA | lab_id | SA3013-17RA2 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 390 | I | J | PR |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: PET

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW45-0607RA2 | nsample | OLFS4-MW46-0607RA2 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-13RA2 | lab_id | SA3013-15RA2 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 330 | I | J | P |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| TPH (C08-C40) | 300 | I | J | P |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OVGC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW37-0607 | nsample | OLFS4-MW37-0607-D | nsample | OLFS4-MW38-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-3 | lab_id | SA3013-5 | lab_id | SA3013-9 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | OLFS4-MW37-0607 | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0068 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0067 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0067 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OVGC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW39-0607 | nsample | OLFS4-MW40-0607 | nsample | OLFS4-MW41-0607 |
| samp_date | 6/12/2007 | samp_date | 6/12/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-7 | lab_id | SA3013-1 | lab_id | SA3013-11 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0067 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0067 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0068 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OVGC

| | | | | | |
|---|---|---|---|---|---|
| nsample | OLFS4-MW42-0607 | nsample | OLFS4-MW43-0607 | nsample | OLFS4-MW44-0607 |
| samp_date | 6/14/2007 | samp_date | 6/14/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-19 | lab_id | SA3013-21 | lab_id | SA3013-17 |
| qc_type | NM | qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0066 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0066 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0067 | U | U | |

**PROJ_NO: 00389**

SDG: CTO29-1 MEDIA: WATER DATA FRACTION: OVGC

| | | | |
|---|---|---|---|
| nsample | OLFS4-MW45-0607 | nsample | OLFS4-MW46-0607 |
| samp_date | 6/13/2007 | samp_date | 6/13/2007 |
| lab_id | SA3013-13 | lab_id | SA3013-15 |
| qc_type | NM | qc_type | NM |
| units | UG/L | units | UG/L |
| Pct_Solids | 0.0 | Pct_Solids | 0.0 |
| DUP_OF: | | DUP_OF: | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0067 | U | U | |

| Parameter | Result | Lab Qual | Val Qual | Qual Code |
|---|---|---|---|---|
| 1,2-DIBROMOETHANE | 0.0066 | U | U | |

# APPENDIX H

# SUPPORTING INFORMATION FOR HUMAN HEALTH RISK ASSESSMENT

# APPENDIX H.1

# USEPA HUMAN HEALTH RISK CHARACTERIZATION CALCULATIONS AND RESULTS

**TABLE H-1**

**SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs - RESIDENTIAL EXPOSURES TO SUBSURFACE SOIL**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENNSACOLA, FLORIDA**

| Chemical | Incremental Lifetime Carcinogenic Risk (ILCR) | | | Estimated Non-Carcinogenic Hazard Quotient (HQ) | | |
|---|---|---|---|---|---|---|
| | Exposure Point Concentration (mg/kg) | SCTL[1] (mg/kg) | Estimated ILCR | Primary Target Organs | SCTL[1] (mg/kg) | Estimated HQ |
| Aluminum | 12800 | NA | NA | Body Weight | 80000 | 0.2 |
| Arsenic | 2.2 | 2.1 | 1E-06 | Cardiovascular, Skin | 26 | 0.08 |
| Chromium | 9.6 | 210 | 5E-08 | Respiratory | 234 | 0.04 |
| Iron | 7490 | NA | NA | Gastrointestinal | 53000 | 0.1 |
| Manganese | 61.4 | NA | NA | Neurological | 3500 | 0.02 |
| Vanadium | 17.2 | NA | NA | Hair Loss | 67 | 0.3 |
| | | Total ILCR | 1E-06 | | Total HI | 0.7 |

1 - Table II Soil Cleanup Target Levels (FDEP, April 2005). Some noncarcinogenic SCTLs not presented in Table II were calculated as per the methodology presented in Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, February, 2005.

NA - Not applicable. There are no cancer slope factors (CSF) available for this chemical.

**TABLE H-2**

**SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs - TYPICAL INDUSTRIAL EXPOSURES TO SUBSURFACE SOIL**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENNSACOLA, FLORIDA**

| Chemical | Incremental Lifetime Carcinogenic Risk (ILCR) | | | Estimated Non-Carcinogenic Hazard Quotient (HQ) | | |
|---|---|---|---|---|---|---|
| | Exposure Point Concentration (mg/kg) | SCTL[1] (mg/kg) | Estimated ILCR | Primary Target Organs | SCTL[1] (mg/kg) | Estimated HQ |
| Aluminum | 12800 | NA | NA | Body Weight | 1000000 | 0.01 |
| Arsenic | 2.2 | 12 | 2E-07 | Cardiovascular, Skin | 657 | 0.003 |
| Chromium | 9.6 | 470 | 2E-08 | Respiratory | 5940 | 0.002 |
| Iron | 7490 | NA | NA | Gastrointestinal | 1000000 | 0.007 |
| Manganese | 61.4 | NA | NA | Neurological | 43000 | 0.001 |
| Vanadium | 17.2 | NA | NA | Hair Loss | 10000 | 0.002 |
| | | Total ILCR | 2E-07 | | Total HI | 0.03 |

1 - Table II Soil Cleanup Target Levels (FDEP, April 2005). Some noncarcinogenic SCTLs not presented in Table II were calculated as per the methodology presented in Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., Final Report, February, 2005.

NA - Not applicable. There are no cancer slope factors (CSF) available for this chemical.

