

**Petroleum Source Removal Areas of Concern  
Former Griffiss Air Force Base  
Rome, New York**

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# **LONG-TERM MONITORING REPORT**

**(Fall 2006)**



**Contract No. F41624-03-D-8601**

**Revision 0.0  
August 2007**

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**FPM** group

**LONG TERM MONITORING  
REPORT  
(FALL 2006)**

**PETROLEUM SOURCE REMOVAL  
AREAS of CONCERN**

**Prepared for:**

**Air Force Real Property Agency  
Former Griffiss Air Force Base  
Rome, New York**

**through**

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## **APPENDICES**

(All appendices are located on a CD in the back of this binder.)

- Appendix A Sampling Forms, Soil Disposal Documentation, ORC<sup>®</sup> Calculations
- Appendix B Validated Lab Data
- Appendix C Raw Lab Data

## LIST OF ACRONYMS AND ABBREVIATIONS

<b>AFB</b>	Air Force Base
<b>AFCEE</b>	Air Force Center for Environmental Excellence
<b>AOI</b>	Area of Interest
<b>ARAR</b>	Applicable or Relevant and Appropriate Requirements
<b>AST</b>	aboveground storage tank
<b>AVGAS</b>	aviation gasoline
<b>bgs</b>	below ground surface
<b>BTEX</b>	benzene, toluene, ethylbenzene, xylene
<b>BTOIC</b>	below top of inner casing
<b>COC</b>	contaminant of concern
<b>CSM</b>	Conceptual Site Model
<b>c.y.</b>	cubic yard
<b>DO</b>	dissolved oxygen
<b>EBS</b>	Environmental Baseline Survey
<b>E&amp;E</b>	Ecology and Environmental, Inc.
<b>ESI</b>	Expanded Site Investigation
<b>FID</b>	flame ionization detector
<b>FPM</b>	FPM Group, Ltd.
<b>FSP</b>	field sampling plan
<b>JP-4</b>	jet propulsion fuel grade 4
<b>LAW</b>	Law Engineering and Environmental Services, Inc.
<b>LTM</b>	long-term monitoring
<b>MOGAS</b>	automotive gasoline
<b>MSL</b>	mean sea level
<b>NYS</b>	New York State
<b>NYSBC</b>	New York State Barge Canal
<b>NYSDEC</b>	New York State Department of Environmental Conservation
<b>ORC<sup>®</sup></b>	Oxygen Release Compound <sup>®</sup>
<b>ppm</b>	parts per million
<b>QAPP</b>	Quality Assurance Project Plan
<b>RI</b>	Remedial Investigation

<b>SAP</b>	sampling and analysis plan
<b>SI</b>	site investigation
<b>SRA</b>	source removal area of concern
<b>STARS</b>	Spill Technology and Remediation Series
<b>SVOC</b>	semi-volatile organic compound
<b>TAGM</b>	Technical and Administrative Guidance Memorandum
<b>TPH</b>	Total Petroleum Hydrocarbon
<b>USEPA</b>	United States Environmental Protection Agency
<b>UST</b>	underground storage tank
<b>VOC</b>	volatile organic compound
<b>µg/L</b>	micrograms per liter

## 1 INTRODUCTION

FPM Group Ltd. (FPM) has been contracted by the Air Force Center for Engineering and the Environment (AFCEE), to conduct a long-term monitoring (LTM) program for groundwater at the Tank Farms 1&3 Petroleum Source Removal Area of Concern (SRA) at the former Griffiss Air Force Base (AFB), New York. The LTM program was conducted in accordance with provisions of the Basic Contract No. F41624-03-D-8601 Delivery Order No. 0027. The purpose of the LTM program is to monitor the presence of contaminants of concern (COCs), assess the potential for migration of the COCs, statistically identify groundwater trends for the COCs, and establish an early warning system for assuring compliance with potential COC receptors.

Data evaluation and report preparation for the LTM program includes semi-annual summary updates and a more detailed annual report. The LTM program will also be reviewed periodically to revise sampling locations and/or sampling frequencies for optimal functioning. This semi-annual LTM report includes collection, analysis, and reporting of COCs for the following SRA from June 2002 through March 2006:

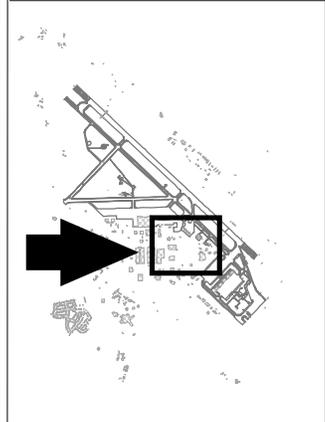
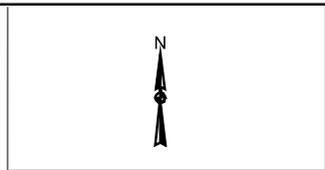
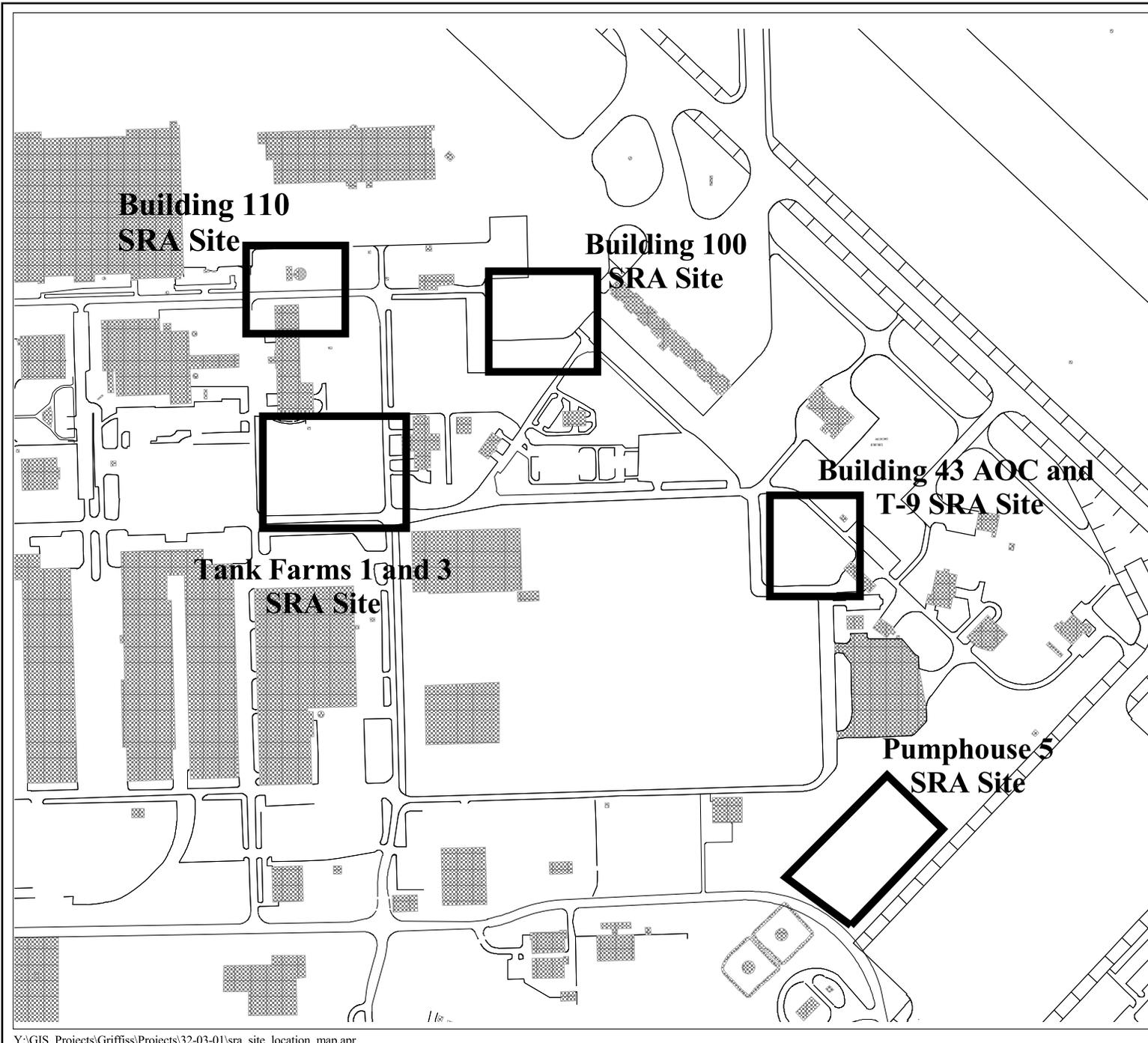
- Tank Farm 1 and 3 SRA SS-20 (New York State Department of Environmental Conservation [NYSDEC] Spill #9111733)

The locations of the Petroleum SRA can be reviewed in Figure 1-1. LTM was recommended by FPM and approved by NYSDEC by their approval of site-specific workplans and groundwater monitoring reports for Tank Farms 1 and 3 (FPM, November 2001).

As part of the performance based contract, it should be noted that the following sites were previously sampled under LTM, and were closed or proposed for closure.

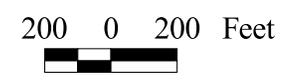
- Building T-9 SRA SS-25 (NYSDEC Spill #9702173). Spill closed September 24, 2004
- Building 43 SRA ST-26 (NYSDEC Spill #9204543 and #9313076) proposed for closure, March 2005
- Building 110 SRA ST-36 (NYSDEC Spill #8603763). Spill closed September 29, 2004
- Building 771/Pumphouse 5 SRA ST-37 (NYSDEC Spill #8903144). Site closed October 20, 2004
- Building 100 SRA ST-51 (NYSDEC Spill #9704490). Spill closed September 29, 2004

Groundwater samples were collected from each of the sites listed and analyzed for the respective COCs as identified during previous investigations (e.g., volatile organic compounds [VOCs] and semivolatile organic compounds [SVOCs]). Both existing data and information from new sampling rounds are utilized for overall performance evaluation.



**Legend**

-  Road/Airfield
-  Demolished Building
-  Existing Building



UNITED STATES AIR FORCE  
 GRIFFISS AIR FORCE BASE  
 ROME, NEW YORK



**Figure 1-1  
 Petroleum Source  
 Removal Areas  
 Location Map**

Y:\GIS Projects\Griffiss\Projects\32-03-01\sra site location map.apr

Groundwater samples were collected and analyzed at as many existing monitoring wells as possible to adequately locate and track the migration of the COC plume(s).

New wells were installed according to the protocol as described in the Field Sampling Plan (FSP) (FPM, August 2003). Reference is also made to the AFCEE Quality Assurance Project Plan (QAPP) Version 3.1 (AFCEE, 2001) , prior to June 2006 and Version 4.0 (AFCEE, 2005) is used currently, with project-specific variances. The QAPP together with the FSP form the Sampling and Analysis Plan (SAP).

## **1.1 Long-Term Monitoring Approach**

### **1.1.1 Long-Term Monitoring Background**

To illustrate how this LTM Program will operate, the following highlights the overall objectives, components, and constraints of the groundwater LTM Program.

The objectives of LTM are:

- To continue refining the conceptual site model (CSM) for groundwater flow so that the predictions regarding the fate and transport of COCs are accurate;
- To establish an early warning monitoring system for the protection of potential receptors prior to completion of exposure pathways;
- To evaluate COC degradation due to remedial action or natural attenuation processes;
- and
- To collect data that support attainment of spill closure.

Typical components of a groundwater LTM system include:

- One or more upgradient well(s) representative of background conditions; and
- LTM wells that track the COC migration or degradation trend.

Constraints associated with a groundwater LTM system include:

- All monitoring wells must be screened in the same hydrogeologic unit as the COC plume or known/probable groundwater pathway from a potential source; and
- Downgradient LTM wells must be located to detect unexpected variations in groundwater quality as efficiently as possible (i.e., with respect to groundwater migration rates and downgradient flow direction).

Given the above objectives and constraints the design of an LTM system considers the following tasks:

1. Selecting water-level observation wells and water quality monitoring wells from existing monitoring wells and piezometers, or selecting locations for new wells, depending on the evaluation of existing data (i.e., well logs, water-level measurements, proximity to natural flow boundaries, trends and uncertainties in the existing data) and the specific intended and distinct role of that monitoring point;
2. Providing a statistical evaluation of water-level elevation data for groundwater flow direction, existing COC concentrations, and groundwater chemistry to predict long-term trends;
3. Identifying performance evaluation criteria (e.g., statistical tests), including appropriate analysis methods for evaluating data variations or closure attainment;
4. Identifying water quality sampling frequency at each monitoring point both for
  - a) understanding the trends of COCs and/or their indicator analytes, and
  - b) minimizing the costs and maximizing the benefits of the program;
5. Identifying physical and chemical parameters (e.g., transport and attenuation properties) for the COCs; and
6. Periodically assessing the LTM monitoring well network for addition of new monitoring wells or possible decommissioning of monitoring wells from the LTM program.

### **1.1.2 Purpose of LTM Program**

Each site-specific LTM Work Plan has identified monitoring points that will best detect groundwater COCs that are known to exist at the Petroleum SRA, and track their transport over time to support a decision for either continued monitoring, remedial measures (i.e., free product recovery in those cases where free product is encountered), or spill closure. The LTM Program will use historic data and new information from annual and quarterly sampling rounds at specified existing and new monitoring wells.

## **2 ENVIRONMENTAL SETTING**

### **2.1 PHYSIOGRAPHY AND TOPOGRAPHY**

The former Griffiss AFB is located in the city of Rome in Oneida County, New York (refer to Figure 2-1). The former Base lies within the Mohawk Valley between the Appalachian plateau and the Adirondack Mountains. A rolling plateau northeast of the former Base reaches an elevation of 1300 feet above mean sea level (MSL). The New York State Barge Canal (NYSBC) and the Mohawk River valley south of the former Base lie below 430 feet above MSL. The topography across the former Base is relatively flat with elevations ranging from 435 feet above MSL in the southwest portion to 595 feet above MSL in the northwest portion of the former Base.

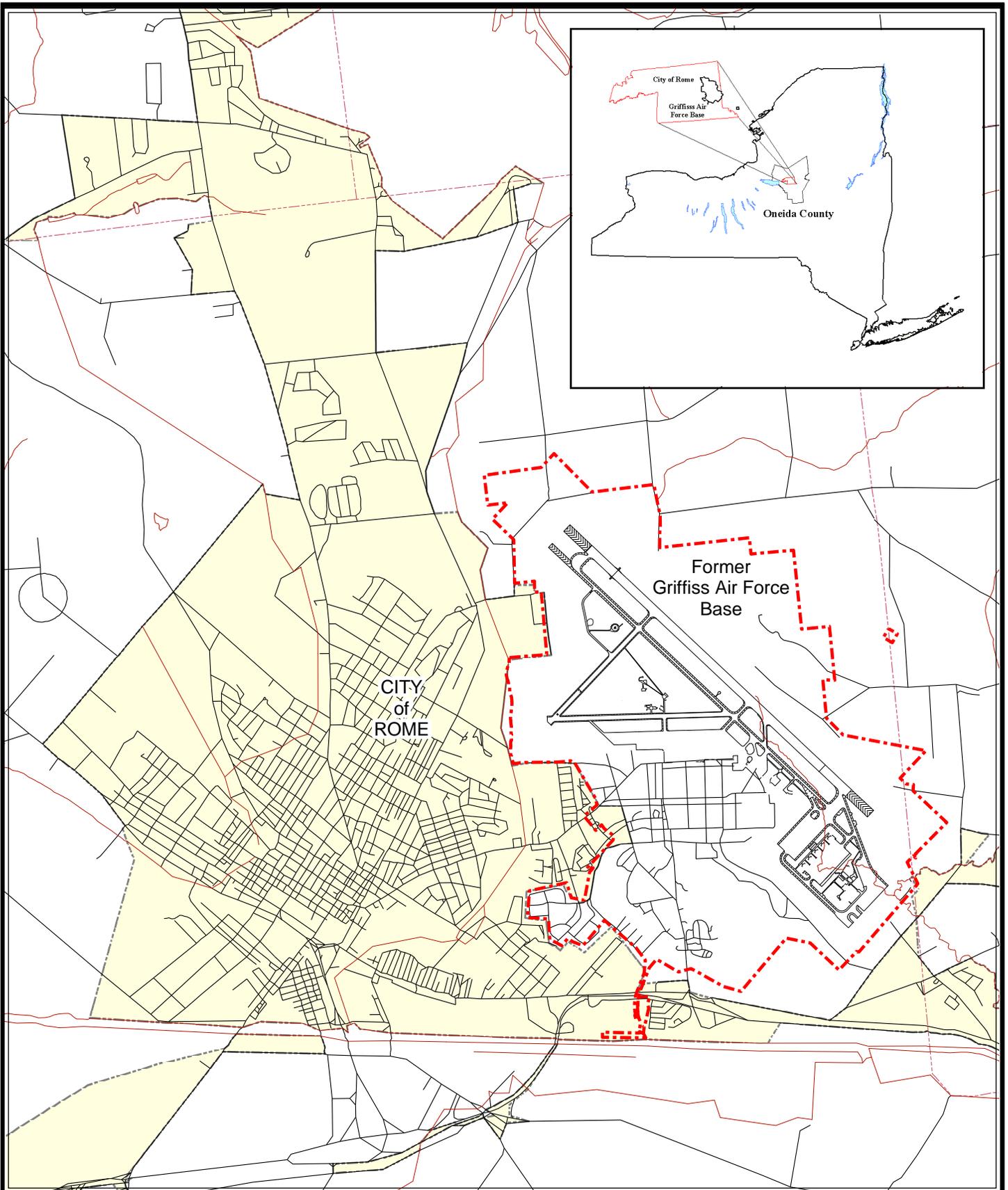
### **2.2 GEOLOGY**

Unconsolidated sediments at the former Griffiss AFB consist primarily of glacial till with minor quantities of clay and sand and significant quantities of silt and gravel. The thickness of these sediments range from 12 feet in the northeast portion to more than 130 feet in the southern portion of the former Base. The average thickness of the unconsolidated sediments is 25 to 50 feet in the central portion and 100 to 130 feet in the south and southwest portions of the former Base. The bedrock beneath the former AFB generally dips from the northeast to the southwest and consists of Utica Shale, a gray and black carbonaceous unit with a high/medium organic content (Remedial Investigation (RI), Law Engineering and Environmental Services, Inc. (LAW), December 1996).

### **2.3 HYDROGEOLOGY**

The shallow water table aquifer lies within the unconsolidated sediments, where depth to groundwater, during the December 1998 synoptic Base-wide water-level measurement of wells, ranged from just below the ground surface to approximately 57 feet below ground surface (bgs) in the southwest portion of the base and to 63 feet bgs in the northeast portion of the former Base (FPM, September 2000). Several surface water creeks act as discharge areas for shallow groundwater, and drainage culverts and sewers intercept surface water runoff.

A comprehensive description of regional and local geology, hydrogeology, lithology, and hydrology for the former Griffiss AFB was given in the RI (LAW, December 1996), and in the Supplemental Investigation (SI) prepared by Ecology and Environment, Inc. (E&E, July 1998). Detailed site descriptions and the hydrology for each Petroleum Source Removal Area are presented with each site-specific section.



**FIGURE 2-1**  
**Base Location Map**



**UNITED STATES AIR FORCE**  
**GRIFFISS AIR FORCE BASE**  
**ROME, NEW YORK**



## **2.4 CLIMATE**

The former Griffiss AFB experiences a continental climate characterized by warm, humid, moderately wet summers and cold winters with moderately heavy snowfalls. The mean annual precipitation is 45.6 inches, which includes the mean annual snowfall of 107 inches. The annual evapotranspiration rate is 23 inches. The average temperature during the winter season is 20 degrees Fahrenheit; temperatures during the spring, summer, and fall vary from 31 to 81 degrees Fahrenheit. The prevailing winds are from the southwest, with an average wind speed of 5 knots.

The former Griffiss AFB is located in a region prone to acid precipitation; the annual average pH of precipitation recorded for 1992 at the three closest stations ranged from 4.25 to 4.28. Fluctuations in pH have an inverse correlation to precipitation, such that lower pH levels correlate with higher amounts of precipitation (LAW, December 1996).

## **2.5 BIOLOGY**

The former Griffiss AFB, covering 3,552 acres of property within the Erie-Ontario ecozone of the Great Lakes Physiographic Province, has been heavily disturbed from an ecological perspective. Although there are a few undisturbed communities within the former Base's boundary, the 1993 Inventory of Rare Plant Species and Significant Natural Communities identified six significant habitats of special concern occurring on the former Base (New York Natural Heritage Program, January 1994). None of these habitats occur adjacent to the Petroleum Source Removal Areas described in this report.

## **2.6 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS IDENTIFICATION**

At the Petroleum SRA to be monitored under the LTM Program, the Applicable or Relevant and Appropriate Requirements (ARARs) and other criteria and guidelines to be considered include the NYSDEC Spill Technology and Remediation Series (STARS), Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels, January 1994, NYSDEC Interim Procedures for Inactivation of Petroleum-Impacted Sites, January 1997, and NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998.

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### **3 TANK FARMS 1 AND 3 SRA (IRP SITE SS-20, NYSDEC SPILL #9111733)**

#### **3.1 SITE LOCATION AND HISTORY**

The Tank Farms 1 and 3 SRA is located in the central portion of the former Griffiss AFB, as shown in Figure 1-1. The site is a grass-covered area that is located southeast of Building 112 and is bounded by Brooks Road to the south, Otis Street to the east, and Moody Street to the west. The SRA encompasses the former fuel storage facilities for the following products: aviation gasoline (AVGAS), jet propulsion fuel grade 4 (JP-4), automotive gasoline (MOGAS), diesel fuel, fuel oil, and deicing fluid. The Tank Farms 1 and 3 site layout is shown in Figure 3-1.

Tank Farm 1 is the former location of eight 25,000-gallon underground storage tanks (USTs). The USTs are numerically identified as UST 114-1 through UST 114-8. The tanks originally contained AVGAS, then were used for diesel fuel, MOGAS, and finally fuel oil. Other former facilities associated with Tank Farm 1 include one 50,000-gallon aboveground storage tank (AST) for deicing fluid (AST 6045), one underground 50,000-gallon deicing fluid tank (UST 5885), one pumphouse (Building 114), one pump pit, separator tanks, and one water separator pit. The pumphouse was connected to a railroad car unloading stand with three outlets used to off-load fuel from railroad cars into the tanks (Tetra Tech, September 1994; E&E, December 1997). Open NYSDEC Spill #9111733 is associated with former USTs 114-1 through 114-8.

Tank Farm 3 is the former location of four 25,000-gallon USTs (UST 147-1 through -4) that contained JP-4. Other former facilities associated with Tank Farm 3 include two pumphouses (Buildings 147 and 165), one pump pit, separator tanks, one water separator pit, and three aboveground bulk fuel storage tanks (ASTs 161, 162, and 163). The former bulk fuel ASTs originally contained JP-4 but were later used to store fuel oil. Former AST 161 was 840,000 gallons in capacity and former ASTs 162 and 163 were both 420,000 gallons in capacity. Each bulk fuel AST was surrounded by a soil berm.

#### **3.2 DESCRIPTION OF PREVIOUS SAMPLING AND INVESTIGATIONS**

In November 1981, Base Fuels verified that 2 to 3 gallons per day of JP-4 leaked from eight valves at Tank Farm 3 for an indefinite period (LAW, February 1995).

In the fall of 1982, investigative soil borings associated with the construction of a steam line were installed to the south of Brooks Road and former Tank Farm 1, where free product was found floating above the water table in the area.

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In October 1983, the Base Civil Engineering Department installed and sampled well TF3-CE3, shown in Figure 3-1. The well was found to contain free product. When monitoring well TF3-CE3 was sampled again during the summer of 1984, no free product was detected.

In the summer of 1984, Roy F. Weston, Inc. installed 33 temporary wells and eight permanent wells. The Weston report hypothesized that the source of the fuel in the groundwater was potentially contributed by two sources: (1) numerous small spills and leaks from the Tank Farms, and (2) from a former truck maintenance shed that was located north of Building 3, where base personnel informed Weston that waste fuels were discharged to the subsurface via a drywell (Weston, November 1985). Review of the 1994 Environmental Baseline Survey (EBS) did not confirm information on drywells or a truck maintenance shed north of Building 3, prior to 1985. The Expanded Site Investigation (ESI) of Area of Interest (AOI) Site 58/101 detected minor SVOCs in surficial soils north of Building 3; however, the groundwater was not impacted (Tetra Tech, September 1994).

In November 1985, all ASTs and USTs associated with Tank Farms 1 and 3 were removed, with the exception of the bulk fuel ASTs (AST 161, 162, and 163). While underground piping was being cut and capped at Tank Farm 1, a 4-inch pipe was found to be full of AVGAS. While a similar action was being performed at Tank Farm 3, the contractor discovered 3 inches of fuel on the floor of Building 147 (Tank Farm 3 pumphouse) and fuel in a header pipe. Industrial Tank and Oil Company subsequently removed the fuel (1,200 gallons). There is no indication in the administrative records that endpoint sampling was performed following the removal of the ASTs and USTs.

In December 1985, Barsons Construction Company removed 60,000 cubic yards (c.y.) of contaminated soil and replaced it with clean fill.

In 1988, the bulk fuel ASTs (AST 161, 162, and 163) and associated underground facilities were removed, along with any contaminated soils. The soil berms surrounding the bulk fuel ASTs were used to fill the excavated area previously occupied by the removed contaminated soil and underground facilities. Additional cover soil was placed on top of the former berm material to bring the excavated area to grade.

In 1993 and 1994, monitoring wells TF3MW-21, -25, -27 and TF3-CE3 were sampled as part of the quarterly sampling program. The analytical results indicated no VOC or SVOC exceedances of the New York State (NYS) Groundwater Standards. No VOC, SVOC, or metal data were found to exist for wells TF3MW-22, -23, -24, -26, and -28. Based on the October 1998 well/piezometer inventory (E&E, January 1999), and visual inspection, these additional wells do not exist at the present time.

Groundwater observation wells TF3TW-1 and -2 were placed as close as practical to boring locations TF3SB-16 and -17, respectively, to identify the presence of free product. No free

product was observed in either temporary well. However, the boring logs and field notes from TF3TW-1 indicated flame ionization detector (FID) readings as high as 1,000 parts per million (ppm) near the surface of the water table (14 ft bgs) and sheen on all split-spoon samples. The field notes for TF3TW-2 indicated a maximum FID reading of 100 ppm at an interval from 4 to 6 ft bgs (vadose zone) and a slight sheen on all split-spoon samples, except the interval from 0 to 2 ft bgs.

In 1999 and 2000, FPM completed a Supplemental Study to fill data gaps and fully delineate groundwater contamination at the site (FPM, September 2000). A total of 96 soil borings were installed with 72 groundwater samples collected and analyzed using United States Environmental Protection Agency (USEPA) methods 8021 for VOCs and 8270 for SVOCs. In addition, groundwater samples were collected from existing monitoring wells TF3MW-1, TF3-CE3, and TF3MW-21 and newly installed TF3MW-2. These locations are shown in Figure 3-1.

In general, groundwater sample analysis showed numerous exceedances downgradient of USTs 114-1 through -8 (NYSDEC open Spill #9111733) and USTs 147-1 through -4. Except for minor exceedances at TF3TW-43 and -55, groundwater samples immediately downgradient from former Building 165, bulk fuel storage ASTs 161, 163, and 6045, and UST 5885 showed no groundwater exceedances.

In November 2001, monitoring wells TF3MW-116, -117, -118, -119, -120, -121, -123, -124, -125, -126, -127, -128, -129, and -130 were installed and developed prior to sampling. A source removal action in Fall 2002, at the Tank Farms 1 and 3 site, removed residual soil contamination that was identified during the previous soil boring activities and not removed during the Barson's excavation in 1985. Approximately 12,800 c.y. of soil was excavated from locations within the former bermed area and vicinity including the former building 147 footprint at Tank Farms site. Removal of the residual soil contamination continued into the saturated zone where contamination was located and stopped any additional leaching of contamination to groundwater from the vadose zone (Parsons, December 2003).

In summary, separate petroleum plumes may have originated from three locations including, USTs 114-1 through -8 and USTs 147-1 through -4, as well as the former truck maintenance shed north of Building 3, possibly in the vicinity of TF3MW-123 or -125. The dissolved groundwater plume appears to be well defined and to be naturally attenuating. Based on observations at the site and based on the size and stability of the dissolved plume, residual free product has not been identified (FPM, February 2004).

### **3.3 LTM PLAN**

Table 3-1 summarizes the original LTM sampling and analysis plan. The objectives of the Tank Farm 1 and 3 LTM program include the following:

- Monitor the groundwater to track plume migration.

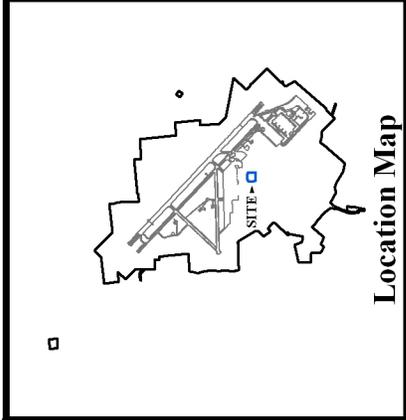
- Monitor natural attenuation parameters including pH, temperature, alkalinity, redox potential, nitrate, ferrous iron, sulfate, sulfide and dissolved oxygen to assess the potential for natural attenuation of the petroleum plume.

**Table 3-1**  
**Tank Farms 1 and 3 Quarterly Sampling Analysis Summary**

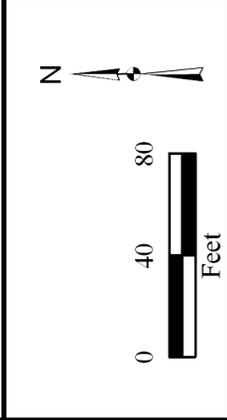
Site/ Sampling Locations	Screen Interval (ft. MSL)	Sampling Rationale	Target Analytes/ USEPA Method Numbers	Sampling Frequency
TF3-CE3	442-457	Downgradient, within plume	VOCs 8260 AFCEE QAPP	Quarterly
TF3MW-2	450-460	Downgradient, within plume	3.1 List	
TF3MW-21	445-465	Downgradient within plume		
TF3MW-25	444-464	Crossgradient	SVOCs 8270	
TF3MW-116	449-459	Downgradient within plume		
TF3MW-117	448-458	Crossgradient from plume	* Natural attenuation	
TF3MW-123	449-459	Downgradient within plume	parameters pH, temperature,	
TF3MW-124	449-459	Crossgradient from plume	redox potential, ferrous	
TF3MW-125	449-459	Downgradient	iron, and dissolved oxygen	
TF3MW-126	449-459	Downgradient within plume	will be measured in the	
TF3MW-127	450-460	Upgradient within plume	field.	
TF3MW-128	451-461	Upgradient within plume		
TF3MW-129	451-461	Upgradient from plume	Alkalinity, nitrate, sulfate,	
TF3MW-130	451-461	Upgradient within plume	sulfide	

### 3.4 RESULTS

Seventeen sampling rounds were conducted at the Tank Farm 1 and 3 SRA site in: December 2001; February, June, September and December 2002; March, June, September and December 2003, and March, June, September, and December 2004, March 2005, and March, June and September 2006. Sampling locations are identified on Figure 3-2. The detected groundwater analytical results are shown in Table 3-2, and total VOC detections and groundwater elevations are illustrated in Figures 3-3 and 3-4. Groundwater flow is to the south-southeast. VOC- and SVOC-contaminated groundwater plumes are shown on Figure 3-2. Two plumes from two source areas have stabilized and are attenuating. The plume located near monitoring wells TF3MW-127, -128, and -133 is associated with former UST 147-1 through 4, while the second plume is located in the vicinity of TF3MW-21, -116, -123 and decommissioned well TF3MW-125, where the source was most likely former USTs 114-1 through -8 and the former truck maintenance shed that was located north of Building 3 (possibly near TF3MW-123 and -125).



- Key Features**
- ◻ Decommissioned Monitoring Well
  - ⊕ Existing Monitoring Well
  - LTM Well
  - ⊙ LTM Well with ORC Socks Installed
  - ▨ September 2006 Plume Extent
- ORC Injection Location**
- ✕ Dec 2005
  - ▲ Aug 2006



UNITED STATES AIR FORCE  
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ROME, NEW YORK

**Figure 3-2**  
**Tank Farms 1 and 3**  
**SRA Sample Location Map**

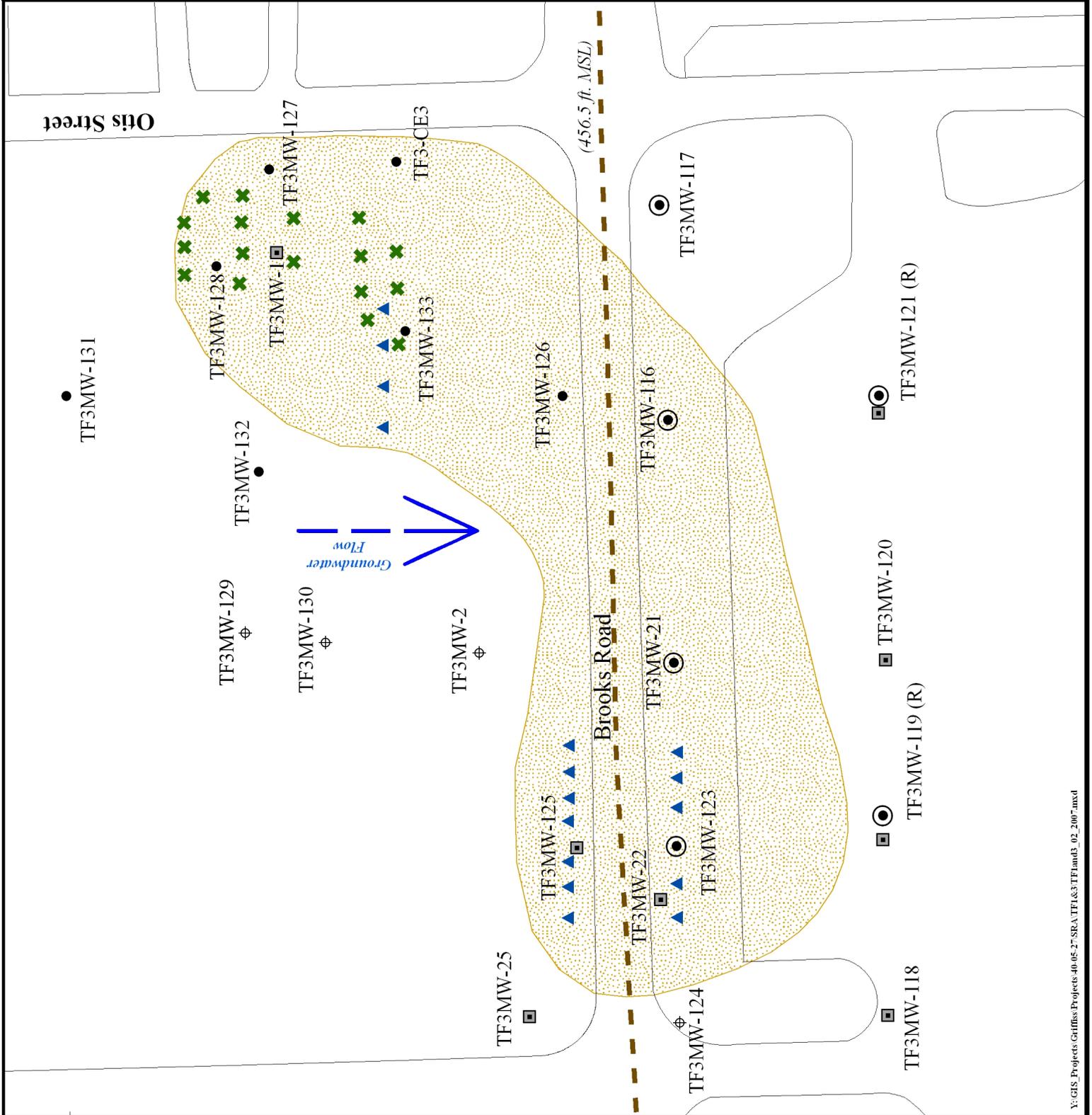


Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup> (µg/L)	TF3-CE3																
		TF3CE313AA	TF3CE312BB	TF3CE313CA	TF3CE312DA	TF3CE312EA	TF3CE313FA	TF3CE313GB	TF3CE313HB	TF3CE312IB	TF3CE313JB	TF3CE313KB	TF3CE313LB	TF3CE313MA	TF3CE312NA	TF3CE313OA	TF3CE313PA	
Sample ID	Date of Collection	2/19/02	6/19/02	9/13/02	12/12/02	3/12/03	6/20/03	9/12/03	12/12/2003	3/17/2004	6/17/2004	9/16/2004	1/3/2005	3/29/2005	3/28/2006	6/20/2006	9/26/2006	
Sample Depth (ft)	(µg/L)	13	12	13	12	12	13	13	13	12	13	13	13	12	13	13	13	
<b>VOCs (µg/L)</b>																		
1,1,1-trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5	1.1	1.1	U	U	U	U	U	U	2.7	0.85 F	8.6	0.37 F	1.4	0.46 F	1.1	1.31	
sec-butylbenzene	5	4.4	4.8	8.1	3.4 ♦	1.9	1.6	1.7	6.0	6.0	5.0	5.8	2.9	4.7	2.8	3.7	4.06	
t-butylbenzene	5	0.85	1.1	1.2	0.83 ♦	0.39 F	U	0.34 F	0.79 F	0.71 F	0.69 F	0.78 F	0.46 F	0.7 F	0.50 F	0.59 F	0.85	
chloroethane	5	U	U	0.21 F	U	U	U	U	U	U	U	U	U	0.22 F	U	0.29 F	U	
chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
chloromethane	5	U	U	0.24 F	U	U	U	U	U	U	U	U	U	U	U	U	U	
ethylbenzene	5	0.21 F	U	0.37 F	U	U	U	U	U	0.28 F	U	0.22 F	U	U	U	U	U	
isopropylbenzene	5	6.9	7.6	13	5.1 ♦	2.1	3.1	3.6	9.8	11	7.8	8.7	3.4	7.3	3.2	5.2	6.4	
methyl ethyl ketone	5	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U	U	U	U	
naphthalene	10	U	1.3	5.2	2 J	0.72 F	0.78 F	0.81 F	2.6	3.8	2.0	2.2	0.71 F	2.2	0.81 F	1.6 B	2.33	
n-propylbenzene	5	8.1	5.8	11	4.8 ♦	2	2.3	2.1	10	13	8.4	U	3.4	8.6	3.4	5.8	6.68	
trichloroethylene	5	1.7	0.98	1	2	2	1.4	3	1.6	1.3	1.1	1.2	1.7	0.95 F	1.7	1	1.13	
m,p-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Total VOCs		22.16	21.58	40.32	18.13	9.11	9.18	11.55	30.79	38.79	25.84	27.5	12.94	26.07	12.87	19.28	22.76	
<b>SVOCs (µg/L)</b>																		
2-methylnaphthalene	--	6 F	U	U	U	U	2 F	4 F	3 F	U	N/S							
di-n-butyl phthalate	50	4 F	U	U	U	U	U	U	U	U	N/S							
<b>Wet Chemistry Data (mg/L)</b>																		
nitrate	10,000	0.36	0.087	0.32	N/A	0.38	0.71	0.60	0.56	0.63	0.46	0.52	0.17	0.4	N/S	N/S	N/S	
sulfate	250,000	17.3	11.4 B	17.4	6.4	10.7 B	15	20.3	11.6	14.2	N/S							
sulfide		U	U	U	U	U	U	U	U	0.077 F	N/S							
total alkalinity	--	242	217	342	174	189	202	211	412	179 B	243	197	210	230	N/S	192	250	
<b>Field Parameters</b>																		
dissolved iron (mg/L)		3.5	N/A	5.5	2.8	2.9	2.8	2.5	3.4	2.4	3	3	3.4	2.8	3	4	3.6	
pH		7.11	7.88	6.68	7.12	7.09	7.29	7.32	6.61	7.32	7.22	7.74	7.93	7.01	6.84	7.46	7.29	
specific conductance (µS/cm)		469	550	658	534	497	342	515	589	66	66	67	62	64	96.3	0.11	78.7	
temperature (degrees C)		9.8	10.3	12.8	11.8	9.33	9.76	12.35	11.42	8.68	9.7	12	10.7	9.1	9.41	10.8	12.8	
dissolved oxygen (mg/L)		4.23	1.05	1.62	2.78	4.62	3.12	6	2.95	3.3	3.5	4.03	5.6	6.41	2.49	6.05	4.77	
oxidation reduction potential (mV)		-103	-127	-3	-114	-27	-122	-141	-110	-79	-108	-107	-88	50	-107	29	-26	

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 -- Indicates no NYS GA Groundwater Standard  
 ♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.  
 UJ - The analyte was not detected above the RL. However the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-2								
		TF3M0214AA	TF3M0214BB	TF3M0219CA	TF3M0214DA	TF3M0214EA	TF3M0214FA	TF3M0215GB	TF3M0214HB	TF3M0214IB
Sample ID		2/26/02	6/19/02	9/13/02	12/12/02	3/12/03	6/23/03	9/12/03	12/12/2003	3/18/2004
Date of Collection										
Sample Depth (ft)	(µg/L)	14	14	19	14	14	14	15	14	14
<b>VOCs (µg/L)</b>										
1,1,1-trichloroethane	5	U	0.68	0.31 F	0.41 F	0.54	0.35 F	U	U	U
1,2,4-trimethylbenzene	5	0.71	U	U	0.24 F	U	0.24 F	0.39 F	U	U
acetone	50	U	U	U	U	U	U	U	4.1 F	U
chloroform	7	1.8	2	0.77	1.3	2.1	0.92	0.83	1.1 B	1
ethylbenzene	5	0.54	0.3 F	0.24 F	0.21 F	U	0.3 F	U	U	U
isopropylbenzene	5	0.66	U	0.58	0.38 F	U	0.29 F	0.29 F	0.43 F	U
methyl ethyl ketone	5	U	U	U	U	1.6 UJ	U	U	U	U
n-propylbenzene	5	0.39 F	U	0.31 F	0.23 F	U	0.23 F	U	U	U
trichloroethylene	5	0.91	1	0.51	0.62	0.95	0.52 F	0.75 F	0.9 F	0.68 F
m,p-xylene	5	0.45 F	U	U	U	U	U	U	U	U
Total VOCs		5.46	3.98	2.72	3.39	3.59	2.85	0.83	5.43	1.68
<b>SVOCs (µg/L)</b>										
Total SVOCs		0	0	0	0	0	0	0	0	0
<b>Wet Chemistry Data (mg/L)</b>										
nitrate	10,000	1.3	1.1	1.5	N/A	1.3	0.8	0.94	1	1.3
sulfate	250,000	27.2	17 B	13.1	9.1	17.6 B	16.5	15.7	15.3	18.1
sulfide		U	U	U	U	U	U	U	U	U
total alkalinity	--	144	120	148	87.2	132	148	158	222	218
<b>Field Parameters</b>										
dissolved iron (mg/L)		0.3	N/A	0.8	0.8	0	0	0	0.4	0
pH		7.35	7.58	7.26	7.17	7.49	7.26	7.42	6.44	7.4
specific conductance (µS/cm)		326	360	544	469	277	287	426	459	48
temperature (degrees C)		10.3	10.4	12.7	12.5	9.96	10.49	12.13	12.44	9.41
dissolved oxygen (mg/L)		5.65	3.92	3.79	6.19	6.8	5.56	6.26	4.97	6.7
oxidation reduction potential (mV)		-47	-19	-19	-35	226	-11	-73	78	52

Well was not sampled after March 2004

Notes:

1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000

-- Indicates no NYS GA Groundwater Standard

♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.