**TABLE H-3**

**SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs - CONSTRUCTION WORKERS EXPOSED TO SUBSURFACE SOIL**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENNSACOLA, FLORIDA**

| Chemical | Incremental Lifetime Carcinogenic Risk (ILCR) | | | Estimated Non-Carcinogenic Hazard Quotient (HQ) | | |
|---|---|---|---|---|---|---|
| | Exposure Point Concentration (mg/kg) | SCTL[1] (mg/kg) | Estimated ILCR | Primary Target Organs | SCTL[1] (mg/kg) | Estimated HQ |
| Aluminum | 12800 | NA | NA | Body Weight | 11900 | 1 |
| Arsenic | 2.2 | NA | NA | Cardiovascular, Skin | 83 | 0.03 |
| Chromium | 9.6 | 11 | 9E-07 | Respiratory | 266 | 0.04 |
| Iron | 7490 | NA | NA | Gastrointestinal | 90600 | 0.08 |
| Manganese | 61.4 | NA | NA | Neurological | 173 | 0.4 |
| Vanadium | 17.2 | NA | NA | Hair Loss | 302 | 0.06 |
| | | Total ILCR | 9E-07 | | Total HI | 2 |

1 - SCTLs were calculated as per the methodology presented in Appendix D.
NA - Not applicable. There are no cancer slope factors (CSF) available for this chemical.

**TABLE H-4**

**SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs**
**RESIDENTIAL EXPOSURE TO ONSITE GROUNDWATER**
**SITE 4**
**NETPDTC, SAUFLEY**
**PENNSACOLA, FLORIDA**

| Chemical | Estimated Lifetime Carcinogenic Risk (ILCR) | | | Estimated Non-Carcinogenic Hazard Quotient (HQ) | | |
|---|---|---|---|---|---|---|
| | Exposure Concentration µg/L | PRG[1] µg/L | Estimated ILCR | Primary Target Organs | PRG[1] µg/L | Estimated HQ |
| Benzene | 26 | 0.35 | 7E-05 | Blood | 44 | 0.6 |
| Chlorodibromomethane | 0.5 | 0.13 | 4E-06 | Liver | 120 | 0.004 |
| Chloroform | 3 | 0.17 | 2E-05 | Liver | 80 | 0.04 |
| cis-1,2-Dichloroethene | 350 | NA | NA | Blood | 61 | 6 |
| Isopropylbenzene | 80 | NA | NA | Adrenals, Kidney | 660 | 0.1 |
| Tetrachloroethene | 0.54 | 0.1 | 5E-06 | Liver | 220 | 0.002 |
| Total Xylenes | 840 | NA | NA | Neurological | 210 | 4 |
| trans-1,2-Dichloroethene | 48 | NA | NA | Blood, Liver | 110 | 0.4 |
| Vinyl Chloride | 0.36 | 0.02 | 2E-05 | Liver | 72 | 0.005 |
| 1-Methylnaphthalene[2] | 8.6 | NA | NA | Nasal | 6.2 | 1 |
| 2-Methylnaphthalene[2] | 12 | NA | NA | Nasal | 6.2 | 2 |
| Benzo(a)pyrene Equivalents | 0.044 | 0.0029 | 2E-05 | NA | NA | NA |
| Naphthalene | 79 | NA | NA | Nasal | 6.2 | 13 |
| Aluminum | 3110 | NA | NA | Body Weight | 36000 | 0.09 |
| Arsenic | 5.8 | 0.045 | 1E-04 | Cardiovascular, Skin | 11 | 0.5 |
| Chromium | 855 | NA | NA | Respiratory | 110 | 8 |
| Nickel | 438 | NA | NA | Body Weight | 730 | 0.6 |
| Thallium | 0.99 | NA | NA | Hair Loss, Liver | 2.4 | 0.4 |
| Vanadium | 12.1 | NA | NA | Hair Loss | 36 | 0.3 |
| | | **Total Carcinogenic Risk** | **3E-04** | | **Total HI** | **36** |

| | |
|---|---|
| Total Body Weight HI = | 0.7 |
| Total Nasal HI = | 16 |
| Total Liver HI = | 0.9 |
| Total Hair Loss HI = | 0.7 |
| Total Blood HI = | 7 |

| | |
|---|---|
| Total Skin HI = | 0.5 |
| Total Cardiovascular HI = | 0.5 |
| Total Neurological HI = | 4 |
| Total Kidney HI = | 0.1 |
| Total Respiratory HI = | 8 |
| Total Adrenals HI = | 0.1 |

1 - Tap Water Preliminary Remediation Goal (PRG) (USEPA Region 9, October 2004, Updated December 28, 2004).

2 - The PRG for naphthalene is used as a surrogate for 1- and 2-methylnaphthalene.

NA - Not applicable. The USEPA has not established a cancer slope factor (CSF) or noncarcinogenic reference dose (RfD) for this chemical.

# APPENDIX H.2

# FDEP CALCULATOR RESULTS

**CALCULATION WORKSHEET** 

| | | |
|---|---|---|
| **CLIENT:** NETPDTC, SAUFLEY | | **JOB NUMBER:** 0389 |
| **SUBJECT:** CALCULATION OF ALTERNATE SOIL CLEANUP TARGET LEVELS (SCTLS) FOR CARCINOGENS CONSTRUCTION WORKERS | | |
| **BASED ON:** TECHNICAL REPORT: DEVELOPMENT OF SOIL CLEANUP TARGET LEVELS FOR CHAPTER 62-777, F.A.C., FDEP, FEBRUARY 2005 | | |
| **BY:** R. JUPIN | **CHECKED BY:** | **DATE:** 10/18/2006 |