B - The analyte was also detected in a blank.

F - An analyte was positively identified but the associated numerical value is below the reporting limit

N/A - Analyte was not analyzed during sampling

R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.

U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

UJ - The analyte was not detected above the RL. However the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards (µg/L)	TF3MW-21															
		TF3M2114AA	TF3M2114BB	TF3M2114CA	TF3M2114DA	TF3M2114EA	TF3M2114FA	TF3M2114GB	TF3M2114HB	TF3M2114IB	TF3M2114JB	TF3M2114KB	TF3M2114LB	TF3M2114MA	TF3M2114NA	TF3M2114OA	TF3M2114PA
Date of Collection		2/27/02	6/19/02	9/13/02	12/12/2002	3/12/2003	6/23/2003	9/11/2003	12/12/2003	3/18/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/26/2006
Sample Depth (ft)		14	14	15	13	14	14	14	14	14	14	14	14	14	14	14	14
<b>VOCs (mg/L)</b>																	
1,1-dichloroethane	5	0.33 F	0.25 F	U	0.23 F	0.24 F	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-tetrachloroethane	5	U	1.9	U	U	0.16 UJ	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromo-3-chloropropane	0.04	U	U	2.1 J *	U	0.25 UJ	U	U	U	U	U	U	U	U	U	U	U
1,2,3-trichloropropane	0.04	U	1.1	U	U	0.16 UJ	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	3.3	2.4 *	11	0.41 F	2.2 J *	0.9 F	9.6	1.8	U	1.9 F	U	U	U	0.56 F	U	1.04 *
1,3,5-trimethylbenzene	5	1.3	U	0.4 F	U	0.5 J *	U	2.6	U	U	U	U	U	U	U	U	U
benzene	1	0.75	0.55	0.56 *	U	0.15 UJ	U	U	U	U	U	U	U	U	U	U	0.23
n - butylbenzene	5	5.1	4.4	6.9 J *	4.3	0.22 UJ	U	8.1	U	3.8 F	3 F	2.5 F	1.8 F	2.2 F	2	4 *	3.2 *
sec-butylbenzene	5	6.4	6.4	9.8	4.8	4.7 J *	U	7.2	6.4	2.9 F	5.4	5.3	3.8 F	3.3 F	4.6	5.3 J	5.1
t-butylbenzene	5	1.8	1.6	2.3	1.2	1.3 J *	1.2 J	2	U	0.69 F	1.5 F	U	U	U	1.2	1.4 J	1.84 *
chloroethane	5	U	U	0.82 J *	0.55	0.16 UJ	0.44 F	U	U	U	U	U	U	U	U	1.3 J	U
chloromethane	5	U	U	0.85 *	0.33 F	0.26 J *	0.28 F	U	U	U	U	U	U	U	U	1.1	U
ethylbenzene	5	U	0.28 F	U	U	0.18 UJ	0.71 F	3.5	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	1.4 F	U	U	U	U	U	U
isopropylbenzene	5	34	28	50	36	25 J *	32 J	71	63	23	30	41	29	24	48 *	54 *	64
p-isopropyltoluene	5	8.9	7	10 *	4	4.4 J *	3.5 J	7.6	6.3	2.4 F	4.4 F	4.1 F	4 F	3.8 F	3.8	3.2 F *	4.1 *
methylene chloride	5	U	U	U	U	U	U	U	U	2.6 F	U	U	U	U	U	U	U
naphthalene	10	U	U	1.6 J *	0.78 J	0.21 UJ	0.7 F	2.2	2	U	1.1 F	1.2 F	1.2 F	1.6 F	2	1.8 J	3.26 *
n-propylbenzene	5	7.8	6.7	10	6.9	5.2 J *	5.2 J	12	11	4.2	6.7	8.8	6.7	5.4	8.4	8.1 *	10.8
tetrachloroethylene	5	U	U	U	U	0.18 UJ	U	U	U	U	U	U	U	U	U	U	U
trichloroethylene	5	U	U	U	U	0.17 UJ	U	U	U	U	U	U	U	U	U	U	U
toluene	5	0.31 F	4.5	0.48 F	U	0.16 UJ	U	U	U	U	U	2 F	U	U	U	U	0.24
m,p-xylene	5	4.4	4.5	8.2	1.2	1.9 J *	2.3 J	18	5.2	2 F	3.7 F	2.4 F	2.8 F	3.2 F	4.2	1.1 F	1.18
Total VOCs		74.39	65.08	108.11	60.7	40.5	42.03	143.8	95.7	40.9	58.29	68.8	49.3	74.76	81.2	94.99	
<b>SVOCs (µg/L)</b>																	
2-methylnaphthalene	--	5 F	U	6	U	U	3 F	4 F	4 F	U	N/S						
acenaphthene	--	U	U	U	U	U	U	2 F	U	N/S							
benzoic acid	--	U	U	U	U	13 UJ	17 R	18 R	U	U	N/S						
phenanthrene	--	U	U	U	U	U	U	2 F	U	N/S							
di-n-butyl phthalate	50	3 F	U	3	U	U	U	U	U	U	N/S						
2,4,5-trichlorophenol	1*	U	3 M	U	U	U	U	U	U	N/S							
2,4,6-trichlorophenol	1*	U	4 M	U	U	U	U	U	U	N/S							
2,4-dichlorophenol	1*	U	5 M	U	U	U	U	U	U	N/S							
2,4-dinitrophenol	1*	U	13 M	U	U	11 UJ	U	U	U	N/S							
4,6-dinitro-2-methylphenol	1*	U	18 M	U	U	U	U	U	U	N/S							
4-nitrophenol	1*	U	4 M	U	U	U	U	U	U	N/S							
Total SVOCs		8 F	0	9	0	0	3 F	4 F	8 F	0	N/S	N/S	N/S	N/S	0	0	0
<b>Wet Chemistry Data (mg/L)</b>																	
nitrate	10000	U	U	U	U	U	U	U	U	U	U	U	U	U	N/S	N/S	N/S
sulfate	250000	4	9	3.7 B	4.5	10.5 B *	34.9	8.4	6.9	10.9	N/S						
sulfide		U	U	U	U	U	U	U	U	U	N/S						
total alkalinity	--	233	185	210 *	158	178	182	221	456	215	210	187	174	166	N/S	147	240
<b>Field Parameters</b>																	
dissolved iron (mg/L)		3.8	N/A	3.2	2	1.9	1.9	1.6	2.4	1.6	2.4	3.2	3.6	3.6	3.8	3.7	2.8
pH		7.26	8.19	6.92	7.09	9.95	7.36	7.43	8.99	7.41	6.92	6.98	6.73	7.83	7.58	7.26	7.27
specific conductance (µS/cm)		591	665	940	524	443	749	898	979	62	60	60	68	92.8	114	89.2	0.12
temperature (degrees C)		10.5	10.5	12.8	12.3	10.1	10.4	12.05	12.79	10.11	10.6	13.2	12.5	10.7	11.1	11.4	14.1
dissolved oxygen (mg/L)		3.26	1.08	1.54	6.99	4.24	4.28	4.35	8.13	4.1	2.4	5.2	8.19	7.06	3.66	7.68	3.34
oxidation reduction potential (mV)		-130	-139	108	-101	-121	-156	-149	-144	-90	-95	-107	-133	-90	-27	-97	-116

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 \* - Sum of total phenolic compounds may not exceed 1 ppm.  
 • - Indicates higher value detected in the sample duplicate or during the dilution phase.  
 -- Indicates no NYS GA Groundwater Standard  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 M - Matrix effect present  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

**Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)**

Monitoring Well ID Sample ID	NYSDEC GW Standards <sup>1</sup> (µg/L)	TF3MW-25						
		TF3M2513AA	TF3M2513BB	TF3M2514CA	TF3M2512DA	TF3M2513EA	TF3M2513FA	TF3M2513GB
Date of Collection		2/26/02	6/19/02	9/13/02	12/12/2002	3/12/2003	6/20/2003	9/11/2003
Sample Depth (ft)		13	13	14	12	13	13	14
<b>VOCs (µg/L)</b>								
acetone	50	U	U	U	U	U	U	2.4 F
t-butylbenzene	5	1.8	U	U	U	U	U	U
bromomethane	5	U	U	U	U	0.19 UJ	U	U
chloroform	7	1.2	1.2	1.1	0.97	1.1	0.61	0.63
ethylbenzene	5	0.23 F	U	U	U	U	U	U
tetrachloroethylene	5	0.29 F	0.27 F	0.33 F	0.28 F	0.31 F	U	0.29 F
trichloroethylene	5	0.4 F	0.35 F	0.38 F	0.38 F	0.35 F	U	0.31 F
toluene	5	U	U	U	U	U	U	U
m,p-xylene	5	U	U	U	U	U	U	U
Total VOCs		3	1.2	1.1	0.97	1.1	0.61	3.94
<b>SVOCs (µg/L)</b>								
benzoic acid	--	U	U	U	U	13 UJ	17 R	18 R
isophorone	50	U	U	U	U	U	1 R	U
2,4-dinitrophenol	1*	U	U	U	U	11 UJ	U	U
Total SVOCs		0	0	0	0	0	0	0
<b>Wet Chemistry Data (mg/L)</b>								
nitrate	10000	1	0.83	0.85	N/A	1.5	0.92	0.7
sulfate	250000	27.9	17.9 B	178 B	7.7	16.1 B	17.9	17.4
sulfide		U	U	U	U	U	U	U
total alkalinity	--	160	122	148	106	131	140	139
<b>Field Parameters</b>								
Dissolved Iron (mg/L)		0.5	N/A	0.6	0.8	0.1	1.8	N/S
pH		7.38	7.94	7.1	7.1	7.06	7.28	N/S
Specific Conductance (µS/cm)		483	573	876	506	385	503	N/S
Temperature (degrees C)		10.3	10.4	13.2	12.5	10.14	10.15	N/S
Dissolved Oxygen (mg/L)		4.35	2.76	3.12	3.89	9.07	4.45	N/S
Oxidation Reduction Potential (mV)		-77	-101	-22	-88	235	-108	N/S

Decommissioned well not sampled after September 2003

Notes:

1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000

\* - Sum of total phenolic compounds may not exceed 1 ppm.

◆ - Indicates higher value detected in the sample duplicate or during the dilution phase.

-- Indicates no NYS GA Groundwater Standard

B - The analyte was also detected in a blank.

F - Analyte was positively identified but the associated numerical value is below the reporting limit

M - Matrix effect present

N/A - Analyte was not analyzed during sampling

R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.

U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-116																	
		TF3M11613AA	TF3M11613AA	TF3M11613BB	TF3M11614CA	TF3M11613DA	TF3M11613EA	TF3M11613FA	TF3M11614GB	TF3M11613HB	TF3M11613IB	TF3M11613JB	TF3M11613KB	TF3M11613LB	TF3M11613MA	TF3M11613NA	TF3M11614OA	TF3M11614PA	
Date of Collection		12/13/01	2/27/02	6/18/02	9/13/02	12/19/02	3/12/03	6/23/03	9/12/2003	12/12/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/26/2006	
Sample Depth (ft)	(µg/L)	13	13	13	14	13	13	13	13	13	13	13	16	13	13	13	14	14	
<b>VOCs (ug/L)</b>																			
1,2,4-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	0.26 F	UM	U	U	U	U	U	U
1,2-dichloropropane	1	U	0.82	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5	U	U	U	0.65	0.38 F	0.22 F	U	U	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5	10	8.1 ♦	7.3	10	10	4.1	7.9	3.1 ♦	3.5 ♦	4.9 ♦	6.5	13 M	14	8 M	8.7	4.5	4.03	
t-butylbenzene	5	2.1	1.5 ♦	2.2	2.1	2.1	1.2	1.7 J	0.86 ♦	1.2 ♦	1.8 ♦	1.9	2.8 M	2.3	1.8 J	1.6	1.5	1.54	
cis-1,2-dichloroethylene	5	U	0.26 F	U	U	U	U	U	U	0.24 F	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	0.36 F	U	0.54 F	U	
ethylbenzene	5	U	U	U	U	U	U	U	U	U	U	0.24 F	U	0.21 F	U	U	U	U	U
isopropylbenzene	5	15	7.9 ♦	12	6.3	14	4.9	2.8 ♦	5.8 ♦	9.4 ♦	14	22	18	9.4 M	9.9	5.8	7.44		
n-butylbenzene	5	3.8	3.6	4.4	7.8	3.8	U	3.1 J	2 ♦	1.5 ♦	1.8 ♦	1.5	3.6 M	3.8	3.3 J	4.2	2	1.8	
methyl ethyl ketone	5	U	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5	8.3	10 ♦	11	9.5	6.8	4.6	9.4	2.7 ♦	3.7 ♦	6 ♦	6.8	16	18	9.3 M	4.4	4.4	4.18	
toluene	5	U	U	U	0.22 F	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	0.21 F	U	U	U	U
Total VOCs		39.2	32.18	36.9	36.57	37.08	15.02	31.1	11.46	15.94	23.9	31.2	57.6	56.31	32.37	33.2	18.79	18.99	
<b>SVOCs (µg/L)</b>																			
2-methylnaphthalene	--	8	10	11	4	11	10	3	10	7 F ♦	6 F ♦	N/S	N/S						
2,4-dichlorophenol	1*	U	U	5 M	U	U	U	U	U	U	U	N/S	N/S						
2,4-dinitrophenol	1*	U	U	13 M	U	U	11 UJ	U	U	U	U	N/S	N/S						
2,4,5-trichlorophenol	1*	U	U	3 M	U	U	U	U	U	U	U	N/S	N/S						
4,6-dinitro-2-methylphenol	1*	U	U	18 M	U	U	U	U	U	U	U	N/S	N/S						
4-nitrophenol	1*	U	U	4 M	U	U	U	U	U	U	U	N/S	N/S						
2,4,6-trichlorophenol	1*	U	U	4 M	U	U	U	U	U	U	U	N/S	N/S						
naphthalene	10	U	U	U	U	U	U	4	U	U	U	N/S	N/S						
phenanthrene	50	U	U	U	U	U	U	2	U	U	U	N/S	N/S						
pyrene	50	U	U	U	U	U	U	2	U	U	U	N/S	N/S						
di-n-octyl phthalate	50	U	U	3 F	U	U	U	U	U	U	U	N/S	N/S						
Total SVOCs		8	10	14	4	11	10	11	10	7	6	N/S	N/S						
<b>Wet Chemistry Data (mg/L)</b>																			
nitrate	10000	N/A	U	U	U	U	0.056	U	U	U	0.1 ♦	0.052	U	0.31	U	N/S	N/S	N/S	N/S
sulfate	250000	N/A	U	11.1	2.9 B	7.9	11.4 B	U	13.2	21.6 ♦	10.1	N/S	N/S						
sulfide	--	N/A	U	U	U	U	U	U	U	0.091 F ♦	N/S	N/S							
total alkalinity	--	N/A	232 ♦	215	252	181	260	252	227 ♦	487	161 B ♦	222	191	224 ♦	201	N/S	178	250	
<b>Field Parameters</b>																			
dissolved iron (mg/L)		N/A	6	N/A	6.8	3.5	2.4	5.6	2.8	N/A	4.4	5	5	4.2	1.8	3.2	4.5	3.2	
pH		7.5	7.05	7.96	6.91	6.92	9.9	7.09	6.85	8.78	6.74	6.8	6.65	6.49	8	7.4	7.02	7.3	
specific conductance (µS/cm)		1020	437	668	821	674	471	519	582	767	66	83	79	63	90	86.7	0.169	140	
temperature (degrees C)		12.91	10.5	10.7	13.1	12.5	10.3	10.78	12.22	12.9	9.38	10.4	13.1	12.2	10.2	10.6	11	14.1	
dissolved oxygen (mg/L)		5.06	3.55	0.62	1.16	5.55	3.71	4.46	5.24	4.36	3.5	3.9	2.65	7.29	6.78	3.19	6.82	0.7	
oxidation reduction potential (mV)		-124	-117	-135	-16	-105	-120	-142	-136	-135	-63	-99	-106	-131	-113	-72	-92	-122	

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 ♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.  
 \* - Sum of total phenolic compounds may not exceed 1 ppm.  
 -- Indicates no NYS GA Groundwater Standard  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 M - Matrix effect present  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-117																	
		TF3M11713AA	TF3M11713AAI	TF3M11713BB	TF3M11713CA	TF3M11712DA	TF3M11713EA	TF3M11713FA	TF3M11713GB	TF3M11713HB	TF3M11713IB	TF3M11713JB	TF3M11713KB	TF3M11713LB	TF3M11713MA	TF3M11713NA	TF3M11713OA	TF3M11713PA	
Date of Collection	(µg/L)	12/13/01	2/27/02	6/18/02	9/13/02	12/12/2002	3/12/03	6/20/03	9/12/2003	12/12/2003	3/18/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/26/2006	
Sample Depth (ft)	(µg/L)	13	13	13	13	12	13	13	13	13	13	13	13	13	13	13	13	14	
<b>VOCs (µg/L)</b>																			
1,1,2-trichloroethane	1	U	U	0.42 M	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-dibromo-3-chloropropane	5	U	U	U	U	U	0.25 UJ	U	U	U	U	U	U	U	U	U	U	U	U
benzene	1	0.29 F	0.35 F	U	0.28 F	0.31 F	U	0.28	0.24 F	U	0.26 F	U	U	U	U	U	U	0.12	U
bromomethane	5	U	U	U	U	U	0.19 UJ	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	0.38 F	U	0.41 F	U	U
chloromethane	5	U	U	U	U	0.21 F	U	U	U	U	U	U	U	U	0.49 F	U	0.4 F	U	U
sec-butylbenzene	5	1.9	1.6	1.4	2.8	1.9	U	6.1	2.4	5.6	2.1	4.8	6.4	U	U	0.95 F	0.86 F	0.55	U
t-butylbenzene	5	1	2.5	2.6	2	2.1	2.2	2	2.7	1.9	2.8	2.9	2.8	U	2	2.2	1.8	1.36	U
cis-1,2-dichloroethylene	5	0.4 F	0.29 F	U	U	U	0.36 F	0.22 F	U	0.48 F	0.33 F	U	U	U	U	U	0.34 F	0.2	U
isopropylbenzene	5	2	0.52	1.1	4.7	1.1	0.8	7.7	2.9	6.1	2.9	6.4	12	5.9	3.9	1.1	0.73 F	0.15	U
p-isopropyltoluene	5	1.8	4.5	U	U	U	3.8	U	5.5	U	5.2	6	5.5	U	U	U	U	U	U
n-butylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	0.48 F	U	U	U	U	U
n-propylbenzene	5	0.32 F	U	U	0.52	U	U	0.83 F	0.37 F	2.5	0.39 F	2.5	5.2	3.7	0.66 F	U	U	U	U
Total VOCs		7.71	9.76	5.1	10.3	5.62	7.16	17.13	14.11	16.58	13.98	22.6	31.9	10.08	7.43	4.25	4.95	2.38	U
<b>SVOCs (µg/L)</b>																			
2,4-dichlorophenol	1*	U	U	4 M	U	U	U	U	U	U	U	N/S	N/S						
2,4-dinitrophenol	1*	U	U	12 M	U	U	11UJ	U	U	U	U	N/S	N/S						
2,4,5-trichlorophenol	1*	U	U	3 M	U	U	U	U	U	U	U	N/S	N/S						
4,6-dinitro-2-methylphenol	1*	U	U	16 M	U	U	U	U	U	U	U	N/S	N/S						
4-nitrophenol	1*	U	U	3 M	U	U	U	U	U	U	U	N/S	N/S						
2,4,6-trichlorophenol	1*	U	U	4 M	U	U	U	U	U	U	U	N/S	N/S						
benzoic acid		U	U	U	U	U	13 UJ	17 R	7 R	U	U	N/S	N/S						
<b>Wet Chemistry Data (mg/L)</b>																			
nitrate	10000	N/A	0.064	U	U	U	U	U	0.061	0.11	0.069	2.5	0.67	0.29	N/S	N/S	N/S	N/S	N/S
sulfate	250000	N/A	U	7.7	6.2 B	3.2	5.8 B	83.4	U	6.3	1.3	N/S	N/S						
sulfide		N/A	U	U	U	U	U	U	U	U	U	N/S	N/S						
total alkalinity	--	N/A	298	274	312	206	251	264	307	445	336	316	269	244	237	N/S	224	280	280
<b>Field Parameters</b>																			
dissolved iron (mg/L)		N/A	6	N/A	6.2	5.6	4.6	4.9	4	3.3	4.2	4.4	3.6	3.2	3.5	3	4.2	4	4
pH		7.57	6.87	7.82	6.92	6.84	9.58	6.93	6.98	8.63	6.82	6.64	6.78	6.45	7.87	7.41	7.06	7.14	7.14
specific conductance (µS/cm)		1340	1190	1840	1620	1330	158	209	180	179	13	95	82	80	98	133	14	16	16
temperature (degrees C)		13.71	10	11	14.8	13.4	9.5	10.72	14.03	13.88	8.81	10.7	15	12	8.8	9.5	11.7	15.7	15.7
dissolved oxygen (mg/L)		4.31	4.19	6.93	1.39	3.55	5.35	4.13	5.53	6.71	4.9	2.5	4.42	9.22	5.46	4.78	7.47	0.51	0.51
oxidation reduction potential (mV)		-93	-98	-123	88	-102	-102	-119	-141	-112	-68	-53	-97	-122	-94	-10	-85	-113	-113

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 -- Indicates no NYS GA Groundwater Standard  
 \* - Sum of total phenolic compounds may not exceed 1 ppm.  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 M - Matrix effect present  
 R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.  
 UJ - The analyte was not detected above the RL. However the quantitation is an approximation.



Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-123																	
		TF3M12313AA	TF3M12313AA	TF3M12313BB	TF3M12313CA	TF3M12313DA	TF3M12313EA	TF3M12313FA	TF3M12313GB	TF3M12313HB	TF3M12313IB	TF3MW12313JH	TF3M12313KB	TF3M12313LB	TF3M12313MA	TF3M12313NB	TF3M12314OA	TF3M12314PA	
Date of Collection		12/13/01	2/26/02	6/19/02	9/13/02	12/12/02	3/12/03	6/23/03	9/12/2003	12/12/2003	3/18/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/26/2006	
Sample Depth (ft)	(µg/L)	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	14	14	
<b>VOCs (µg/L)</b>																			
1,2,3-trichlorobenzene	5	U	U	U	0.9 M	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	350 *	88 *	46 *	78 M *	28	31 *	60	72	37	54	45	66	28	19	8.1	5.5 *	22.5	
1,1,1,2-trichloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	26 *	10	6.1 *	12	4	4.1	8.9	9.9	4.9	7.1	7	10	4.4	2.7 F	1.5 F	0.88 F	3.88	
1,2-dibromo-3-chloropropane	0.04	5.6	U	1.4 *	U	5.1 UJ	0.5 UJ	U	U	U	U	U	U	U	U	U	U	U	U
1,1-dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.37 F	U
benzene	1	0.38 F	0.32 F	U	U	0.25 F	U	U	U	U	U	U	U	U	U	U	U	U	U
bromomethane	5	U	U	U	U	U	0.38 UJ	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	0.29 F	U	U	U	U	U	U	U	U	U	U	0.72 F	0.69 F	U
chloromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5	8.2 *	2.5	1.4	3.9 M	1.3	1.2 *	U	2.2	U	1.5 F	2.1 F	1 F	0.96 F	0.89 F	0.77 F	U	1.42	
isopropylbenzene	5	480 *	140 *	73 *	130 M *	53	62.1 *	120	130	63	110	85	120	56	51	62	41 J	67.9	
n-butylbenzene	5	20 *	4.7	2.1 *	U	U	U	5.2	U	U	1.4 F	1.9 F	0.9 F	1.2 F	U	U	U	1.44	
ethylbenzene	5	2.4	1.7	0.95 *	U	0.33 F	U	U	U	U	U	U	U	U	U	U	U	0.17	
methylene chloride	5	U	U	U	U	U	U	6.5 B	U	3 B	U	U	U	U	U	U	U	U	U
n-propylbenzene	5	63 *	16 *	10 *	15	U	6.4 J *	11	U	U	11	U	U	6.2	U	U	U	U	U
p-isopropyltoluene	5	21 *	6.4	3 *	5 *	2.4	1.9 *	U	4.6	1.2	U	2.6 F	3.7 F	1.6 F	1.4 F	0.84 F	0.46 F	1.82	
sec-butylbenzene	5	22 *	6.1	2.7 *	5 *	2.5	2 *	2.7	4.8	1.4	U	2.8 F	4.3	2 F	1.6 F	1.2 F	0.79 F	1.52	
n-propylbenzene	5	U	23	U	26	9.1	U	U	16	7	11	11	15	7.1	6.2	7.1	4.1 J	7.35	
naphthalene	10	U	U	2.2 *	3.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U
toluene	5	1.1	0.27 F	U	2	U	U	U	U	U	U	1 F	U	U	U	U	U	U	U
m,p-xylene	5	22 *	7	2.5 *	4.3	1.8	1.2	U	U	1.3 F	4.3	1.4 F	1.4 F	U	U	U	U	U	0.34
Total VOCs		1021.3	305.99	151.35	288.1	102.97	109.8	209.1	244.7	118.8	182.1	168.7	225.4	101	84.06	82.35	54.19	107.03	
<b>SVOCs (µg/L)</b>																			
not sampled at this location																			
<b>Wet Chemistry Data (mg/L)</b>																			
nitrate	10000	N/A	0.8	U	U	U	0.063	U	U	0.29	0.06	U	0.12	0.04 F	U	N/S	N/S	N/S	N/S
sulfate	250000	N/A	U	11	4.7 B	4	9.3 B	25.5	17	6.3	4.4	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
sulfide		N/A	U	U	U	U	U	U	U	0.06 F	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
total alkalinity	--	N/A	202	156	204	150	160	159	167	352	222	202	186	205	188	N/S	156	200	
<b>Field Parameters</b>																			
dissolved iron (mg/L)		N/A	4	N/A	3	2.8	1.9	2.8	2.2	N/A	1.8	1	3	N/A	1.4	2.4	3.6	3	
pH		7.75	6.94	7.89	7.14	6.73	9.9	7.03	7.16	8.76	7.12	6.99	6.57	6.6	7.81	7.46	7.26	7.33	
specific conductance (µS/cm)		721	751	686	615	594	531	590	600	830	64	77	90	88	98	94.3	74.3	81	
temperature (degrees C)		12.48	9.1	10.8	14.4	11.8	9	11.56	13.38	13.82	8.5	11.1	14.2	11.9	8.9	9.4	11.5	14.4	
dissolved oxygen (mg/L)		3.98	3.29	0.86	1.05	4.02	4.24	3.89	4.8	4.58	2.3	4.8	7.32	8.02	4.99	4.36	6.08	3.09	
oxidation reduction potential (mV)		-99	-84	-118	-19	-65	-109	-130	-128	-113	-67	-84	-71	-111	-90	176	-99	-108	

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000.  
 2 - When the guidance value or standard is below the method detection limit, achieving the method detection limit is considered acceptable for meeting the guidance value or standard.  
 \* - Concentrations are from duplicate sample, which was greater than the original sample.  
 -- Indicates no NYS GA Groundwater Standard  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 J - Analyte was positively identified, quantitation is an approximation  
 M - Matrix effect present  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 R - The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.  
 UJ - The analyte was not detected above the RL, however the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-124									
		TF3M12413AA	TF3M12413AA	TF3M12413BB	TF3M12414CA	TF3M12412DA	TF3M12413EA	TF3M12413HA	TF3M12413GB	TF3M12413HB	TF3M12413IB
Sample ID		12/13/01	2/25/02	6/18/02	9/13/02	12/12/2002	3/12/2003	6/19/2003	9/12/2003	12/12/2003	3/17/2004
Date of Collection											
Sample Depth (ft)	(µg/L)	13	13	13	14	12	13	13	13	13	13
<b>VOCs (µg/L)</b>											
1,2-dibromo-3-chloropropane	0.04	U	U	U	U	U	0.25 UJ	U	U	U	U
acetone	50	U	U	U	U	U	U	U	U	4.4 F	3.3 F
benzene	1	0.76 F	0.76	0.43 F	0.5	U	U	U	U	U	U
1-chlorohexane	--	U	U	U	U	U	U	0.14 M	0.14 M	U	U
1,2,3-trichloropropane	5	U	U	U	U	U	U	0.21 M	U	U	U
1,2,4-trimethylbenzene	5	U	U	U	U	U	U	0.23 M	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	0.25 M	U	U	U
chloromethane	5	U	U	U	U	0.22 F	U	U	U	U	U
t-butylbenzene	5	0.45 F	0.3 F	U	U	U	U	U	U	U	U
bromodichloromethane	50	U	U	U	U	U	U	0.11 M	U	U	U
bromomethane	5	U	U	U	U	U	0.19 UJ	U	0.13 M	U	U
isopropylbenzene	5	2.3	0.23 F	U	U	U	U	U	U	U	U
p - isopropyltoluene	5	0.21 F	U	U	U	U	U	U	U	U	U
sec - butylbenzene	5	0.47 F	U	U	U	U	U	U	U	U	U
m,p-xylene	5	U	U	U	U	U	U	0.34 M	U	U	U
2-hexanone	--	U	U	U	U	U	U	U	U	U	U
toluene	5	U	U	U	U	U	U	0.17 M	U	U	U
trichloroethylene	5	0.52 F	0.57	0.59	0.61	0.48 F	0.62 J	0.33 F	U	0.6 F	0.55 F
styrene	5	U	U	U	U	U	U	0.12 M	U	U	U
tetrachloroethylene	5	U	U	U	U	U	U	U	0.18 M	U	U
trichlorofluoromethane	5	U	U	U	U	U	U	U	0.14 M	U	U
Total VOCs		4.71	1.86	12.02	1.11	0.7	0.62	1.9	0.59	5 F	3.85 F
<b>SVOCs (µg/L)</b>											
2,4,5-trichlorophenol	1*	U	U	3 M	U	U	3 UJ	U	U	U	U
2,4,6-trichlorophenol	1*	U	U	4 M	U	U	4 UJ	U	U	U	U
2,4-dichlorophenol	1*	U	U	5 M	U	U	4 UJ	U	U	U	U
2,4-dinitrophenol	1*	U	U	12 M	UJ	U	11 UJ	U	U	U	U
4,6-dinitro-2-methylphenol	1*	U	U	16 M	U	U	15 UJ	U	U	U	U
4-nitrophenol	1*	U	U	4 M	U	U	3 UJ	U	U	U	U
benzoic acid	--	U	U	U	U	U	13 UJ	17 R	17 R	U	U
isophorone	50	U	U	U	U	U	5 UJ	R	U	U	U
benzo(a)anthracene	1*	U	U	U	U	U	2 UJ	3 M	U	U	U
<b>Wet Chemistry Data (mg/L)</b>											
nitrate	10000	N/A	U	U	U	U	0.12	0.056	U	U	U
sulfate	250000	N/A	U	27.9	22 B	24.3	28.8 B	198	35.5	114	33.1 M
sulfide		N/A	U	U	U	U	U	U	U	U	0.049 M
total alkalinity	--	N/A	165	132	160	116	150	129	148	154	167
<b>Field Parameters</b>											
dissolved iron (mg/L)		N/A	1.4	N/A	1.5	1.3	0.2	2.5	2	0.6	3.2
pH		7.98	7.31	7.96	7.12	6.79	10.15	7.17	7.29	7.2	7.19
specific conductance (µS/cm)		867	581	799	856	658	526	700	937	880	240
temperature (degrees C)		13.68	10.4	11.6	15.6	13.3	9.6	11.52	14.95	14.1	8.63
dissolved oxygen (mg/L)		3.88	3.35	0.63	1.56	3.98	4.61	3.9	5.52	8.17	2.6
oxidation reduction potential (mV)		-73	-90	-129	4	-39	-107	-110	-128	-106	-10

Monitoring well not sampled after March 2004

Notes:

- 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000
- 2 - When the guidance value or standard is below the method detection limit, achieving the method detection limit is considered acceptable for meeting the guidance value or standard
- \* - Sum of total phenolic compounds may not exceed 1 ppm.
- ♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.
- Indicates no NYS GA Groundwater Standard
- F - Analyte was positively identified but the associated numerical value is below the reporting limit
- M - Matrix effect present
- N/A - Analyte was not analyzed during sampling
- N/S - Analyte was not sampled.
- U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.
- UJ - The analyte was not detected above the RL, however the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-125							
		TF3M12513AA	TF3M12513BB	TF3M12514CA	TF3M12513DA	TF3M12513EA	TF3M12513FA	TF3M12514GB	
Sample ID		2/12/02	6/19/02	9/13/02	12/20/2002	3/12/2003	6/23/2003	9/2/2003	
Date of Collection									
Sample Depth (ft)	(µg/L)	13	13	14	13	13	13	14	
<b>VOCs (µg/L)</b>									
1,2-dichloropropane	1	U	U	U	U	.32 UJ	U	U	
1,2,4-trimethylbenzene	5	81 ♦	48 ♦	56 ♦	29	28	23	36	
1,3,5-trimethylbenzene	5	33 ♦	19	21 ♦	14	10 M	8.3	13	
benzene	1	0.36 F	U	U	U	0.30 UJ	U	U	
n-butylbenzene	5	U	2.3	3 J	U	0.44 UJ	U	U	
sec-butylbenzene	5	2.7 ♦	2	2.6 ♦	1.4	1.8 M	U	U	
t-butylbenzene	5	1.6 ♦	0.98	1.3 ♦	0.9	0.92 J	U	U	
chloroethane	5	U	U	0.63	U	0.32 UJ	U	U	
chloromethane	5	U	U	0.66	U	0.28 UJ	U	U	
ethylbenzene	5	94 ♦	82 ♦	90 ♦	53	61 M	51	62	
isopropylbenzene	5	80 ♦	62 ♦	85 ♦	40	50 M	37	43	
p-isopropyltoluene	5	4.2 ♦	2.9 ♦	3.6	U	2.1 M	U	U	
methylene chloride	5	U	U	U	U	0.5	7 B	8.5	
methyl ethyl ketone	5	U	U	U	U	3.1 UJ	U	U	
n-propylbenzene	5	14	15	18 ♦	9.5	11 M	7.8	11	
naphthalene	10	U	11	14 ♦	7.8	10 J	6.8	9.1	
toluene	5	1.1 ♦	0.86	1.1 ♦	U	0.54 M	U	U	
o-xylene	5	2.5	1.1	1.4 ♦	0.87	0.78 M	U	U	
m,p-xylene	5	89 ♦	47 ♦	42 ♦	26	28 J	26	37	
Total VOCs		403.46	294.14	337.29	182.47	204.64	159.9	219.6	
<b>SVOCs (µg/L)</b>									
bis-(2-ethylhexyl) phthalate	5	5 F	U	U	U	U	U	U	
benzoic acid	--	U	U	U	U	U	17 R	18 R	
naphthalene	10	4 F	U	U	6 F	6 F	4 F	6 F	
phenanthrene	50	U	U	U	U	3 F	U	U	
pyrene	50	3 F	U	U	U	U	U	U	
2-methylnaphthalene	--	U	U	U	U	5 F	2 F	2 F	
bis (2-ethylhexyl) phthalate	5	U	U	U	U	4 M	U	U	
Total SVOCs		12	0	0	6	18	6	8	
<b>Wet Chemistry Data (mg/L)</b>									
nitrate	10000	U	U	U	N/A	U	U	U	
sulfate	250000	U	5.4	5.2 B	2.7	10.9 B	39.7	4.3	
sulfide		U	U	U	U	1 M	U	U	
total alkalinity	--	106	97.6	137	96.3	143	116	116	
<b>Field Parameters</b>									
dissolved iron (mg/L)		3.5	N/A	5.6	4.4	2.8	3.5	N/S	
pH		6.64	6.55	6.9	6.87	6.84	6.8	N/S	
specific conductance (µS/cm)		380	403	422	481	391	228	N/S	
temperature (degrees C)		9.6	9.9	13	12.8	9.38	9.99	N/S	
dissolved oxygen (mg/L)		4.90	3.87	1.09	2.88	4.51	3.56	N/S	
oxidation reduction potential (mV)		-50	-83	-22	-112	-3	-132	N/S	

Monitoring well decommissioned in September 2003

Notes:

- 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000
  - 2 - When the guidance value or standard is below the method detection limit, achieving the method detection limit is considered acceptable for meeting the guidance value or standard
- ♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.
  - Indicates no NYS GA Groundwater Standard
  - B - The analyte was also detected in a blank.
  - F - Analyte was positively identified but the associated numerical value is below the reporting limit
  - J - Analyte was positively identified, quantitation is an approximation
  - N/A - Analyte was not analyzed during sampling
  - N/S - Analyte was not sampled.
  - U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.
  - UJ - The analyte was not detected above the RL. However the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-126															
		TF3M112613AA	TF3M112613BB	TF3M12614CA	TF3M12612DA	TF3M12613EA	TF3M12613FA	TF3M12614GB	TF3M12612HB	TF3M12613IB	TF3M12613JB	TF3M12613KB	TF3M12613LB	TF3M12613MA	TF3M12613NA	TF3M12614OA	TF3M12614PA
Date of Collection		2/12/02	6/19/02	9/13/02	12/20/2002	3/12/03	6/20/03	9/12/2003	12/12/2003	3/18/2004	6/17/2004	9/13/2004	1/3/2005	3/29/2005	3/28/2006	6/20/2006	9/26/2006
Sample Depth (ft)	(µg/L)	13	13	14	12	13	13	14	12	13	13	13	13	13	13	14	14
<b>VOCs (ug/L)</b>																	
1,2-dichloropropane	1	U	U	0.42 F	U	U	U	U	U	U	U	U	U	U	U	U	U
1-2-dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	0.26 F	U	U	U
1,2,4-trimethylbenzene	5	0.55	U	1.6	U	U	U	U	U	U	0.39 F	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	50	U	U	U	U	U	U	U	5.7 F	U	U	U	U	U	U	U	U
benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5	7.8	4.7	U	U	U	U	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5	11	6.5	6	2.4	2.4	1.9 J ♦	1.8	1.1	1.4	2	1.2	0.77 F	U	2.4	4.4	5.33
Trichloroethylene		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5	2.5	1.5	1.5	1.4	0.88	0.6 F ♦	1.2	1.4	1.1	1.6	1.5	0.96 F	0.87 F	1.4	2.4	1.58
Tetrachloroethylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroform	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	0.29 F	U	0.62 F	U
chloromethane	5	U	U	U	0.26 F	U	U	U	U	U	U	U	U	0.33 F	U	0.69 F	U
ethylbenzene	5	U	0.37 F	U	U	U	U	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5	11	4.2	8.1	3.1	U	0.35 F ♦	1.6	1	1.1	3	0.39 F	1	0.86 F	0.31 F	9.6	6.28
p-isopropyltoluene	5	1	0.38 F	0.31 F	0.3 F	U	U	U	2.5	U	3.2	U	U	U	U	U	U
methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methyl ethyl ketone	5	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5	18	2.9	6.9	1	0.99	0.33 F ♦	0.77 F	0.49 F	0.83 F	0.8 F	U	U	0.25 F	U	1.4	5.81
naphthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.22 F	U
toluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs		51.85	20.55	24.41	8.46	4.27	3.18	5.37	9.69	6.93	7.79	6.29	2.73	2.86	4.11	19.33	19
<b>SVOCs (µg/L)</b>																	
benzoic acid	--	U	U	U	U	U	17 R	17 R	U	U	N/S						
2-methylnaphthalene	--	12	U	10	U	U	U	U	U	U	N/S						
<b>Wet Chemistry Data (mg/L)</b>																	
nitrate	10000	U	U	U	N/A	U	U	U	U	0.58	0.18	0.065	0.67	U	N/S	N/S	N/S
sulfate	250000	U	13.8	4.9 B	8.9	16.8 B	50	9.2	35.4	22.7	N/S						
sulfide		U	U	U	U	U	U	U	U	U	N/S						
total alkalinity	--	267	220	233	182	233	241	243	400	308	275	218	271	243	N/S	217	260
<b>Field Parameters</b>																	
dissolved iron (mg/L)		3.5	N/A	5.4	6	3.4	4.4	2.5	1.8	2	3.2	4.8	2.3	2.8	3.5	4.8	2.6
pH		7.12	6.64	6.74	6.94	6.9	7.15	7.17	6.7	6.95	7.11	6.88	7.48	7.65	7.18	7.5	7.28
specific conductance (µS/cm)		451	479	660	590	509	414	581	686	68	58	59	65.8	70.4	99	88	87
temperature (degrees C)		10	9.8	13.2	12.7	9.6	10.11	13.32	12.52	8.5	9.9	13.4	11.3	9.3	8.77	10.4	14.4
dissolved oxygen (mg/L)		5.18	3.51	1.13	2.18	4.5	3.75	3.54	0.9	4.8	2.9	6.08	8.82	4.44	3.33	2.92	3
oxidation reduction potential (mV)		-84	-91	-8	-118	-30	-125	-152	-122	-70	-104	-100	-10	-102	-122	-57	-121