**PURPOSE:** To calculate an alternative soil cleanup level for consturction workers exposed to soil.

**RELEVANT EQUATIONS:**

$$SCTL = \frac{TR \times BW \times AT}{EF \times ED \times FC \times [Intake_{Ing} + Intake_{Der} + Intake_{Inh}]}$$

$$Intake_{Ing} = CSFo \times IRo \times 10^{-6} \text{ kg/mg}$$

$$Intake_{Der} = CSFd \times SA \times AF \times DA \times 10^{-6} \text{ kg/mg}$$

$$Intake_{Inh} = CSFi \times IRi \times (1/VF + 1/PEF)$$

Where:

| | | | |
|---|---|---|---|
| Chemical | = | | Benzo(a)pyrene (cPAHs) |
| SCTL | = | | Soil Cleanup Target Level (mg/kg) |
| TR | = | 1.0E-06 | Target Cancer Risk (unitless) |
| BW | = | 70 | Body weight (kg) |
| AT | = | 25550 | Averaging time (days) |
| EF | = | 250 | Exposure frequency (days/year) |
| ED | = | 1 | Exposure duration (years) |
| FC | = | 1 | Fraction from contaminated source (unitless) |
| IRo | = | 330 | Ingestion rate, oral (mg/day) |
| SA | = | 3300 | Surface area of skin exposed ($cm^2$/day) |
| AF | = | 0.3 | Adherence factor ($mg/cm^2$) |
| DA | = | 0.13 | Dermal absorption (unitless) |
| IRi | = | 20 | Inhalation rate ($m^3$/day) |
| VF | = | 2.72E+07 | Volatilization factor ($m^3$/kg) |
| PEF | = | 2.43E+06 | Particulate emission factor ($m^3$/kg) |
| CSFo | = | 7.30E+00 | Oral cancer slope factor $(mg/kg/day)^{-1}$ |
| CSFd | = | 7.30E+00 | Dermal cancer slope factor $(mg/kg/day)^{-1}$ |
| CSFi | = | 3.10E+00 | Inhalation cancer slope factor $(mg/kg/day)^{-1}$ |

| **CLIENT:** NETPDTC, SAUFLEY | | **JOB NUMBER:** 0389 |
|---|---|---|
| **SUBJECT:** CALCULATION OF ALTERNATE SOIL CLEANUP TARGET LEVELS (SCTLS) FOR CARCINOGENS CONSTRUCTION WORKERS | | |
| **BASED ON:** TECHNICAL REPORT: DEVELOPMENT OF SOIL CLEANUP TARGET LEVELS FOR CHAPTER 62-777, F.A.C., FDEP, FEBRUARY 2005 | | |
| **BY:** R. JUPIN | **CHECKED BY:** T. Jackson | **DATE:** 10/18/2006 |

**EXAMPLE CALCULATION**

$Intake_{Ing}$ = 7.30E+00 (mg/kg-day)-1 x 330 mg/day x 1E-06 kg/mg

$Intake_{Ing}$ = 2.41E-03 kg-kg/mg

$Intake_{Der}$ = 7.30E+00 (mg/kg-day)-1 x 3300 cm2/day x 0.3 mg/cm2 x 0.13 x 1E-06 kg/mg

$Intake_{Der}$ = 9.40E-04 kg-kg/mg

$Intake_{Inh}$ = 3.10E+00 (mg/kg-day)-1 x 20 m3/day x (1/2.72E+07 m3/kg + 1/2.43E+06 m3/kg)

$Intake_{Inh}$ = 2.78E-05 kg-kg/mg

$$SCTL = \frac{1.E\text{-}06 \times 70\ kg \times 25550\ days}{250\ days/yr \times 1\ yrs \times 1 \times [2.41E\text{-}03\ kg\text{-}kg/mg + 9.40E\text{-}04\ kg\text{-}kg/mg + 2.78E\text{-}05\ kg\text{-}kg/mg]}$$

SCTL = 2.12E+00 mg/kg ✓

**CALCULATION WORKSHEET** 

| **CLIENT:** NETPDTC, SAUFLEY | | **JOB NUMBER:** 0389 |
|---|---|---|
| **SUBJECT:** CALCULATION OF ALTERNATE SOIL CLEANUP TARGET LEVELS (SCTLS) FOR NONCARCINOGENS - CONSTRUCTION WORKERS | | |
| **BASED ON:** TECHNICAL REPORT: DEVELOPMENT OF SOIL CLEANUP TARGET LEVELS FOR CHAPTER 62-777, F.A.C., FDEP, FEBRUARY 2005 | | |
| **BY:** R. JUPIN | **CHECKED BY:** T. Jupin | **DATE:** 10/18/2006 |

**PURPOSE:** To calculate an alternative soil cleanup level for consturction workers exposed to soil.

**RELEVANT EQUATIONS:**

$$SCTL = \frac{THI \times BW \times AT}{EF \times ED \times FC \times [Intake_{Ing} + Intake_{Der} + Intake_{Inh}]}$$

$$Intake_{Ing} = 1/RfDo \times IRo \times 10^{-6}\ kg/mg$$

$$Intake_{Der} = 1/RfDd \times SA \times AF \times DA \times 10^{-6}\ kg/mg$$

$$Intake_{Inh} = 1/RfDi \times IRi \times (1/VF + 1/PEF)$$

Where:

| | | | |
|---|---|---|---|
| Chemical | = | Arsenic | |
| SCTL | = | | Soil Cleanup Target Level (mg/kg) |
| THI | = | 1 | Target Hazard Index (unitless) |
| BW | = | 70 | Body weight (kg) |
| AT | = | 365 | Averaging time (days) |
| EF | = | 250 | Exposure frequency (days/year) |
| ED | = | 1 | Exposure duration (years) |
| FC | = | 1 | Fraction from contaminated source (unitless) |
| IRo | = | 330 | Ingestion rate, oral (mg/day) |
| SA | = | 3300 | Surface area of skin exposed ($cm^2$/day) |
| AF | = | 0.3 | Adherence factor ($mg/cm^2$) ✓ |
| DA | = | 0.03 | Dermal absorption (unitless) ✓ |
| IRi | = | 20 | Inhalation rate ($m^3$/day) |
| VF | = | 1.00E+99 | Volatilization factor ($m^3$/kg) ✓ |
| PEF | = | 2.43E+06 | Particulate emission factor ($m^3$/kg) ✓ |
| RfDo | = | 3.0E-04 | Oral reference dose (mg/kg/day) |
| RfDd | = | 3.0E-04 | Dermal reference dose (mg/kg/day) |
| RfDi | = | 3.0E-04 | Inhalation reference dose (mg/kg/day) |

| | | |
|---|---|---|
| **CLIENT:** NAVAL AIR STATION, PENSACOLA | | **JOB NUMBER:** 4821 |
| **SUBJECT:** CALCULATION OF ALTERNATE SOIL CLEANUP TARGET LEVELS (SCTLS) FOR NONCARCINOGENS - CONSTRUCTION WORKERS | | |
| **BASED ON:** TECHNICAL REPORT: DEVELOPMENT OF SOIL CLEANUP TARGET LEVELS FOR CHAPTER 62-777, F.A.C., FDEP, FEBRUARY 2005 | | |
| **BY:** R. JUPIN | **CHECKED BY:** T. Jupin | **DATE:** 10/18/2006 |

**EXAMPLE CALCULATION**

$Intake_{Ing}$ = 1/3.0E-04 mg/kg-day x 330 mg/day x 1E-06 kg/mg

$Intake_{Ing}$ = 1.10E+00 kg-kg/mg

$Intake_{Der}$ = 1/3.0E-04 mg/kg-day x 3300 cm2/day x 0.3 mg/cm2 x 0.03 x 1E-06 kg/mg

$Intake_{Der}$ = 9.90E-02 kg-kg/mg

$Intake_{Inh}$ = 1/3.0E-04 mg/kg-day x 20 m3/day x (1/1.00E+99 m3/kg + 1/2.43E+06 m3/kg)

$Intake_{Inh}$ = 2.74E-02 kg-kg/mg

$$SCTL = \frac{1 \times 70 \text{ kg} \times 365 \text{ days}}{250 \text{ days/yr} \times 1 \text{ yrs} \times 1 \times [1.10E+00 \text{ kg-kg/mg} + 9.90E-02 \text{ kg-kg/mg} + 2.74E-02 \text{ kg-kg/mg}]}$$

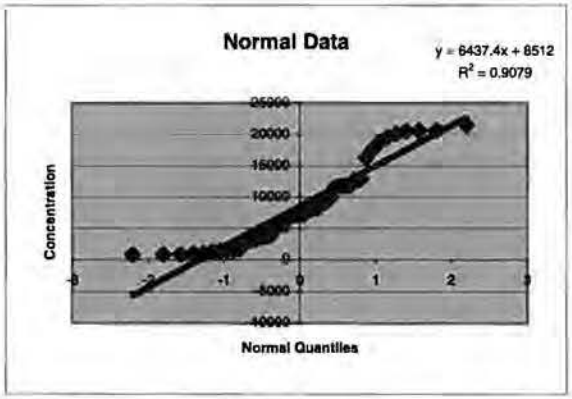
SCTL = 8.33E+01 mg/kg ✓

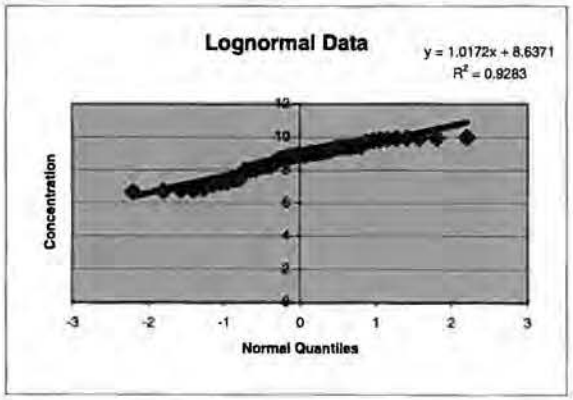
# APPENDIX H.3

# EXAMPLE CALCULATIONS OF ALTERNATE SOIL CLEANUP TARGET LEVELS (SCTLS)

## FDEP UCL Calculator Version 1.0

Goodness-of-fit test results  Aluminum




**Shapiro-Francia Results (Adjust for Censoring)**

| | |
|---|---|
| SF for Normal Distribution | 0.9079 |
| SF for LogNormal Distribution | 0.9283 |
| Shapiro-Francia critical value for p<0.05 | NA |

Test stat > critical value indicates a reasonable fit

**Shapiro-Wilk's Test Results for All Data (BDL replaced with 1/2 DL)**

| | |
|---|---|
| SW test statistic for Normal Distribution | 1.094 |
| SW test statistic for LogNormal Distribution | 1.100 |
| Shapiro-Wilk's critical value for p<0.05 | 0.945 |

Test stat > critical value indicates a reasonable fit

**Based on the results of the Shapiro-Wilk's test**
**Distribution is best described as: Lognormal**

Lognormal

**FDEP UCL Calculator Version 1.0** **10/2/07**

| Summary Statistics for Aluminum | |
|---|---|
| Number of Samples | 45 |
| Number of Censored Data | 0 |
| Minimum | 776 |
| Maximum | 21500 |
| Mean | 8512 |
| Median | 7200 |
| Standard Deviation | 6620.516 |
| Variance | 43831228 |
| Coefficient of Variation | 0.777786 |
| Skewness | 0.656777 |

| 95% UCL (Assuming Normal Data) | |
|---|---|
| Student's-t | 10170.27 |

| 95% UCL (Adjusted for Skewness) | |
|---|---|
| Adjusted-CLT | 10238.76 |
| Modified-t | 10186.37 |

| 95% Non-parametric UCL | |
|---|---|
| CLT | 10135.5 |
| Jackknife | NA |
| Standard Bootstrap | 10289.34 |
| Bootstrap-t | 10405.79 |
| Chebyshev (Mean, Std) | 12814.02 |

| Summary Statistics for ln(Aluminum) | |
|---|---|
| Minimum | 6.654152 |
| Maximum | 9.975808 |
| Mean | 8.637099 |
| Standard Deviation | 1.034578 |
| Variance | 1.070351 |

| Goodness-of-Fit Results | |
|---|---|
| Distribution Recommended | Lognormal |
| Distribution Used | Lognormal |