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 2 - When the guidance value or standard is below the method detection limit, achieving the method detection limit is considered acceptable for meeting the guidance value or standard  
 ♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.  
 -- Indicates no NYS GA Groundwater Standard  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 J - Analyte was positively identified, quantitation is an approximation  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.  
 UJ - The analyte was not detected above the RL. However the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-127															
		TF3M12713AA	TF3M12713BB	TF3M12714CA	TF3M12712DA	TF3M12713EA	TF3M12713FA	TF3M12713GB	TF3M12713HB	TF3M12713IB	TF3M12713JB	TF3M12713KB	TF3M12713LB	TF3M12713MA	TF3M12713NA	TF3M12713OA	TF3M12713PA
Sample ID	GW	2/12/02	6/19/02	9/13/02	12/20/2002	3/12/2003	6/20/2003	9/12/2003	12/12/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/26/2006
Date of Collection	Standards <sup>1</sup>	13	13	14	12	13	13	13	13	13	13	13	13	13	13	13	13
Sample Depth (ft)	(µg/L)	13	13	14	12	13	13	13	13	13	13	13	13	13	13	13	13
<b>VOCs (µg/L)</b>																	
1,2,4-trimethylbenzene	5	180 ♦	16	190 ♦	14	15	5.6	56 J	56	21	72	43	70	6.2	28	15	101
1,3,5-trimethylbenzene	5	66 ♦	6.6	74 ♦	7.9	6.3	2.5	30	20	7.1	0.83 F	13	U	2.9	9.2	U	U
benzene	1	2.6	0.94	5.7	1.3	0.54	2.2	5.2	2.1	2.9	4.2	3.3	2.2	0.97	1.7	1.4	3.05
n-butylbenzene	5	9	1.2	U	U	U	U	3.5	U	U	0.87 F	0.64 F	0.49 F	0.41 F	0.26 F	U	1.56
sec-butylbenzene	5	12	2.1	15 ♦	2.7	1.5	1.3	6.7	5.1	2.7	3.2	2.7	1.7 F	1.2	0.87 F	1.4	3.7 ♦
t-butylbenzene	5	1.7	0.24 F	1.7 ♦	0.34 F	U	U	0.87 F	0.52 F	0.26 F	0.87 F	U	U	U	U	U	U
chloroethane	5	U	U	0.44 F	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane	5	U	U	0.47 F	U	U	U	U	U	U	U	U	U	U	U	0.22 F	U
ethylbenzene	5	81	15	120 B	20	35	12	41 J	47	25	50	26	30	5.2	16	17	47.8
isopropylbenzene	5	37	5.9	67 ♦	8.7	7.6	3.1	24	18	8.6	18	10	10	3.6	6.5	9.9	25.5
p-isopropyltoluene	5	14	1.3	11	1.2	0.56	U	2.5	1.7	0.48 F	1.7 F	0.89 F	0.74 F	0.34 F	0.60 F	0.66 F	3.9 ♦
methyl ethyl ketone	5	U	U	U	U	1.6 UJ	U	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5	48	7.3	80 ♦	9.6	7.1	3.1	28	20	7.7	19	11	10	3.9	6.5	9.8	27.5
naphthalene	10	U	5.1	44	7.6 J	8.5	2.2	22	19	8.2	19	12	12	2.6	7.2	7.9 B	25.8
trichloroethylene	5	0.54	0.44 F	0.26 F	0.49 F	0.43 F	U	0.23 F	U	U	U	U	U	U	0.28 F	U	U
m,p-xylene	5	45	7	49	7.7	20	4.6	45	40	18	41	24	25	2.7	11	8.3	31.6
methylene chloride	5	U	U	U	U	U	U	U	0.8 F	U	2.2	0.53 F	U	U	U	U	U
Total VOCs		451.84	62.12	659.77	73.83	82.53	36.6	220	230.22	101.94	230.67	147.06	162.13	30.02	77.11	71.5	271.41
<b>SVOCs (µg/L) MCL<sup>2</sup></b>																	
2-methylnaphthalene	--	35	23	140	9 F	8 F	3 F	9 F	2 F	U	N/S						
<b>Wet Chemistry Data (mg/L)</b>																	
nitrate	10000	0.11	U	U	N/A	U	0.055	U	0.15	0.83	0.36	0.13	0.36	0.24	N/S	N/S	N/S
sulfate	250000	U	24.8	14.8	11.5	10.6 B	14.2	21	21.6	24.8	N/S						
sulfide		U	U	U	U	U	U	U	U	0.061 F	N/S						
total alkalinity	--	284	218	268	214	252	253	231	389	233 B	341	246	314	298	N/S	217	380
<b>Field Parameters</b>																	
dissolved iron (mg/L)		3.2	N/A	6.5	3.5	2	1.8	4	2.5	2	2.8	1	2	1.8	0.5	3.7	4.2
pH		6.81	7.85	6.56	7.03	7.08	7.15	7.07	6.44	7.07	6.99	7.59	6.24	6.82	6.93	7.15	7.27
specific conductance (µS/cm)		524	752	839	566	451	353	517	543	76	81	68.8	71	74	95.6	112	82
temperature (degrees C)		9.6	10.2	13.3	11.5	8.3	9.37	13.22	11.69	7.79	9.9	13.2	10.4	8.4	8.57	10.6	13.5
dissolved oxygen (mg/L)		3.55	0.8	1.2	2.66	4.88	4.02	6.28	3.41	4.1	2.9	4.59	8.11	6.87	5.22	2.86	5.12
oxidation reduction potential (mV)		-90	-111	6	-99	52	-89	-129	-73	-21	-70	-38	-51	75	-50	118	23

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 \* - Sum of total phenolic compounds may not exceed 1 ppm.  
 ♦ - Concentrations are from duplicate sample or dilution, which was greater than the original sample  
 -- Indicates no NYS GA Groundwater Standard  
 B - The analyte was also detected in a blank  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 J - Analyte was positively identified, quantitation is an approximation  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.  
 UJ - The analyte was not detected above the RL, however the quantitation is an approximation.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-128															
		TF3M12813AA	TF3M12813BB	TF3M12814CA	TF3M12813DA	TF3M12814EA	TF3M12813FA	TF3M12814GB	TF3M12813HB	TF3M12813IB	TF3M12814JB	TF3M12813KB	TF3M12814LB	TF3M12814MA	TF3M12814NA	TF3M12814OA	TF3M12814PA
Date of Collection		2/12/02	6/19/02	9/13/02	12/20/2002	3/12/2003	6/20/2003	9/11/2003	12/12/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/26/2006
Sample Depth (ft)	(µg/L)	13	13	14	13	14	13	14	13	13	14	13	14	14	14	14	14
<b>VOCs (µg/L)</b>																	
1,2,4-trimethylbenzene	5	140 ♦	98 ♦	53	33	31	60 ♦	44	24	16	32	20	8.3	25	17	8	4.25
1,3,5-trimethylbenzene	5	54	39 ♦	23	14	10	24 ♦	18	7.9	5.5	12	6.7	2.7	11	9.8	U	U
acetone	50	U	U	U	U	U	U	U	3.4 F	U	U	U	U	U	U	U	U
benzene	1	4.2	2.2 ♦	3.3	1.4	0.62	0.99 ♦	1.4	0.42 F	0.63	0.8	0.42 F	.25 F	1.2	0.9	0.85	0.33
n-butylbenzene	5	6	3.6	U	U	U	U	3	0.89 F	U	0.74 F	0.59 F	U	1.8	1.2	2	U
sec-butylbenzene	5	9.3	6.8	6	3.1	2	4.5 ♦	3.8	1.2	1.4	2.2	1.5	0.44 F	3.4	3.2	3.4	0.89
t-butylbenzene	5	1.2	0.75	0.8	0.42 F	0.24 F	0.3 F	0.47 F	U	U	0.3 F	U	U	0.34 F	0.38 F	0.4 F	U
chloroethane	5	U	U	0.29 F	U	U	U	U	U	U	U	U	U	U	U	U	U
chloromethane	5	U	U	0.31 F	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5	98 ♦	58 ♦	54 B	19	12	22 ♦	21	9.1	10	15	8.6	5.5	17	14	14	6.5
isopropylbenzene	5	32	21 ♦	24	9.3	5.5	10 ♦	9.8	3.9	4.7	7.3	3.9	2.1	9	7.4	7.7	2.05
p-isopropyltoluene	5	40	17 ♦	19	9.8	3.9	5.6 ♦	3.8	1.2	2	5.3	2.4	0.75 F	5	2.1	2	0.86
methyl ethyl ketone	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5	41	30 ♦	30	13	7.3	16 ♦	14	5.4	5.2	9.6	5.5	2.5	12	10	10	2.49
naphthalene	10	U	23	30	9.9 J	5.4	9	8.3	3.1	4.8	6.5	3.4	2.4	7.4	6.5	6.4 B	3.04
toluene	5	1 ♦	0.5	0.36 F	0.23 F	U	U	U	U	U	U	U	U	U	U	U	U
o-xylene	5	1.1	U	0.44 F	0.25 F	U	U	U	U	U	U	U	U	U	U	U	U
m,p-xylene	5	82	47 ♦	32 B	14	11	21 ♦	20	9.4	8.4	14	8	4.2	12	9.9	7.2	4.37
Total VOCs		427.8	346.85	276.5	127.4	88.96	173.39	147.57	69.91	58.63	105.74	61.01	29.14	105.14	82.38	61.95	24.78
<b>SVOCs (µg/L) MCL<sup>2</sup></b>																	
2-methylnaphthalene	--	24	17	12	U	4 F	6 F	8 F	U	5 F	N/S						
benzo(a)anthracene	0.002	U	U	U	2 F	U	U	U	U	U	N/S						
acenaphthene	20	8 F	U	5 F	U	U	U	U	U	U	N/S						
anthracene	50	5 F	U	U	U	U	U	U	U	U	N/S						
benzoic acid	--	U	U	U	U	13 UJ	17 R	18 R	U	U	N/S						
dibenzofuran	--	4 F	U	U	U	U	U	U	U	U	N/S						
flouranthene	50	6 F	U	U	U	U	U	U	U	U	N/S						
flourene	50	6 F	U	U	U	U	U	U	U	U	N/S						
naphthalene	10	26	15	17	6 F	4 F	5 F	7 F	U	4 F	N/S						
phenanthrene	50	20	4 F	8 F	U	U	U	U	U	U	N/S						
pyrene	50	4 F	U	3	U	U	U	U	U	U	N/S						
Total SVOCs		103	32	45	8 F	8 F	11 F	15 F	0	9 F	N/S						
<b>Wet Chemistry Data (mg/L)</b>																	
nitrate	10000	U	U	U	N/A	0.73	0.32	U	0.074	0.19	U	U	0.59	U	N/S	N/S	N/S
sulfate	250000	12.9	6.1	5.8	31.8	9.3 B	25.8	6.1	4	2.6	N/S						
sulfide		U	U	U	U	U	U	U	U	U	N/S						
total alkalinity	--	247	233	293	212	203	253	329	573	314 B	362	371	381	402	N/S	332	400
<b>Field Parameters</b>																	
dissolved iron (mg/L)		0.7	N/A	3.2	1.6	0	1.6	0.4	0.2	0.4	0.5	0	0	0.8	0	0	0
pH		7.29	7.74	7.13	7.05	7.34	7.05	7.09	5.83	6.8	6.72	7.21	6.3	6.86	6.92	6.93	7.43
specific conductance (µS/cm)		377	457	612	609	338	609	500	659	75	75	76.5	73	71	91.3	84	70
temperature (degrees C)		9.7	9.9	13.4	11.2	6.72	11.2	12.05	10.83	7.92	9.8	13.4	10.6	9	8.89	10.7	13.5
dissolved oxygen (mg/L)		4.8	1.81	4.46	4.27	6.89	4.27	5.89	3.48	4.2	5.3	5.93	7.81	7.5	4.5	4.47	5.11
oxidation reduction potential (mV)		-124	-90	-15	-79	162	-79	-61	246	91	-12	65	99	92	20	231	135

Notes:  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 \* - Sum of total phenolic compounds may not exceed 1 ppm.  
 ♦ - Concentrations are from duplicate sample or dilution, which was greater than the original sample  
 -- Indicates no NYS GA Groundwater Standard  
 B - The analyte was also detected in a blank.  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 J - Analyte was positively identified, quantitation is an approximation  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled.  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.  
 UJ - The analyte was not detected above the RL, however the quantitation is an approximation.

**Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)**

Monitoring Well ID Sample ID	NYSDEC GW Standards <sup>1</sup> (µg/L)	TF3MW-129								
		TF3M12918AA	TF3M12918BB	TF3M12915CA	TF3M12917DA	TF3M12918EA	TF3M12918FA	TF3M12918GB	TF3M12918HB	TF3M12918IB
Date of Collection		2/12/02	6/19/02	9/13/02	12/20/2002	3/12/2003	6/20/03	9/12/03	12/12/2003	3/17/2004
Sample Depth (ft)		13	13	15	17	18	17	18	18	18
<b>VOCs (µg/L)</b>										
1,1,1-trichloroethane	5	U	0.41 F	0.25 F	U	0.35 F	0.24 F	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	U	U	0.39 F
acetone	50	U	U	U	U	U	U	U	4.4 F	U
benzene	1	0.44 F	U	U	U	U	0.61	0.58	0.31 F	2.2
chloroform	7	U	0.45 F	U	U	0.31 F	0.39 F	0.22 F	0.21 F	U
sec - butylbenzene	5	0.21 F	U	U	U	U	U	U	U	U
ethylbenzene	5	0.78	0.25 F	0.42 F	0.23 F	1.1	0.95 F	1.2	0.61 F	3.9
isopropylbenzene	5	1	0.29 F	0.34 F	U	1.3	0.65 F	0.67 F	0.3 F	4.5
n-propylbenzene	5	U	U	U	U	U	U	U	U	0.22 F
naphthalene	10	U	U	U	UJ	0.21 F	U	U	U	U
trichloroethylene	5	0.34 F	0.41 F	0.32 F	0.4 F	0.33 F	0.2 F	0.27 F	0.3 F	0.28 F
o-xylene	5	U	U	U	U	U	U	U	U	0.31 F
Total VOCs		2.77	1.81	1.33	0.63	3.6	3.04	2.94	6.13	11.8
<b>SVOCs (µg/L)</b>										
bis(2-ethylhexyl)phthalate	5	3 F	U	U	U	U	U	U	U	U
benzoic acid	--	U	U	U	U	U	17 R	7 R	U	U
di-n-butyl phthalate	50	3 F	U	U	U	U	U	U	U	U
flouranthene	50	23	4 F	4 F	5 F	4 F	U	U	U	U
phenanthrene	50	8 F	U	U	U	U	U	U	U	U
pyrene	50	16	U	3 F	4 F	3 F	U	2 F	U	U
Total SVOCs		53	4 F	7 F	9 F	7 F	0	2 F	0	0
<b>Wet Chemistry Data (mg/L)</b>										
nitrate	10000	0.22	0.28	0.14	N/A	0.46	0.84	0.4	0.82	0.8
sulfate	250000	U	14.7	17.6	9.3	14.2 B	24	12.6	23.6	18.3
sulfide	--	U	U	U	U	U	U	U	U	U
total alkalinity	--	216	208	223	149	202	235	221	324	175 B
<b>Field Parameters</b>										
dissolved iron (mg/L)		0.3	N/A	0.2	0.4	0.2	0.02	0	0.6	0.5
pH		7.17	7.59	6.75	7.39	9.09	7.39	7.37	6.83	7.17
specific conductance (µS/cm)		563	478	537	512	439	293	480	584	61
temperature (degrees C)		11	11	12.4	12.7	11.1	11.12	12.06	12.86	10.48
dissolved oxygen (mg/L)		3.90	1.36	1.22	3.09	3.97	3.89	5.06	7.71	3.2
oxidation reduction potential (mV)		-59	-75	29	-50	-73	-61	-102	-43	151

Monitoring well not sampled after March 2004

Notes:

- 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000
- ◆ - Indicates higher value detected in the sample duplicate or during the dilution phase.
- Indicates no NYS GA Groundwater Standard
- F - Analyte was positively identified but the associated numerical value is below the reporting limit
- N/A - Analyte was not analyzed during sampling
- U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

**Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)**

Monitoring Well ID	NYSDEC GW Standards <sup>1</sup>	TF3MW-130								
		TF3M13016AA	TF3M13017BB	TF3M13018CA	TF3M13016DA	TF3M13017EA	TF3M13017FA	TF3M13017GB	TF3M13017HB	TF3M13017IB
Sample ID		2/12/02	6/19/02	9/13/02	12/20/2002	3/12/2003	6/23/2003	9/12/2003	12/12/2003	3/17/2004
Date of Collection										
Sample Depth (ft)	(µg/L)	16	16	16	16	17	17	17	17	17
<b>VOCs (ug/L)</b>										
1,1,2-trichloroethane	1	1.1	U	U	U	U	U	U	U	U
1,2,4-trimethylbenzene	5	12	U	0.75	0.59	0.37 F	0.67 F	0.87 F	0.83 F	1.8
1,3,5-trimethylbenzene	5	2.5	U	U	U	U	0.37 F	0.74 F	0.89 F	U
bromodichloromethane	5	0.25 F	U	U	U	U	U	U	U	U
chloroethane	5	U	U	0.25 F	0.26 F	U	U	U	U	U
chloroform	7	0.25 F	U	U	U	U	U	U	U	U
sec - butylbenzene	5	0.61	U	1.2	0.21 F	U	U	0.65 F	0.39 F	0.48 F
ethylbenzene	5	1.7	0.74	0.98 B	1.3	0.68	0.41 F	3.8	3.3	1.7
isopropylbenzene	5	2.4	0.23 F	1.2	1.4	0.46 F	0.72 F	1.8	2.5	2.3
methylene chloride	5	U	U	U	U	0.53	U	U	U	U
p-isopropyltoluene	5	0.45 F	U	0.49 F	U	U	U	U	U	U
n-propylbenzene	5	1.3	U	1.4	0.78	0.44 F	0.34 F	2.4	2	2.1
naphthalene	10	U	0.53 F	0.61 F	1.9	0.47 F	1.7	0.98 F	3	1
o-xylene	5	1.3	0.26 F	U	0.47 F	U	U	0.48 F	0.55	0.38 F
m,p-xylene	5	1.5	0.47 F	U	0.38 F	U	U	1.4 F	1.1 F	0.68 F
Total VOCs		25.36	2.23	6.88	7.29	2.95	4.21	13.12	14.56	48.78
<b>SVOCs (µg/L)</b>										
bis(2-ethylhexyl)phthalate	5	U	U	2 F ♦	U	U	U	U	U	U
benzoic acid	--	U	U	U	U	U	17 R	7 R	U	U
<b>Wet Chemistry Data (mg/L)</b>										
nitrate	10000	0.29	1.5	U	N/A	1.3	1.8	0.86	1.5	0.75
sulfate	250000	48	13.1	12.3	70	13.2 B	17.6	8.4	13.2	12.6
sulfide	--	U	U	U	U	U	U	U	U	0.056 F
total alkalinity	--	225	136	246	120	157	149	212	240	137 B
<b>Field Parameters</b>										
dissolved iron (mg/L)		1	N/A	0.6	0.8	0.4	0	0	0.2	0
pH		6.92	7.18	7.11	7	7.02	6.63	7.1	6.18	6.76
specific conductance (µS/cm)		465	301	591	340	345	226	412	343	50
temperature (degrees C)		10.3	10.2	13	12.6	9.88	10.34	12.88	12.89	9.38
dissolved oxygen (mg/L)		3.69	2.57	1.22	3.65	5.19	6.3	4.48	3.81	2.7
oxidation reduction potential (mV)		-41	4	-12	-17	163	32	-38	48	81

Monitoring well not sampled after March 2004

Notes:

1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000

♦ - Indicates higher value detected in the sample duplicate or during the dilution phase.

-- Indicates no NYS GA Groundwater Standard

F - Analyte was positively identified but the associated numerical value is below the reporting limit

N/A - Analyte was not analyzed during sampling

U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

Table 3-2  
 Tank Farms 1 and 3 Detected Analytical Results (continued)

Monitoring Well ID	NYSDEC GW	TF3MW-131						TF3MW-132						TF3MW-133									
		TF3M13117HB	TF3M13114IB	TF3M13115IB	TF3M13115KB	TF3M13114LB	TF3M13114MA	TF3M13217HB	TF3M13217IB	TF3M13217JB	TF3M13217KB	TF3M13217LB	TF3M13217MA	TF3M13316HR	TF3M13317IB	TF3M13316JB	TF3M13316KB	TF3M13316LA	TF3M13316MA	TF3M13316NA	TF3M13316OA	TF3M13316PA	
Sample ID	Standard <sup>1</sup>	11/25/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	11/25/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	11/25/2003	3/17/2004	6/17/2004	9/13/2004	12/30/2004	3/29/2005	3/28/2006	6/20/2006	9/29/2006	
Sample Depth (ft)	(µg/L)	17	14	15	15	15	14	17	17	16	17	17	17	17	16	16	16	16	16	16	16	16	16
<b>VOCS (µg/L)</b>																							
1,2,4-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-trimethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
acetone	5	U	U	1.5 F	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
chloroform	7	0.34 F	U	0.55	0.4 F	0.47 F	0.3 F	0.93	U	0.79	0.63 B	0.57	0.78	U	U	U	U	U	U	0.33 F	U	U	U
chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-dichloroethylene	5	U	U	U	U	U	U	U	U	0.21 F	0.25 F	U	U	U	U	U	U	U	U	U	U	U	U
sec-butylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
ethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
isopropylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
p-isopropyltoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-butylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
n-propylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
naphthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trichloroethylene	5	0.43 F	0.32 F	0.36 F	0.38 F	0.27 F	0.29 F	0.8 F	0.67 F	0.64 F	0.69 F	0.6 F	0.65 F	U	U	U	U	U	U	U	U	U	U
t-butylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p-xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	0.77	0.32	2.41	0.78	0.74	0.59	1.73	0.67	3.44	3.44	1.17	1.43	200.9	169.39	115.27	42.08	35.44	38.08	62.97	50.81	25.3	
<b>SVOCs (µg/L)</b>																							
2-methylnaphthalene	--	U	U	N/S	N/S	N/S	N/S	U	U	N/S	N/S	N/S	N/S	15	9 F	N/S	N/S						
naphthalene	10	U	U	N/S	N/S	N/S	N/S	U	U	N/S	N/S	N/S	N/S	3 F	3 F	N/S	N/S						
Total SVOCs	0	0	0	N/S	N/S	N/S	N/S	0	0	N/S	N/S	N/S	N/S	18	12 F	N/S	N/S						
<b>Wet Chemistry Data (mg/L)</b>																							
nitrate	10000	1	1.1	1.1	0.73	0.95	0.55	2	2	1.8	1.6	1.7	1.4	0.064	0.45	0.14	0.098	0.59	U	N/S	N/S	N/S	N/S
sulfate	25000	16.7	14.9	N/S	N/S	N/S	N/S	19.3	20.4	N/S	N/S	N/S	N/S	36.8	9.4	N/S	N/S						
sulfide	--	U	0.26 F	N/S	N/S	N/S	N/S	U	U	N/S	N/S	N/S	N/S	U	U	N/S	N/S						
total alkalinity	--	416	146 B	200	226	187	222	346	182 B	268	236	233	237	310	153 B	263	223	226	272	N/S	273	330	
<b>Field Parameters</b>																							
dissolved iron (mg/L)		0	N/A	0	0	0	0	0.8	0	0	0	0	0	0.8	1.8	3.3	2.8	2	3.2	0.7	0.4	0.4	
pH		5.9	6.89	6.98	7.46	6.57	6.65	6.02	7.18	7.13	7.31	6.57	7.01	6.61	7.05	7.15	7.29	6.09	6.98	7.22	7.51	6.71	
specific conductance (µS/cm)		626	80	0.11 *	81.8	65	0.1 *	682	66	63	76.7	90	0.071 *	542	41	58	62.7	62	70	82.4	94	67	
temperature (degrees C)		13.15	9.21	11	14.6	11.7	9	12.03	9.94	10.1	12.1	11.4	10.2	11.63	8.12	9.7	12.7	11	8.9	8.95	10.3	13.2	
dissolved oxygen (mg/L)		2.43	1.6	4.8	3.64	7.58	6.39	2.63	2.9	4.9	6.52	8.78	9.52	1.1	2.8	4.1	3.82	8.41	6.89	4.65	280	4.76	
oxidation reduction potential (mV)		249	169	59	154	141	152	274	169	77	269	118	204	-101	-37	-96	-94	-31	32	-60	90	164	

Monitoring well not sampled after March 2005

Monitoring well not sampled after March 2005

Notes  
 1 - Groundwater Standards are from Technical and Operational Guidance Series (TOGS) 1.1.1, June 1998. Amended in April 2000  
 \* - specific conductance is measured in S/m  
 • - Indicates higher value detected in the sample duplicate or during the dilution phase.  
 -- Indicates no NYS GA Groundwater Standard  
 F - Analyte was positively identified but the associated numerical value is below the reporting limit  
 N/A - Analyte was not analyzed during sampling  
 N/S - Analyte was not sampled  
 U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit.

Figure 3-3  
 Tank Farms 1 and 3 SRA VOC Concentrations and Groundwater Elevation Trends

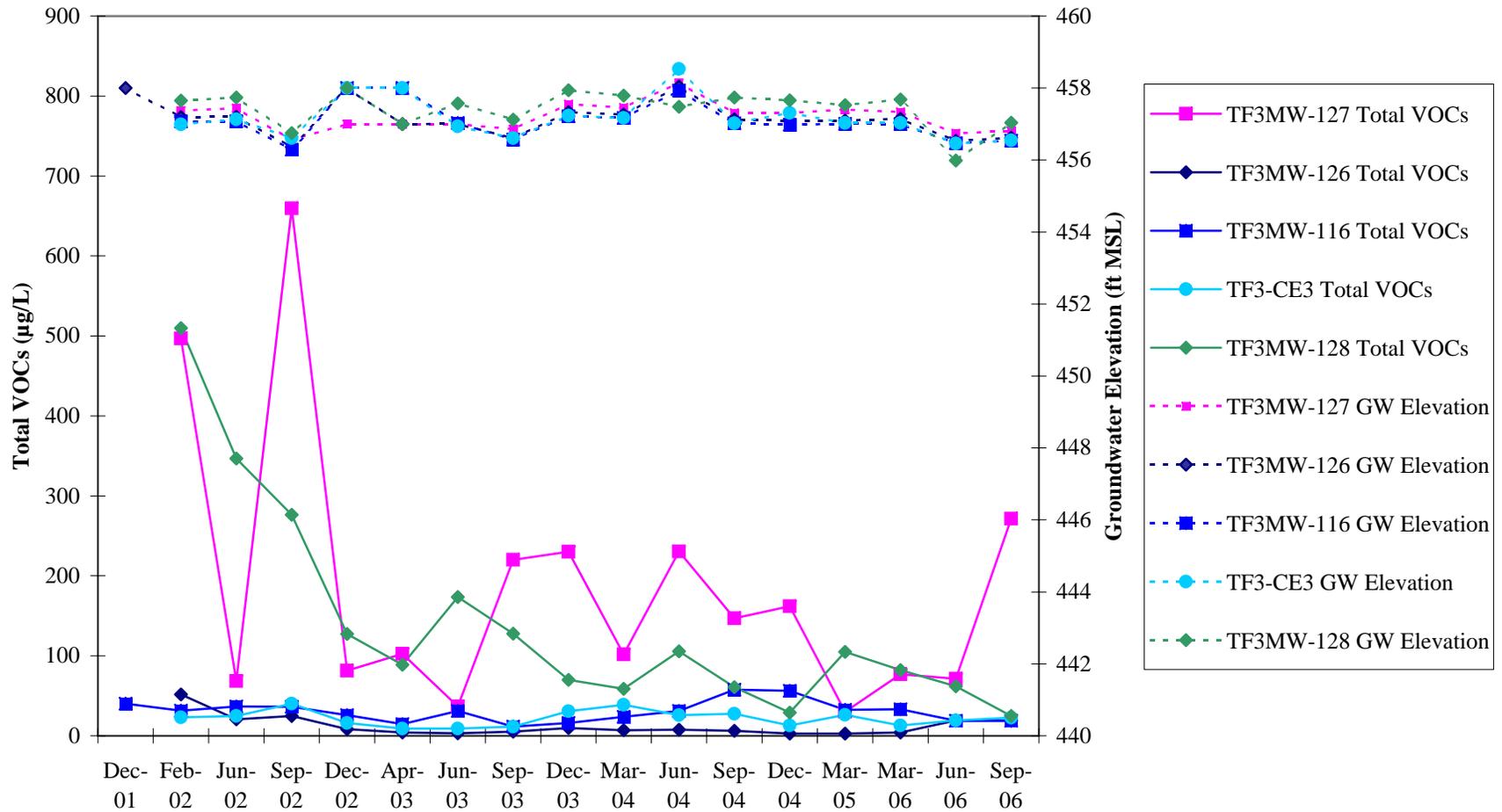
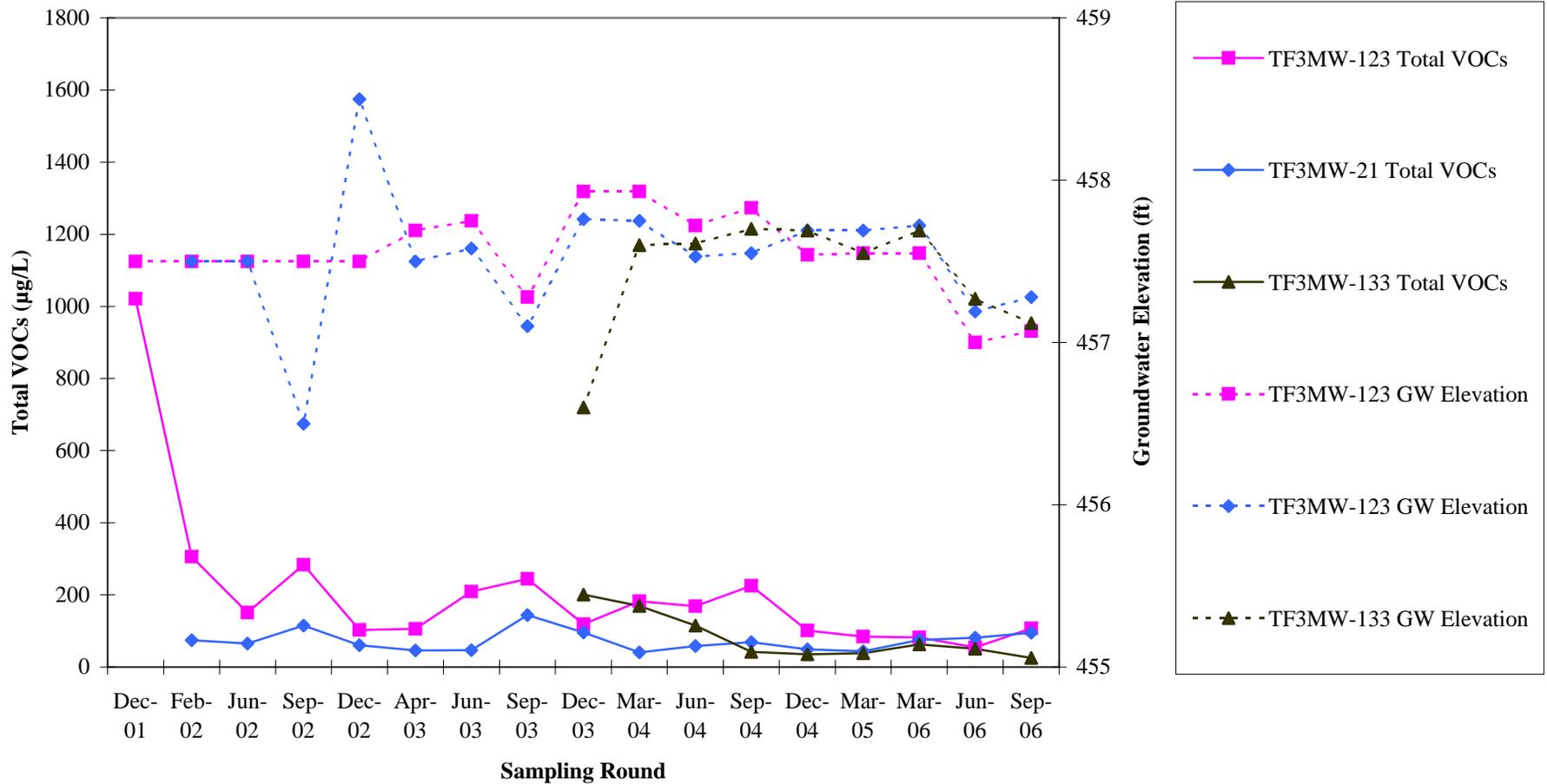


Figure 3-4  
 Tank Farms 1 and 3 SRA VOC Concentrations and Groundwater Elevation Trends



### **December 2001 Downgradient Delineation Results:**

During December 2001 sampling round, monitoring wells TF3MW-116, -117, -118, -119, -120, -121, -123, -124 were sampled along Brooks Road to assess the downgradient migration of the plume. Samples were not analyzed for natural attenuation parameters during this sampling round. TF3MW-123 reported several VOC exceedances and three SVOC exceedances. TF3MW-116 and -118 contained two and one VOC exceedances, respectively, while TF3MW-119 contained one VOC and several SVOC exceedances. No exceedances were reported in monitoring wells TF3MW-117, -120, -121 and -124.

- Minimum VOC exceedance: 5.6 µg/L for 2-dibromo-3-chloropropane at TF3MW-123
- Maximum VOC exceedance: 480 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 1,021 µg/L at TF3MW-123
- Maximum SVOC exceedance: 16 µg/L for bis(2-ethylhexyl)phthlate at TF3MW-123
- Maximum total SVOCs: 148 µg/L at TF3MW-123

### **February 2002:**

Monitoring wells TF3CE-3, TF3MW-21, -116, -126, and -130 contained only VOC exceedances, while TF3MW-119, -123, -125, -127, and -128 showed exceedances for VOCs and SVOCs. Monitoring wells TF3MW-2, -25, -117, -118, -120, -121, -124, and -129 showed no exceedances of NYS Groundwater Standards. In March 2002, monitoring wells TF3MW-118 through -121 were decommissioned due to site construction that changed the site topography and usage. Following completion of site construction, replacement monitoring wells will be installed to monitor plume migration.

- Minimum VOC exceedance: 5.1 µg/L of n-butylbenzene at TF3MW-21
- Maximum VOC exceedance: 140 µg/L of 1,2,4-trimethylbenzene at TF3MW-128
- Maximum total VOCs: 510 µg/L at TF3MW-128
- Maximum SVOC exceedance: 26 µg/L of naphthalene at TF3MW-128
- Maximum total SVOCs: 127 µg/L at TF3MW-127

### **June 2002:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -123, -125, -126, -127, and -128 contained VOC or SVOC exceedances. TF3MW-21, -116, -117, and -123 showed SVOC exceedances that were qualified with an "M" qualifier that indicated a matrix effect was present. Monitoring wells TF3MW-2, -25, -124, -129, and -130 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.8 µg/L of n-propylbenzene at TF3CE-3
- Maximum VOC exceedance: 98 µg/L of 1,2,4-trimethylbenzene at TF3MW-128
- Maximum total VOCs: 294 µg/L at TF3MW-125

- Maximum SVOC exceedance: 20 µg/L of naphthalene at TF3MW-127
- Maximum total SVOCs: 54 µg/L at TF3MW-127

### **September 2002:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -123, -125, and -126 contained only VOC exceedances. Monitoring wells TF3MW-127 and -128 contained VOC and SVOC exceedances. Monitoring wells TF3MW-2, -25, -117, -124, -129, and -130 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.7 µg/L of benzene at TF3MW-127
- Maximum VOC exceedance: 190 µg/L of 1,2,4-trimethylbenzene at TF3MW-127
- Maximum total VOCs: 659.77 µg/L at TF3MW-127
- Maximum SVOC exceedance: 110 µg/L of naphthalene at TF3MW-127
- Maximum total SVOCs: 412 µg/L at TF3MW-127

### **December 2002:**

Monitoring wells TF3-CE3, TF3MW-21, -116, and -125 contained VOC exceedances. Monitoring wells TF3MW-123, -127, and -128 contained both VOC and minor SVOC exceedances. Monitoring wells TF3MW-2, -25, -117, -124, -126, -129, and -130 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.1 µg/L of isopropylbenzene at TF3-CE3
- Maximum VOC exceedance: 53 µg/L for isopropylbenzene at TF3MW-123 and ethylbenzene at TF3MW-125
- Maximum total VOCs: 182 µg/L at TF3MW-125
- Maximum SVOC exceedance: 2 F µg/L at TF3MW-127 and -128 for benzo(a)anthracene
- Maximum total SVOCs: 27 µg/L at TF3MW-127

### **March 2003:**

Monitoring wells TF3MW-21, -117, -123, -125, -127, and -128 contained only VOC exceedances. No SVOC exceedances were detected, except for naphthalene, also a VOC, at TF3MW-127. Monitoring wells TF3-CE3, TF3MW-2, -25, -116, -117, -124, -126, -129, and -130 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.2 J µg/L for n-propylbenzene for TF3MW-21
- Maximum VOC exceedance: 61 M µg/L for ethylbenzene for TF3MW-125
- Maximum total VOCs: 205 µg/L at TF3MW-125

### **June 2003:**

Monitoring wells TF3MW-21, -116, -117, -123, -125, -127, and -128 contained only VOC exceedances. No SVOC exceedances were detected. Monitoring wells TF3-CE3, TF3MW-2, -25, -124, -126, -129, and -130 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.2 J µg/L for n-propylbenzene at TF3MW-21
- Maximum VOC exceedance: 120 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 209 µg/L at TF3MW-123

### **September 2003:**

Monitoring wells TF3MW-21, -117, -123, -125, -127, and -128 contained only VOC exceedances. No SVOC exceedances were detected, except for naphthalene, also a VOC, at TF3MW-127. Monitoring wells TF3-CE3, TF3MW-2, -25, -116, -124, -126, -129, and -130 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.2 µg/L for benzene at TF3MW-127 and n-butylbenzene at TF3MW-123
- Maximum VOC exceedance: 130 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 245 µg/L for TF3MW-123

In September 2003, monitoring wells TF3MW-25 and -125 were decommissioned due to site construction at the Tank Farms 1 and 3 site. As with previously decommissioned monitoring wells, replacement monitoring wells will be installed following completion of site construction and evaluation of the LTM monitoring well network. In addition, in November 2003, TF3MW-131, -132, and -133 were installed in the central portion of the Tank Farm 1 and 3 site.

### **December 2003:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -123, -127, -128, and -133 contained only VOC exceedances. No SVOC exceedances were detected. Monitoring wells TF3MW-2, -25, -124, -126, -129, -130, -131, and -132 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 2.1 µg/L for benzene at TF3MW-127
- Maximum VOC exceedance: 80 µg/L for 1,2,4-trimethylbenzene at TF3MW-133
- Maximum total VOCs: 230 µg/L for TF3MW-127

### **March 2004:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -123, -127, -128, -129 and -133 contained only VOC exceedances. No SVOC exceedances were detected. Monitoring wells TF3MW-2, -25, -124, -126, -130, -131, and -132 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 2.2 µg/L for benzene at TF3MW-129
- Maximum VOC exceedance: 110 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 182 µg/L for TF3MW-123

Following the March 2004 sampling round SVOCs, sulfate and sulfide were no longer sampled for at the Tank Farms 1 & 3 site. In addition, monitoring wells TF3MW-2, -25, -124, -125, -129, and -130 are no longer sampled because previous sampling data showed an absence of contamination.

### **June 2004:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -123, -127, -128, and -133 contained VOC exceedances. Monitoring wells -126, -131, and -132 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 4.2 µg/L for benzene at TF3MW-127
- Maximum VOC exceedance: 85 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 230.67 µg/L for TF3MW-127

### **September 2004:**

Replacement monitoring wells TF3MW-119R and TF3MW-121R were installed prior to the September 2004 sampling round. Replacement monitoring well TF3MW-125R could not be installed due to the installation of new site utilities that obstruct the installation of the replacement well. Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -119R, -123, -127, -128, and -133 contained VOC exceedances. Monitoring wells -126, -131, and -132 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 3.3 µg/L for benzene at TF3MW-127
- Maximum VOC exceedance: 120 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 225.4 µg/L for TF3MW-123

**December 2004:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -117, -123, -127, -128, and -133 contained VOC exceedances. Monitoring wells TF3MW-119R, -126, -131, and -132 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.4 µg/L for n-propylbenzene at TF3MW-133
- Maximum VOC exceedance: 70 µg/L for isopropylbenzene at TF3MW-127
- Maximum total VOCs: 162.13 µg/L for TF3MW-127

**March 2005:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -123, -127, -128, and -133 contained VOC exceedances. Monitoring wells TF3MW-117, -119R, -121R, -126, -131, and -132 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.2 µg/L for ethylbenzene at TF3MW-127
- Maximum VOC exceedance: 62 µg/L for isopropylbenzene at TF3MW-125
- Maximum total VOCs: 105.14 µg/L for TF3MW-128

In December 2005, Oxygen Release Compound (ORC<sup>®</sup>) Advanced was injected into seventeen borings. Site utilities made injection impossible south of Brooks Road and ORC<sup>®</sup> socks were installed in existing monitoring wells instead. Five pounds of ORC<sup>®</sup> per foot were injected from 20 to 14 feet bgs. Injection took place in the source area of Tank Farms 1 & 3 as shown on Figure 3-1 and added to downgradient monitoring wells TF3MW-21, -116, -117, -119R, -121R and -123 by the use of ORC<sup>®</sup> socks in October 2005.