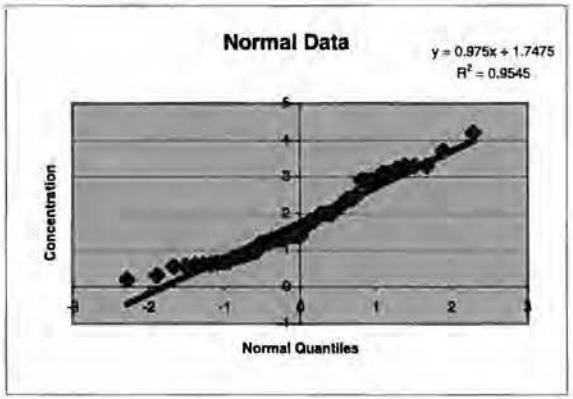
| Estimates Assuming Lognormal Distribution | |
|---|---|
| MLE Mean | 9626.49 |
| MLE Standard Deviation | 13326.35 |
| MLE Median | 5636.951 |
| MLE Coefficient of Variation | 1.384342 |
| | |
| MVUE Estimate of Mean | 9457.798 |
| MVUE Estimate of Std. Dev. | 12250.31 |
| MVUE Estimate of SE | 1723.041 |
| MVUE Coefficient of Variation | 1.29526 |

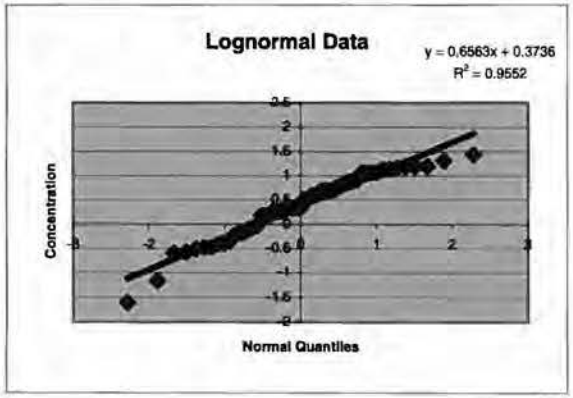
| UCL Assuming Lognormal Distribution | |
|---|---|
| 95% H-UCL | 13987.97 |
| 95% Chebyshev (MVUE) UCL | 16968.36 |
| 99% Chebyshev (MVUE) UCL | 26601.88 |

| FDEP Recommended UCL to Use: |
|---|
| 12814.02 |

## FDEP UCL Calculator Version 1.0

Goodness-of-fit test results  Arsenic




**Shapiro-Francia Results (Adjust for Censoring)**

| | |
|---|---|
| SF for Normal Distribution | 0.9545 |
| SF for LogNormal Distribution | 0.9552 |
| Shapiro-Francia critical value for p<0.05 | NA |

Test stat > critical value indicates a reasonable fit

**D'Agostino's Test Results for All Data (BDL replaced with 1/2 DL)**

| | |
|---|---|
| Fit to Normal Distribution | TRUE |
| Fit to LogNormal Distribution | TRUE |

**Based on the results of the Shapiro-Wilk's test**
**Distribution is best described as: Lognormal**

Lognormal

**FDEP UCL Calculator Version 1.0** **10/2/07**

| Summary Statistics for Arsenic | |
|---|---|
| Number of Samples | 55 |
| Number of Censored Data | 0 |
| Minimum | 0.2 |
| Maximum | 4.2 |
| Mean | 1.747455 |
| Median | 1.4 |
| Standard Deviation | 0.980839 |
| Variance | 0.962045 |
| Coefficient of Variation | 0.561296 |
| Skewness | 0.523989 |

| 95% UCL (Assuming Normal Data) | |
|---|---|
| Student's-t | 1.968794 |

| 95% UCL (Adjusted for Skewness) | |
|---|---|
| Adjusted-CLT | 1.975002 |
| Modified-t | 1.970351 |

| 95% Non-parametric UCL | |
|---|---|
| CLT | 1.965016 |
| Jackknife | NA |
| Standard Bootstrap | 1.990443 |
| Bootstrap-t | 2.081242 |
| Chebyshev (Mean, Std) | 2.32396 |

| Summary Statistics for ln(Arsenic) | |
|---|---|
| Minimum | -1.60944 |
| Maximum | 1.435084 |
| Mean | 0.373648 |
| Standard Deviation | 0.659951 |
| Variance | 0.435536 |

| Goodness-of-Fit Results | |
|---|---|
| Distribution Recommended | Lognormal |
| Distribution Used | Lognormal |

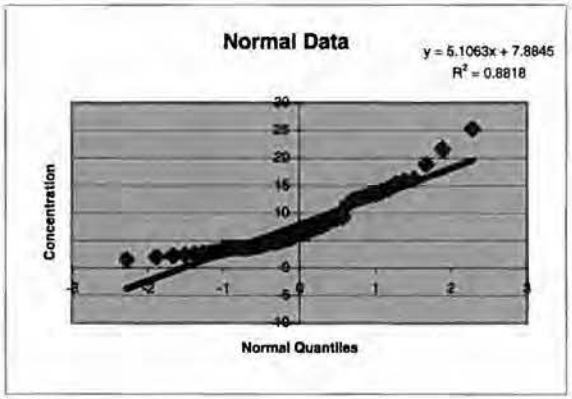
| Estimates Assuming Lognormal Distribution | |
|---|---|
| MLE Mean | 1.806545 |
| MLE Standard Deviation | 1.334633 |
| MLE Median | 1.453026 |
| MLE Coefficient of Variation | 0.738777 |
| | |
| MVUE Estimate of Mean | 1.797952 |
| MVUE Estimate of Std. Dev. | 1.304267 |
| MVUE Estimate of SE | 0.1738 |
| MVUE Coefficient of Variation | 0.725418 |

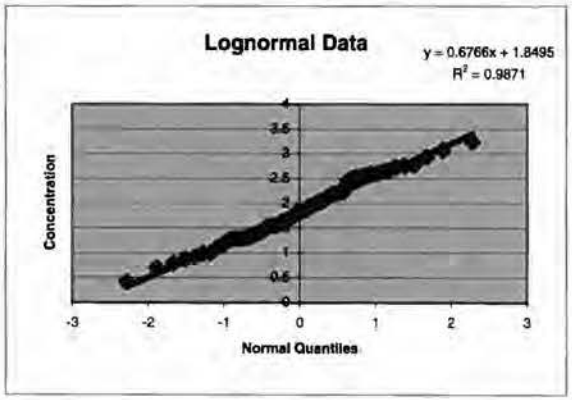
| UCL Assuming Lognormal Distribution | |
|---|---|
| 95% H-UCL | 2.162548 |
| 95% Chebyshev (MVUE) UCL | 2.555531 |
| 99% Chebyshev (MVUE) UCL | 3.527249 |

| FDEP Recommended UCL to Use: |
|---|
| 2.162548 |

## FDEP UCL Calculator Version 1.0

Goodness-of-fit test results  Chromium




**Shapiro-Francia Results (Adjust for Censoring)**

| | |
|---|---|
| SF for Normal Distribution | 0.8818 |
| SF for LogNormal Distribution | 0.9871 |
| Shapiro-Francia critical value for p<0.05 | NA |

Test stat > critical value indicates a reasonable fit

**D'Agostino's Test Results for All Data (BDL replaced with 1/2 DL)**

| | |
|---|---|
| Fit to Normal Distribution | FALSE |
| Fit to LogNormal Distribution | TRUE |

**Based on the results of the Shapiro-Wilk's test**
**Distribution is best described as: Lognormal**

Lognormal

**FDEP UCL Calculator Version 1.0** **10/2/07**

| Summary Statistics for Chromium | |
|---|---|
| Number of Samples | 55 |
| Number of Censored Data | 0 |
| Minimum | 1.5 |
| Maximum | 25.3 |
| Mean | 7.884545 |
| Median | 6.2 |
| Standard Deviation | 5.344172 |
| Variance | 28.56017 |
| Coefficient of Variation | 0.677803 |
| Skewness | 1.217093 |

| 95% UCL (Assuming Normal Data) | |
|---|---|
| Student's-t | 9.090529 |

| 95% UCL (Adjusted for Skewness) | |
|---|---|
| Adjusted-CLT | 9.196328 |
| Modified-t | 9.11024 |

| 95% Non-parametric UCL | |
|---|---|
| CLT | 9.069945 |
| Jackknife | NA |
| Standard Bootstrap | 9.115144 |
| Bootstrap-t | 9.734042 |
| Chebyshev (Mean, Std) | 11.02568 |

| Summary Statistics for ln(Chromium) | |
|---|---|
| Minimum | 0.405465 |
| Maximum | 3.230804 |
| Mean | 1.84952 |
| Standard Deviation | 0.669257 |
| Variance | 0.447905 |

| Goodness-of-Fit Results | |
|---|---|
| Distribution Recommended | Lognormal |
| Distribution Used | Lognormal |

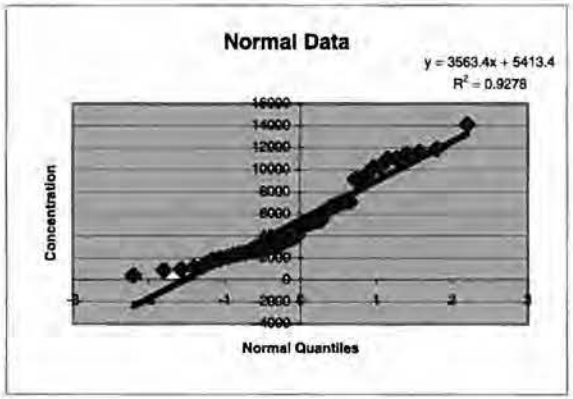
| Estimates Assuming Lognormal Distribution | |
|---|---|
| MLE Mean | 7.952393 |
| MLE Standard Deviation | 5.977693 |
| MLE Median | 6.35677 |
| MLE Coefficient of Variation | 0.751685 |
| | |
| MVUE Estimate of Mean | 7.913311 |
| MVUE Estimate of Std. Dev. | 5.837227 |
| MVUE Estimate of SE | 0.777354 |
| MVUE Coefficient of Variation | 0.737647 |

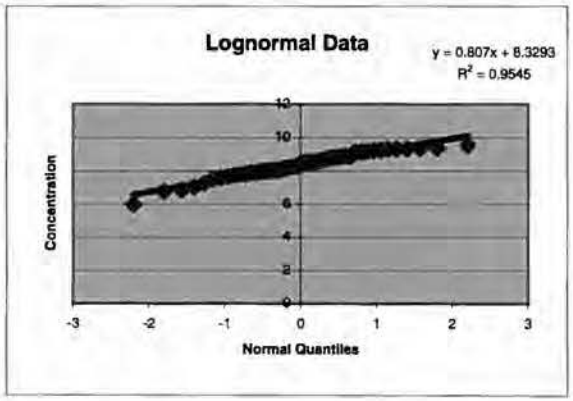
| UCL Assuming Lognormal Distribution | |
|---|---|
| 95% H-UCL | 9.550128 |
| 95% Chebyshev (MVUE) UCL | 11.30172 |
| 99% Chebyshev (MVUE) UCL | 15.64791 |

| FDEP Recommended UCL to Use: |
|---|
| 9.550128 |

## FDEP UCL Calculator Version 1.0

Goodness-of-fit test results  Iron




**Shapiro-Francia Results (Adjust for Censoring)**

| | |
|---|---|
| SF for Normal Distribution | 0.9278 |
| SF for LogNormal Distribution | 0.9545 |
| Shapiro-Francia critical value for p<0.05 | NA |

Test stat > critical value indicates a reasonable fit

**Shapiro-Wilk's Test Results for All Data (BDL replaced with 1/2 DL)**

| | |
|---|---|
| SW test statistic for Normal Distribution | 1.101 |
| SW test statistic for LogNormal Distribution | 1.138 |
| Shapiro-Wilk's critical value for p<0.05 | 0.945 |