**March 2006:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -123, -127, -128, and -133 contained VOC exceedances. Monitoring wells TF3MW-117, -119R, -121R, and -126 showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.9 µg/L for sec-butylbenzene at TF3MW-133
- Maximum VOC exceedance: 62 µg/L for isopropylbenzene at TF3MW-123
- Maximum total VOCs: 82.38 µg/L for TF3MW-128

**June 2006:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -123, -126, -127, -128, and -133 contained VOC exceedances. Monitoring wells TF3MW-117, -119R, and -121R showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.2 µg/L for isopropylbenzene at TF3-CE3
- Maximum VOC exceedance: 54 µg/L for isopropylbenzene at TF3MW-21
- Maximum total VOCs: 81.2 µg/L for TF3MW-21

In August 2006, ORC<sup>®</sup> was injected at fifteen locations along Brooks Road near former well TF3MW-25 and existing wells TF3MW-123 and TF3MW-133 as shown on Figure 3-2.

### **September 2006:**

Monitoring wells TF3-CE3, TF3MW-21, -116, -123, -126, -127, -128, and -133 contained VOC exceedances. Monitoring wells TF3MW-117, -119R, and -121R showed no exceedances of NYS Groundwater Standards.

- Minimum VOC exceedance: 5.1 µg/L for sec-butylbenzene at TF3MW-21
- Maximum VOC exceedance: 101 µg/L for 1,2,4-trimethylbenzene at TF3MW-127
- Maximum total VOCs: 271.41 µg/L for TF3MW-127

### **Natural Attenuation**

Natural attenuation includes any reduction in concentration as a result of any of the natural attenuation processes, including dilution, dispersion, sorption, volatilization, biodegradation/biotransformation, and abiotic degradation/transformation.

In the original LTM workplan, groundwater samples were also analyzed for the following geochemical indicator parameters: alkalinity, dissolved ferrous iron, nitrate, sulfate, and sulfide. These parameters can be used to document if the groundwater conditions support *biological* natural attenuation processes, particularly hydrocarbon biodegradation. These parameters help to identify if groundwater conditions are aerobic or anaerobic, and to indicate if other alternate electron acceptors are available to assist in the biodegradation of remaining COCs.

Microorganisms obtain energy for cell production and maintenance by catalyzing the transfer of electrons from electron donors to electron acceptors. This process results in the oxidation of the electron donor (which, in this case, is benzene, toluene, ethylbenzene and xylene (BTEX)/Total Petroleum Hydrocarbons (TPH), and the reduction of the electron acceptor. In most scenarios, Dissolved Oxygen (DO) is the primary electron acceptor. After DO is consumed, anaerobic microorganisms generally use electron acceptors in the following order of preference – nitrate, ferric iron, sulfate, and carbon dioxide (Wiedemeier et al., November 1995). Anaerobic destruction of BTEX is associated with the reduction of nitrate, solubilization of iron, reduction of sulfate, and production of methane (the latter of which is not included in the list of geochemical parameters analyzed). Each of these parameters will be reviewed in the following subsections. Please refer to Table 3-2 for natural attenuation parameter results.

### **Dissolved Oxygen (DO)**

Oxygen is the most thermodynamically preferred electron acceptor and is normally depleted in areas with relatively higher BTEX/TPH concentrations. The Tank Farms 1& 3 site contained data within normal DO ranges but did show lower readings during the June (summer) and September (fall) 2002 sampling rounds at several well locations (TF3-CE3, TF3MW-21, -116, -123, -124, -127, -128, and -129). No correlation could be found between depleted DO levels within plume boundaries or at contaminated monitoring wells. It does appear that DO levels have been rising site wide since LTM began. Please note that DO levels were measured in the field from samples collected with a disposable bailer and do not necessarily represent subsurface conditions.

### **Nitrate**

After the DO has been consumed, nitrate is used as an alternate electron acceptor for anaerobic biodegradation. In this process, nitrate ( $\text{NO}_3^-$ ) is converted to nitrite ( $\text{NO}_2^-$ ); therefore, nitrate depletion relative to background conditions can be an indication of biological activity. Depleted nitrate conditions appear to exist at monitoring wells within most of the designated plume areas. Nitrate levels in three uncontaminated and upgradient/crossgradient monitoring wells (TF3MW-2, -25, -130, -131, and -132) detections were generally within the range of 0.8 to 2 mg/L. These monitoring wells also showed no contamination during sample analysis. Monitoring wells within the eastern plume show mostly depleted or undetectable nitrate levels. Downgradient well TF3-CE3 showed some nitrate depletion, with levels between 0.087 and 0.71 mg/L that are higher than the source area but lower than uncontaminated upgradient or crossgradient wells. Downgradient wells TF3MW-116 through -119R and -126 also showed depleted or undetectable nitrate ranges of 0-2.5 mg/L with no or low levels of contamination. In addition, uncontaminated well TF3MW-124 and contaminated wells TF3MW-21, -123, and -125 within the western plume boundary along Brooks Road showed depleted or undetectable levels of nitrate when compared to uncontaminated upgradient wells discussed above. It should be noted that downgradient replacement monitoring well TF3MW-121R showed a positive detection of nitrate at 1.2 mg/L for the September 2004 sampling round. The absence of nitrate in within-plume and downgradient wells suggests biological activity associated with nitrate reduction has consumed the available nitrate in areas affected with relatively higher levels of contamination. It was recommended that nitrate no longer be sampled for at the Tank Farms 1 & 3 SRA after March 2005.

### **Dissolved Iron**

After DO and nitrate have been depleted by microbial activity, ferric iron ( $\text{Fe}^{3+}$ ) is used as an electron acceptor during anaerobic biodegradation of hydrocarbons. Ferric iron is reduced to ferrous iron ( $\text{Fe}^{2+}$ ), which is soluble in groundwater, and is therefore an indicator of microbial degradation activity. The presence of ferrous iron above background levels is indicative of anaerobic consumption of petroleum hydrocarbons via iron reduction. Low dissolved iron levels were identified at upgradient/crossgradient uncontaminated locations TF3MW-2, -25, -128, -129, and -130, with an approximate range of 0-1.8 mg/L. Monitoring wells within the Building 147

plume (TF3MW-127, and TF3-CE3) as well as downgradient wells TF3MW-116, -117, and -126 contained relatively higher levels (1-6.5 mg/L) of ferrous iron than upgradient, uncontaminated wells described above. The western plume along Brooks Road shows similar results with contaminated wells TF3MW-21, -123, and, -125 showing relatively elevated ferrous iron levels (1.6 – 5.6 mg/L). Crossgradient well TF3MW-124 showed slightly elevated levels 0.2 –3.2 mg/L, while downgradient uncontaminated monitoring wells TF3MW-118, -120, and -121 all showed undetectable ferrous iron levels. Monitoring wells TF3MW-119, -121 and its replacement wells TF3MW-119R and -121R, located downgradient of TF3MW-123, show undetectable and low levels (0-1 mg/L) during sampling rounds in addition to minor SVOC contamination for the 2002 sampling round only. The presence of ferrous iron above background levels within plume boundaries is indicative of anaerobic degradation of petroleum hydrocarbons in the vicinity of these wells.

### **Sulfate**

Sulfate is the next thermodynamically preferred alternate electron acceptor and is used by microbes once the oxygen, nitrate, and ferric iron have been depleted by the anaerobic biodegradation of hydrocarbons. Sulfate is converted to sulfide in the subsurface during anaerobic biodegradation, often forming hydrogen sulfide gas, which produces a “rotten egg” odor. This process results in a depletion of sulfate and the production of sulfide. Sulfide may not always be detected in groundwater samples, however, because it commonly forms metal sulfide precipitates and falls out of solution. Sulfate levels at upgradient/crossgradient uncontaminated locations TF3MW-2, -25, -129, and -130 did not differ significantly when compared to contaminated, within-plume wells TF3MW-21, -123, -125, -127, and -128. Sulfide was detected during the March 2004 sampling round, but was identified just above the detection limit at wells TF3-CE3, TF3MW-116, -123, -127, -130, -131, -132 and -133. These results indicate that sulfate reduction is not a significant process for the potential anaerobic completion of petroleum hydrocarbons at the site and sulfate sampling was discontinued after the March 2004 sampling round.

### **Alkalinity**

Aerobic biodegradation (during the oxidation of hydrocarbon) uses oxygen to oxidize the hydrocarbon and produces carbon dioxide by the process known as mineralization. When carbon dioxide is produced, it increases the alkalinity, or the water’s ability to buffer an acid, and can therefore be an indicator of biological activity. In general, areas contaminated with hydrocarbons exhibit a higher total alkalinity than background areas. Changes in alkalinity are most pronounced during aerobic respiration, denitrification, iron reduction, and sulfate reduction. Generally higher (>200 mg/L) alkalinity levels were originally measured in downgradient or within-plume wells (TF3-CE3, TF3MW-116, -117, -120, -121, -126, -127, -128, -133) than other wells at the site, with levels generally less than 200 mg/L. It should be noted that alkalinity levels are most likely to be higher in wells downgradient of the plumes; some of the highest levels reported above 300 mg/L were associated with wells TF3CE-3 and TF3MW-116, -117,

-126, and -128. These results now appear to be inconclusive when compared to historical data. High and low alkalinity measurements were found at both contaminated and uncontaminated wells that were upgradient, downgradient, and crossgradient from known sources and existing plumes. Some of the most contaminated areas (TF3MW-123, -21) showed low levels of alkalinity as did its downgradient wells (TF3MW-119, -119R). Alkalinity has become less of an indicator of biodegradation as the plume stabilizes and the clean perimeter wells are no longer sampled with remaining LTM wells.

### **pH**

Hydrocarbon-degrading microbes are active within a pH range of 5 to 9 standard units (s.u.). There was no clear correlation with pH and contaminant locations. All pH readings are within normal ranges with no discernable trends identified between pH levels and seasonal variations or contaminant levels between wells.

### **Temperature**

Groundwater temperature affects the rate of biodegradation, and for every 10 °C increase in temperature between 5 and 25 °C, biodegradation rates may double. The highest groundwater temperatures were found during the fall and winter sampling rounds and the lowest observed during spring and summer sampling, with temperatures falling within normal variation. The temperature discrepancy may be caused by buried steam heat piping at the site which is active during fall, winter and early spring.

### **Specific Conductance**

Specific conductance is a measure of a groundwater's ability to conduct electricity. As the concentration of ions in solution increases, the specific conductance increases. Specific conductance was found to be highest during the summer and fall (June and September) sampling round and lowest during the winter (December, February) sampling.

### **Redox (Reduction/Oxidation Potential)**

The redox potential of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. The redox potential of groundwater typically ranges from -400 mV to +800 mV. Positive redox values (redox > 0) indicate oxidizing (and generally aerobic) conditions (i.e., loss of electrons) and negative measurement (redox < 0) indicate reducing (and generally anaerobic) conditions (i.e., gain of electrons). Redox conditions are usually mediated by biological activity. Positive redox measurements are generally favorable for hydrocarbon biodegradation. Mostly, there appears to be site-wide negative redox measurements throughout, except for TF3MW-121 (which was decommissioned and replaced by TF3MW-121R), TF3MW-2, -128, -129, -130, -131, and -132 during the past sampling rounds. These measurements are consistent with the observation of ongoing anaerobic processes such as nitrate and iron reduction, therefore the potential for significant biodegradation is severely limited.

### **3.5 CONCLUSIONS AND RECOMMENDATIONS**

The 2002 source removal excavation (Parsons, December 2003) positively affected localized groundwater conditions. Removal of the residual soil contamination continued into the saturated zone where contamination was located and eliminated additional leaching of contamination to groundwater from the vadose zone.

In Fall 2005, ORC<sup>®</sup> Advanced was injected into the source area of Tank Farms 1 & 3 near TF3MW-128 (as shown on Figure 3-2) and added to monitoring wells TF3MW-21, -116, -117, -118R, 121R and -123 by the use of ORC<sup>®</sup> socks. In Summer 2006, additional ORC<sup>®</sup> was injected in the vicinity of monitoring wells TF3MW133, TF3MW-123 and former well TF3MW-125 to promote biodegradation. The original LTM plan is summarized in Table 3-1. An optimized LTM network is listed in Table 3-4 and shown on Figure 3-2.

Monitoring wells TF3MW-123, -127, -128, and -133 appear to be the most contaminated wells, with VOC contamination that is primarily isopropylbenzene, ethylbenzene, and 1,2,4-trimethylbenzene. Contaminant levels appear to be attenuating, with downgradient locations showing no increases in contamination with the exception of TF3MW-126 which contained returning VOC exceedances in the summer and fall 2006 sampling rounds. Based on the December 2001 through September 2006 quarterly sampling and review of analytical results, a groundwater plume exists as shown on Figure 3-2.

Groundwater contamination data and review of natural attenuation parameters shows definite seasonal fluctuations. In addition to the decline of total VOC levels over time, nitrate depletion, ferrous iron production, and increased alkalinity have provided the best evidence of natural attenuation provided by biodegradation at the site. No definable trends or attenuation mechanisms were identified after reviews of sulfate and sulfide levels. Generally, low levels of sulfate indicate that sulfate reduction is not a major anaerobic pathway for the site and sulfate analysis was discontinued after March 2004. In general, biodegradation processes appear to be severely electron acceptor-limited at the site.

Additional ORC<sup>®</sup> injection may follow the review of LTM data in December 2007 to decide if additional injection would be needed to aid further biodegradation at the site. A mobile biosparging setup will also be evaluated for intermittent application at the most contaminated wells (TF3MW-123, -127 and -128), to enhance bioremediation.

**Table 3-3**  
**Tank Farms 1 and 3 Proposed Future LTM Sampling**

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
TF3-CE3 TF3MW-21 TF3MW-116 TF3MW-117 TF3MW-119R TF3MW-121R TF3MW-123 TF3MW-126 TF3MW-127 TF3MW-128 TF3MW-133	Within plume Within plume Within plume Crossgradient of plume Downgradient of plume Downgradient of plume Within plume Within plume Within plume Within plume Within plume	VOCs (AFCEE QAPP 4.0 List)/SW8260 Alkalinity/310.2	Annually	The plume is stable.
<b>Recommended LTM Changes</b>				
<b>Analysis Changes</b>				
TF3MW-119R TF3MW-121R	Downgradient of plume Downgradient of plume	SVOCs/SW8270	--	SVOCs were not identified at these wells following six sampling rounds. SVOC sampling is no longer needed.

**Table 3-3 (continued)**  
**Tank Farms 1 and 3 Proposed Future LTM Sampling**

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
<b>Historical LTM Network Changes</b>				
<b>June 2006</b>				
<b>Analysis/Frequency Change</b>				
All sampled wells	--	Nitrate/353.2		Nitrate is no longer a useful biodegradation indicator at the Tank Farms 1 and 3 site, and will not be sampled after the Winter 2006 sampling round.
<b>November 2005</b>				
<b>Removed Sampling Locations</b>				
TF3MW-131 TF3MW-132	Upgradient of plume Upgradient of plume			Previous quarterly LTM samples indicate that no contamination is present and additional groundwater sampling is not needed.
<b>February 2005</b>				
<b>Removed Sampling Locations</b>				
TF3MW-124 TF3MW-129 TF3MW-130	Crossgradient of plume Upgradient of plume Upgradient of plume			Previous quarterly LTM samples indicate that no contamination is present and additional groundwater sampling is not needed.
<b>June 2004</b>				
<b>Analysis/Frequency Changes</b>				
All sampled wells	--	Sulfate/376.3 Sulfide/375.4	--	Sulfate reduction is depleted and will no longer be sampled during June 2004 round.

**Table 3-3 (continued)**  
**Tank Farms 1 and 3 Proposed Future LTM Sampling**

Sampling Locations	Sampling Rationale	Target Analytes/ Method Numbers	Sampling Frequency	Evaluation Criteria/ Modification Justification
<b>Added Sampling Locations</b>				
TF3MW-119R TF3MW-121R	Downgradient of plume Downgradient of plume	VOCs and SVOCs(AFCEE QAPP 3.1 List)/SW8260 and SW8270 Alkalinity/310.2 Nitrate/353.2	Quarterly	Quarterly monitoring with semi-annual evaluation and recommendations. SVOC analysis was added due to previous identification of SVOC contamination. Monitoring well locations were replacements for previous well locations.
<b>Removed Sampling Locations</b>				
TF3MW-118 TF3MW-119 TF3MW-120 TF3MW-121	Downgradient of plume Downgradient of plume Downgradient of plume Downgradient of plume	VOCs (AFCEE QAPP 3.1 List)/SW8260	Quarterly	Decomissioned March 2002 due to site construction.
TF3MW-1 TF3MW-25 TF3MW-125	Within plume Crossgradient of plume Within plume	VOCs (AFCEE QAPP 3.1 List)/SW8260	Quarterly	Destroyed 2003 due to site construction.

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#### **4 REFERENCES**

- AFCEE (Air Force Center for Environmental Excellence). Quality Assurance Project Plan, Version 3.1, August 2001.
- AFCEE (Air Force Center for Environmental Excellence). Quality Assurance Project Plan, Version 4.0, February 2005.
- E&E, Basewide Environmental Baseline Survey Supplement (Update 3), Griffiss AFB, New York, December 1997.
- E&E, Final Report for Supplemental Investigations of Areas of Concern, Griffiss Air Force Base, July 1998.
- E&E, Well/Piezometer Inventory (October 1998) Report for the Former Griffiss Air Force Base, Rome, New York, January 1999.
- FPM, Draft Supplemental Study Report Tank Farms 1 and 3 Source Removal Area of Concern, September 2000.
- FPM, Petroleum Spill Sites Long Term Monitoring Program Draft Work Plan Addendum III,, Former Griffiss Air Force Base, Revision 0.0, May 2003.
- FPM, Tank Farms 1 and 3 Source Removal Area of Concern Long Term Monitoring Draft Work Plan, November 2001.
- FPM, Field Sampling Plan, Long Term Monitoring Program at the Former Griffiss Air Force Base, June 2003.
- FPM, Draft Long Term Monitoring Report, Petroleum Source Removal Areas of Concern, Long Term Monitoring Program at the Former Griffiss Air Force Base, February 2004.
- Law Engineering and Environmental Services, Inc., Draft Final Primary Report, Remedial Investigation at Griffiss Air Force Base, December 1996.
- Law Engineering and Environmental Services, Inc. Tank Farms 1 and 3 Predesign Investigation Technical Memorandum, February 1995.
- Law Engineering and Environmental Services, Inc. Draft-Final Primary Report. Volume 19, Remedial Investigation of Building 112 Area of Concern, December 1996.

- McAllister, P.M. and C.Y. Chiang. *A Practical Approach to Evaluating Natural Attenuation of Contaminants in Ground Water*. Ground Water Monitoring Review. Spring 1984: 161-173.
- New York Natural Heritage Program, 1993 Rare plant species and significant natural communities at Griffiss Air Force Base in Rome, New York, January 1994.
- NYSDEC, Interim Procedures for Inactivation of Petroleum-Impacted Sites, January 1997.
- NYSDEC, New York State Ambient Water Quality Standards and Guidance Values, June 1998.
- NYSDEC, Spill Technology and Remediation Series (STARS), Guidance Values for Fuel Contaminated Soil, August 1992.
- NYSDEC, TAGM 4046, Determination of RSCOs and Cleanup Levels, January 1994.
- Parsons, Remedial Action Report for Source Removal Area of Concern, AOC SS-20 Tank Farms 1 & 3 at the Former Griffiss AFB, Rome, NY, December 2003.
- Tetra Tech, Basewide Environmental Baseline Survey, Griffiss AFB, New York, September 1994.
- Weston, Roy F., Subsurface Investigations At Tank Farms 1 and 3, November 1985  
(Note: document was contained in Appendix D of the Engineering Evaluation. Cost Analysis Report for Tank Farms 1 and 3).
- Wiedemeier, T.H.; Wilson, J.T.; Wilson, B.H.; Kampbell, D.H.; Miller, R.N.; Hansen, J.E. Technical Protocol for Implementing Intrinsic Remediation with Long-Term Monitoring for Natural Attenuation of Fuel Contamination Dissolved in Groundwater, Draft – Revision 0, Air Force Center for Environmental Excellence, November 1995.