Test stat > critical value indicates a reasonable fit

**Based on the results of the Shapiro-Wilk's test**
**Distribution is best described as: Lognormal**

Lognormal

**FDEP UCL Calculator Version 1.0** **10/2/07**

| Summary Statistics for Iron | |
|---|---|
| Number of Samples | 45 |
| Number of Censored Data | 0 |
| Minimum | 382 |
| Maximum | 14100 |
| Mean | 5413.356 |
| Median | 4580 |
| Standard Deviation | 3625.293 |
| Variance | 13142753 |
| Coefficient of Variation | 0.669694 |
| Skewness | 0.671378 |

| 95% UCL (Assuming Normal Data) | |
|---|---|
| Student's-t | 6321.397 |

| 95% UCL (Adjusted for Skewness) | |
|---|---|
| Adjusted-CLT | 6360.16 |
| Modified-t | 6330.412 |

| 95% Non-parametric UCL | |
|---|---|
| CLT | 6302.358 |
| Jackknife | NA |
| Standard Bootstrap | 6367.333 |
| Bootstrap-t | 6509.745 |
| Chebyshev (Mean, Std) | 7769.076 |

| Summary Statistics for ln(Iron) | |
|---|---|
| Minimum | 5.945421 |
| Maximum | 9.55393 |
| Mean | 8.329326 |
| Standard Deviation | 0.809391 |
| Variance | 0.655113 |

| Goodness-of-Fit Results | |
|---|---|
| Distribution Recommended | Lognormal |
| Distribution Used | Lognormal |

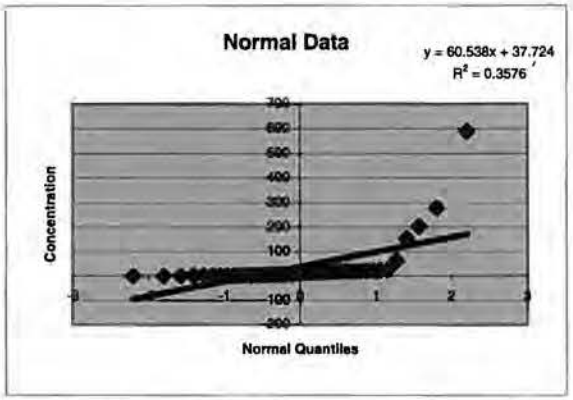
| Estimates Assuming Lognormal Distribution | |
|---|---|
| MLE Mean | 5749.583 |
| MLE Standard Deviation | 5530.849 |
| MLE Median | 4143.623 |
| MLE Coefficient of Variation | 0.961957 |
| | |
| MVUE Estimate of Mean | 5695.39 |
| MVUE Estimate of Std. Dev. | 5286.53 |
| MVUE Estimate of SE | 769.2624 |
| MVUE Coefficient of Variation | 0.928212 |

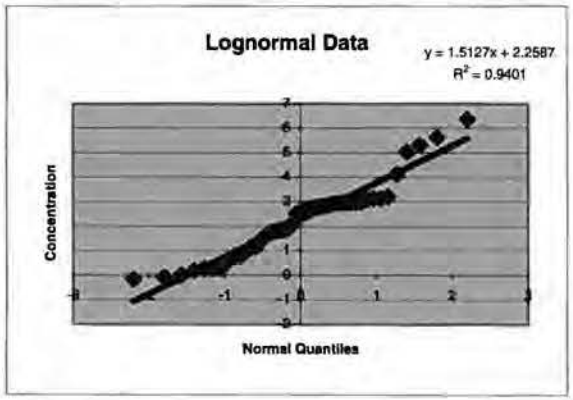
| UCL Assuming Lognormal Distribution | |
|---|---|
| 95% H-UCL | 7487.715 |
| 95% Chebyshev (MVUE) UCL | 9048.527 |
| 99% Chebyshev (MVUE) UCL | 13349.47 |

| FDEP Recommended UCL to Use: |
|---|
| 7487.715 |

## FDEP UCL Calculator Version 1.0

Goodness-of-fit test results  Manganese




**Shapiro-Francia Results (Adjust for Censoring)**

| | |
|---|---|
| SF for Normal Distribution | 0.3576 |
| SF for LogNormal Distribution | 0.9401 |
| Shapiro-Francia critical value for p<0.05 | NA |

Test stat > critical value indicates a reasonable fit

**Shapiro-Wilk's Test Results for All Data (BDL replaced with 1/2 DL)**

| | |
|---|---|
| SW test statistic for Normal Distribution | 0.409 |
| SW test statistic for LogNormal Distribution | 1.096 |
| Shapiro-Wilk's critical value for p<0.05 | 0.945 |

Test stat > critical value indicates a reasonable fit

**Based on the results of the Shapiro-Wilk's test**
**Distribution is best described as: Lognormal**

Lognormal

**FDEP UCL Calculator Version 1.0** **10/2/07**

| Summary Statistics for Manganese | |
|---|---|
| Number of Samples | 45 |
| Number of Censored Data | 0 |
| Minimum | 0.85 |
| Maximum | 588 |
| Mean | 37.724 |
| Median | 12.7 |
| Standard Deviation | 99.2007 |
| Variance | 9840.778 |
| Coefficient of Variation | 2.629644 |
| Skewness | 4.51341 |

| 95% UCL (Assuming Normal Data) | |
|---|---|
| Student's-t | 62.57119 |

| 95% UCL (Adjusted for Skewness) | |
|---|---|
| Adjusted-CLT | 72.68313 |
| Modified-t | 64.22945 |

| 95% Non-parametric UCL | |
|---|---|
| CLT | 62.05021 |
| Jackknife | NA |
| Standard Bootstrap | 59.1125 |
| Bootstrap-t | 73.01974 |
| Chebyshev (Mean, Std) | 102.1847 |

| Summary Statistics for ln(Manganese) | |
|---|---|
| Minimum | -0.16252 |
| Maximum | 6.376727 |
| Mean | 2.258718 |
| Standard Deviation | 1.528788 |
| Variance | 2.337194 |

| Goodness-of-Fit Results | |
|---|---|
| Distribution Recommended | Lognormal |
| Distribution Used | Lognormal |

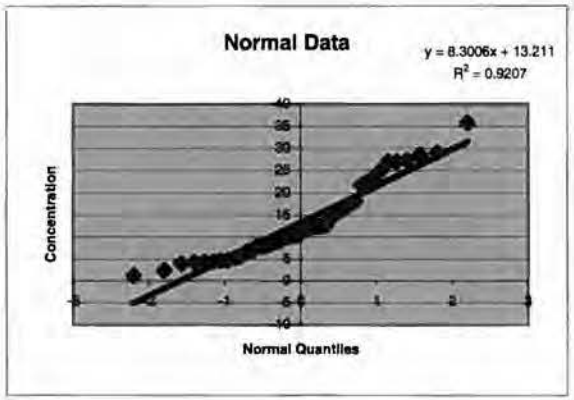
| Estimates Assuming Lognormal Distribution | |
|---|---|
| MLE Mean | 30.79386 |
| MLE Standard Deviation | 94.17157 |
| MLE Median | 9.570813 |
| MLE Coefficient of Variation | 3.058128 |
| | |
| MVUE Estimate of Mean | 29.2133 |
| MVUE Estimate of Std. Dev. | 73.15277 |
| MVUE Estimate of SE | 8.810885 |
| MVUE Coefficient of Variation | 2.504091 |

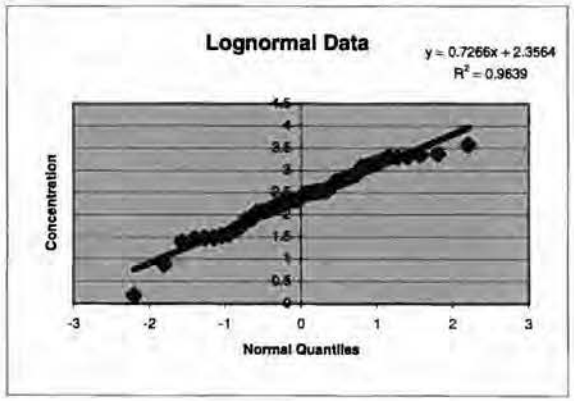
| UCL Assuming Lognormal Distribution | |
|---|---|
| 95% H-UCL | 61.38931 |
| 95% Chebyshev (MVUE) UCL | 67.61906 |
| 99% Chebyshev (MVUE) UCL | 116.8807 |

| FDEP Recommended UCL to Use: |
|---|
| 61.38931 |

# FDEP UCL Calculator Version 1.0

Goodness-of-fit test results  Vanadium




**Shapiro-Francia Results (Adjust for Censoring)**

| | |
|---|---|
| SF for Normal Distribution | 0.9207 |
| SF for LogNormal Distribution | 0.9639 |
| Shapiro-Francia critical value for p<0.05 | NA |

Test stat > critical value indicates a reasonable fit

**Shapiro-Wilk's Test Results for All Data (BDL replaced with 1/2 DL)**

| | |
|---|---|
| SW test statistic for Normal Distribution | 1.079 |
| SW test statistic for LogNormal Distribution | 1.139 |
| Shapiro-Wilk's critical value for p<0.05 | 0.945 |

Test stat > critical value indicates a reasonable fit

**Based on the results of the Shapiro-Wilk's test**
**Distribution is best described as: Lognormal**

Lognormal

**FDEP UCL Calculator Version 1.0** **10/2/07**

| Summary Statistics for Vanadium | |
|---|---|
| Number of Samples | 45 |
| Number of Censored Data | 0 |
| Minimum | 1.2 |
| Maximum | 35.8 |
| Mean | 13.21111 |
| Median | 10.9 |
| Standard Deviation | 8.477034 |
| Variance | 71.8601 |
| Coefficient of Variation | 0.641659 |
| Skewness | 0.854962 |

| 95% UCL (Assuming Normal Data) | |
|---|---|
| Student's-t | 15.33439 |

| 95% UCL (Adjusted for Skewness) | |
|---|---|
| Adjusted-CLT | 15.46198 |
| Modified-t | 15.36123 |

| 95% Non-parametric UCL | |
|---|---|
| CLT | 15.28987 |
| Jackknife | NA |
| Standard Bootstrap | 15.56784 |
| Bootstrap-t | 16.81089 |
| Chebyshev (Mean, Std) | 18.7195 |

| Summary Statistics for ln(Vanadium) | |
|---|---|
| Minimum | 0.182322 |
| Maximum | 3.577948 |
| Mean | 2.356375 |
| Standard Deviation | 0.725225 |
| Variance | 0.525952 |

| Goodness-of-Fit Results | |
|---|---|
| Distribution Recommended | Lognormal |
| Distribution Used | Lognormal |

| Estimates Assuming Lognormal Distribution | |
|---|---|
| MLE Mean | 13.72682 |
| MLE Standard Deviation | 11.41943 |
| MLE Median | 10.55263 |
| MLE Coefficient of Variation | 0.831907 |
| | |
| MVUE Estimate of Mean | 13.62751 |
| MVUE Estimate of Std. Dev. | 11.03005 |
| MVUE Estimate of SE | 1.617962 |
| MVUE Coefficient of Variation | 0.809396 |

| UCL Assuming Lognormal Distribution | |
|---|---|
| 95% H-UCL | 17.24555 |
| 95% Chebyshev (MVUE) UCL | 20.68004 |
| 99% Chebyshev (MVUE) UCL | 29.72606 |

| FDEP Recommended UCL to Use: |
|---|
| 17.24555 |