# Appendices

### Daily Chemical Quality Control Report

Project/Delivery Order Number: F41624-03-D-8601-0027

Date: 06/20/06

Project Name/Site Number: Griffiss Petro SRAs Landfills LTM sampling (Tank Farms 1 and 3, Apron 2, and Building 789).

Weather conditions: Temperature: 75 Barometric reading: 29.87  
Wind direction and speed: west 14 mph.  
Significant wind changes: none.

General description of tasks completed: Bailer sampling at Site Tank Farms 1 and 3 (TF3MW-21, -116, -117, -119R, -121R, -123, -126, -127, -128, -133, and TF3CE3) and Site Apron 2 (AP2MW-3, -14, -LD1SW, -B1NE2, and 782VMW-102) and Site Building 789 (789MW-102). Surface water sampling at Site Apron 2 (782SW-118, -119, and -120).

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Explain any departures from the SAP or deviations from approved procedures during the day's field activities: none.

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Explain any technical problems encountered in the field or field equipment/field analytical instrument malfunction: none.

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Corrective actions taken or instructions obtained from AFCEE personnel: No corrective actions necessary.

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Sampling shipment completed:  Yes  No STL courier.

DCQCR Prepared by: Niels van Hoesel, FOM

Date: 21 June 2006

CQCC Signature: Concordia van Hoesel Date: 6/23/06

#### ATTACHMENTS:

Checklist	Daily Chemical Quality Control Report Attachments
<input checked="" type="checkbox"/>	✓ Field sampling forms
<input checked="" type="checkbox"/>	✓ Equipment Calibration Log
<input checked="" type="checkbox"/>	✓ Copies of COCs
<input checked="" type="checkbox"/>	✓ SDG Table (See accompanying COCs)
<input checked="" type="checkbox"/>	✓ Daily Health and Safety Meeting Form

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: JU PC  
 Location and Site Code (SITEID): TF 183  
 Well No. (LOCID): WL-TF3MW-116 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/05 Weather: Sunny, 80°

**CASING VOLUME INFORMATION:**

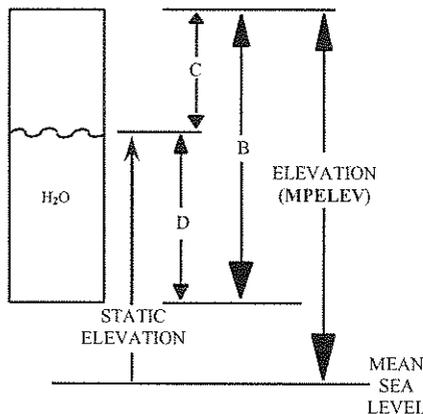
Casing ID (inch)	1.0	1.5	<u>2.0</u>	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	<u>0.16</u>	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 21.07 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.71 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} - 1 = \frac{21.07}{13.71} - 1 = 0.53$  (D) = 7.36 ft.

Casing Water Volume (E) =  $\frac{(A)}{(D)} \times 7.36 = \frac{0.16}{(D)} \times 7.36 = 1.18$  gal

Minimum Purge Volume = 3.53 gal (3 well volumes)



Fe<sup>2+</sup>: 45 mg/l

Purge Date and Method: Bailer

Physical Appearance/Comments: Cloudy, Brown, No odor, Petro odor

**FIELD MEASUREMENTS:**

Allowable Range: ± 0.1    ± 5%    ± 1°C

*became noticeable*

Time	Volume Removed (gal)	pH	EC (µS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1045	0.75	7.10	0.176	11.7	213	5.97	-98
1046	1.50	7.05	0.173	11.1	189	7.77	-96
1049	2.25	7.07	0.168	11.1	184	9.08	-95
1051	3.00	7.04	0.170	11.1	176	7.54	-95
1053	3.75	7.02	0.169	11.0	140	6.82	-92

Sample Time: 1055 Sample ID: TF3M116140A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-09-27      Sampled by: PC SD  
 Location and Site Code (SITEID): TF 1.3  
 Well No. (LOCID): WL-TF3MW-117      Well Diameter (SDIAM): 2  
 Date (LOGDATE): 8-20-06      Weather: 75

**CASING VOLUME INFORMATION:**

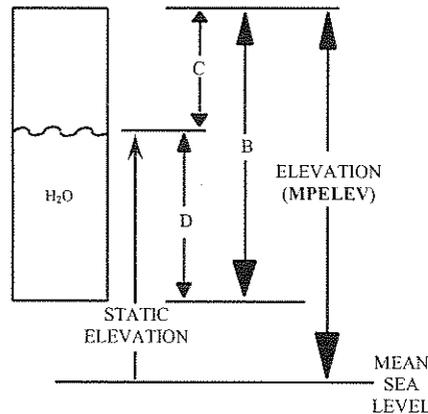
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 21.20 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.24 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(C)}{(D)} = 7.96$  ft.

Casing Water Volume (E) =  $\frac{(A)}{(D)} \times (D) = 1.27\%$  gal

Minimum Purge Volume = 3.82 gal (3 well volumes)



FE 9.2

Purge Date and Method: Boiley

Physical Appearance/Comments: Silty orange, petro odor

**FIELD MEASUREMENTS:**

Allowable Range:      ± 0.1      ± 5%      ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1024	1	7.52	0.115	12.4	443	6.22	-109
1025	2	7.21	96.6	11.6	185	4.67	-97
1027	3	7.09	95.7	11.3	119	4.52	-95
1028	4	7.05	94.6	11.5	81	4.64	-92
1030	5	7.06	94.0	11.7	62	2.97	-85

Sample Time: 1033      Sample ID: TF3M11713 0A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: JD PC  
 Location and Site Code (SITEID): TF 16-3  
 Well No. (LOCID): WL-TF3MW-119R Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: Sunny, 70's

**CASING VOLUME INFORMATION:**

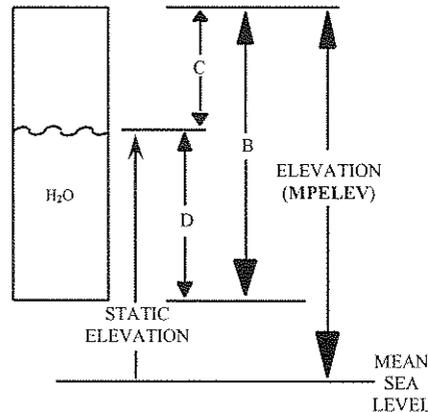
Casing ID (inch)	1.0	1.5	<u>2.0</u>	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	<u>0.16</u>	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 18.43 ft.  
 Measured Water Level Depth (C) (STATDEP) 12.42 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(C)}{(D)} = \underline{6.01}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{6.01}{(D)} = \underline{0.96}$  gal

Minimum Purge Volume = 2.88 gal (3 well volumes)



Purge Date and Method: Bailer

Physical Appearance/Comments: Silty Brown, Petro odor became stronger, Shales  
Fe<sup>2+</sup>: 0.7 mg/L

**FIELD MEASUREMENTS:**

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (µS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
0925	0.75	6.60	0.142	15.6	>999	6.71	64
0927	1.50	7.00	0.137	14.4	>999	6.53	-8
0928	2.25	7.16	0.133	14.0	>999	7.59	-30
0930	3.00	7.29	0.133	13.9	>999	10.36	-36
0931	3.75	7.33	0.133	13.8	>999	7.09	-53
0933	4.50	7.33	0.133	14.1	>999	9.19	-53

Sample Time: 0935 Sample ID: TF3M119R120A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: JD Pc  
 Location and Site Code (SITEID): TF12-3  
 Well No. (LOCID): WL-TF3MW-121R Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: Sunny, 80°

**CASING VOLUME INFORMATION:**

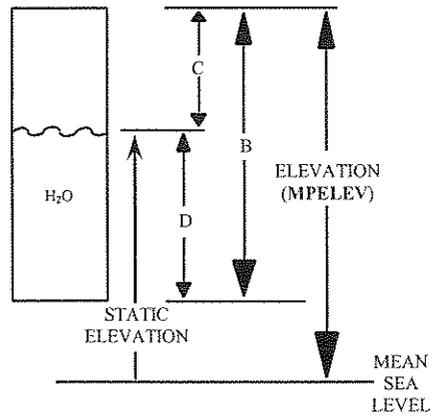
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 17.19 ft.  
 Measured Water Level Depth (C) (STATDEP) 11.96 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(C)}{(D)} = 5.23$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{5.23}{(D)} = 0.84$  gal

Minimum Purge Volume = 2.52 gal (3 well volumes)



Fe 0.8

Purge Date and Method: Bailer

Physical Appearance/Comments: Silty brown no odor

**FIELD MEASUREMENTS:**

Allowable Range:            ± 0.1            ± 5%            ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
958	0.75	7.65	.130	17.3	>999	5.83	58
959	1.50	7.34	.131	17.6	>999	4.56	55
1001	2.25	7.28	.133	17.7	>999	4.51	57
1002	3.0	7.30	.133	17.6	>999	5.73	60
1007	3.75	7.34	.134	17.6	>999	5.17	63

Sample Time: 1005 Sample ID: TF3M121R120A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

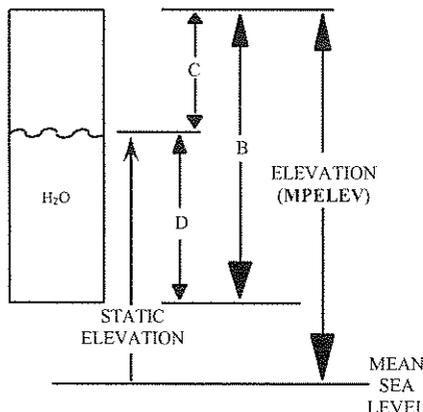
Project: 40-05-27      Sampled by: PC JD  
 Location and Site Code (SITEID): TF 1+3  
 Well No. (LOCID): WL-TF340W-123      Well Diameter (SDIAM): 2  
 Date (LOGDATE): 6-20-06      Weather: 80

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 20.51 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.76 ft.  
 Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(C)}{(D)} = \frac{20.51}{13.76} - \frac{13.76}{13.76} = 0.48$  ft.  
 Casing Water Volume (E) =  $\frac{(A)}{(D)} \times (D) = \frac{0.04}{0.48} \times 13.76 = 1.08$  gal  
 Minimum Purge Volume = 3.24 gal (3 well volumes)



Fe 3.6

Purge Date and Method: Boiler  
 Physical Appearance/Comments: cloudy pale odor

**FIELD MEASUREMENTS:**

Allowable Range:      ± 0.1      ± 5%      ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1117	1	7.61	76.7	12.4	121	9.25	-89
1119	2	7.32	75.9	11.7	88.1	4.70	-95
1121	3	7.70	79.9	11.6	55.8	6.33	-95
1122	4	7.30	74.4	11.9	37.8	5.83	-95
1125	4.50	7.26	74.7	11.5	31.7	6.08	-99

Sample Time: 1129      Sample ID: TF3M12314 0A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: NVH DF  
 Location and Site Code (SITEID): Tanda Farm 1+3  
 Well No. (LOCID): TF3MW-126 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: JS Sunny

CASING VOLUME INFORMATION:

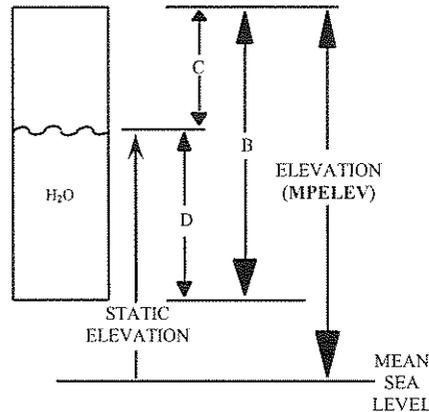
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 20.86 ft.  
 Measured Water Level Depth (C) (STATDEP) 17.63 ft.  
 Length of Static Water Column (D) =  $\frac{20.86}{(B)} - \frac{17.63}{(C)} = \frac{7.23}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{7.23}{(D)} = \frac{1.15}{(E)}$  gal

Minimum Purge Volume = 3.47 gal (3 well volumes)



Purge Date and Method: 6/20/06 bailer  
 Physical Appearance/Comments: poor odor  $Fe^{3+} = 4.8$  mg/l

FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^{\circ}C$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
11:18	1	7.57	91.2	11.5	99.0	5.04	125
11:20	2	7.53	88.9	11.1	601	4.55	36
11:22	3	7.53	88.1	10.4	460	2.91	-44
11:24	4	7.50	88.0	10.4	34.7	2.92	-57

Sample Time: 11:26 Sample ID: TF3M126140A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $Fe^{2+}$ ,  $CH_4$ ,  $H_2S$ ) parameters should be sampled first.

## WELL PURGING &amp; SAMPLING FORM

Project: 40-05-22 Sampled by: NVH DF  
 Location and Site Code (SITEID): Panhandle Farms 1+3  
 Well No. (LOCID): TF3MW-127 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: 75° sunny

## CASING VOLUME INFORMATION:

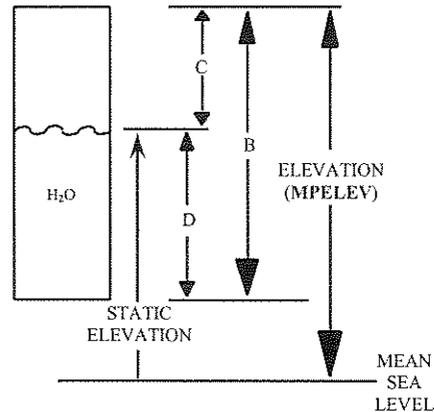
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

## PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 19.65 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.48 ft.  
 Length of Static Water Column (D) =  $\frac{19.65}{(B)} - \frac{13.48}{(C)} = \frac{6.17}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{6.17}{(D)} = \frac{0.98}{(E)}$  gal

Minimum Purge Volume = 2.96 gal (3 well volumes)



Purge Date and Method: 6/20/06 bailer

Physical Appearance/Comments: very slight odor  $[Fe^{2+}] = 3.2 \text{ mg/l}$

## FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (µS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
9:57	1	6.91	0.109	11.8	89.2	4.40	251
9:58	2	7.05	0.111	11.1	118.0	3.34	232
9:59	3	7.69	0.112	10.7	107.0	3.13	204
10:01	4	7.12	0.113	10.5	99.3	2.92	165
10:03	5	7.15	0.112	10.6	97.5	2.88	118

Sample Time: 10:06 Sample ID: TF3M127130A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $Fe^{2+}$ ,  $CH_4$ ,  $H_2S$ ) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: NVH DF  
 Location and Site Code (SITEID): Tank Farm 143  
 Well No. (LOCID): TF3mw-128 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: 75° sunny

CASING VOLUME INFORMATION:

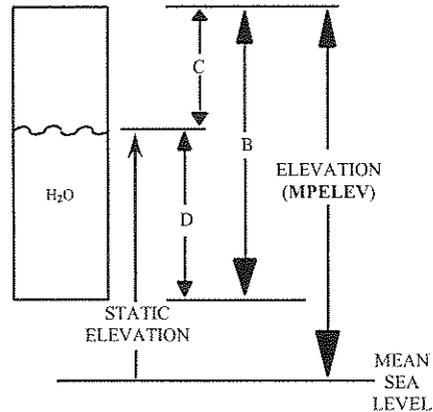
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 20.20 ft.  
 Measured Water Level Depth (C) (STATDEP) 14.23 ft.  
 Length of Static Water Column (D) =  $\frac{20.20}{(B)} - \frac{14.23}{(C)} = \frac{5.97}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{5.97}{(D)} = 0.955$  gal

Minimum Purge Volume = 2.86 gal (3 well volumes)



Purge Date and Method: 6/20/06 Spileo  
 Physical Appearance/Comments: clear no odor  $[Fe^{3+}] = 0.0$  mg/L.

FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ C$

Time	Volume Removed (gal)	pH	EC (µS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
9:30	1	6.55	0.097	120	153	5.31	228
9:32	2	6.72	0.093	12.0	132	3.62	222
9:34	3	6.91	86.0	108	148	4.76	223
9:36	3.5	6.93	84.6	10.7	1080	4.99	228
9:38	4	6.93	84.0	10.7	80.3	4.47	271

Sample Time: 9:40 Sample ID: TF3M128140A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $Fe^{2+}$ ,  $CH_4$ ,  $H_2S$ ) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 46-05-27 Sampled by: NVH DF  
 Location and Site Code (SITEID): Pank Farms 1+3  
 Well No. (LOCID): TF3 MW-133 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: 75° sunny

**CASING VOLUME INFORMATION:**

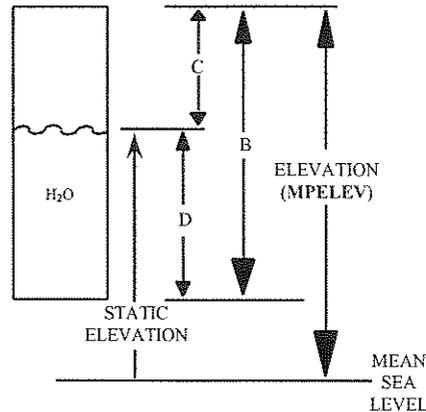
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 22.20 ft.  
 Measured Water Level Depth (C) (STATDEP) 16.33 ft.  
 Length of Static Water Column (D) =  $\frac{22.20}{(B)} - \frac{16.33}{(C)} = \frac{5.87}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{5.87}{(D)} = \frac{0.94}{(D)}$  gal

Minimum Purge Volume = 2.81 gal (3 well volumes)



Purge Date and Method: 6/20/06 bailer

Physical Appearance/Comments: slight odor  $Fe^{3+} = 0.4$  mg/L

**FIELD MEASUREMENTS:**

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^{\circ}C$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
11:44	1	7.61	70.5	11.6	98.9	7.87	159
11:46	2	7.41	89.9	10.7	99.0	3.05	122
11:49	3	7.45	96.7	10.3	83.6	2.80	102
11:52	4	7.51	95.3	10.4	61.1	2.57	90
11:53	5	7.51	94.0	10.3	61.9	2.80	90

Sample Time: 11:54 Sample ID: TF3M133160A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity,  $Fe^{2+}$ ,  $CH_4$ ,  $H_2S$ ) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: JD PC  
 Location and Site Code (SITEID): TF183  
 Well No. (LOCID): TF3MW21 Well Diameter (SDIAM): 4"  
 Date (LOGDATE): 6/20/06 Weather: Sunny, 80°

CASING VOLUME INFORMATION:

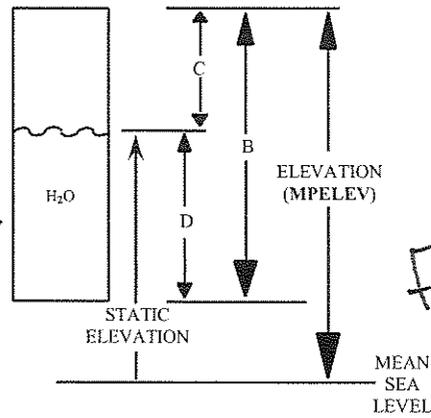
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	<u>4.0</u>	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	<u>0.65</u>	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 76.02 ft.  
 Measured Water Level Depth (C) (STATDEP) 14.42 ft.  
 Length of Static Water Column (D) = 11.6° ft.

Casing Water Volume (E) =  $\frac{0.65}{0.16} \times 11.6 = 4.67 \times 11.6 = 54.17$  gal

Minimum Purge Volume = 22.62 gal (3 well volumes)



Fe<sup>2+</sup>: 3.7 mg/L

Purge Date and Method: Bailer  
 Physical Appearance/Comments: Silty Orange, Petro odor, No Sheen

FIELD MEASUREMENTS:

Allowable Range: ± 0.1    ± 5%    ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1319	4.0	7.65	95.7	13.2	509	5.49	-122
1323	8.0	7.20	94.9	11.6	575	10.64	-95
1328	12.0	7.21	92.8	11.4	592	7.06	-99
1331	16.0	7.23	93.6	11.4	484	6.74	-100
1334	20.0	7.25	90.9	11.4	371	7.63	-101
1338	24.0	7.28	87.6	11.1	218	8.64	-99
1340	25.0	7.25	88.7	11.6	214	9.88	-96
1341	26.0	7.26	89.2	11.4	187	7.68	-97

Sample Time: 1339 Sample ID: TF3M21140A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: NVH DF  
 Location and Site Code (SITEID): Tank Farm 1+3  
 Well No. (LOCID): TF3 CE 3 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 6/20/06 Weather: 75°

CASING VOLUME INFORMATION:

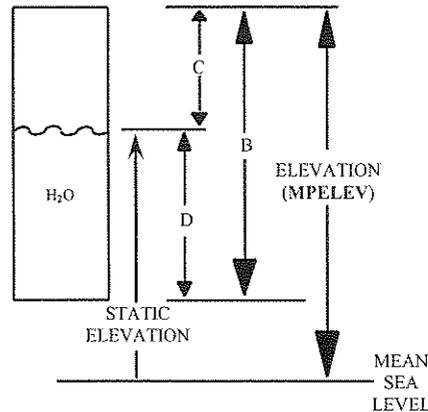
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 27.82 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.08 ft.  
 Length of Static Water Column (D) =  $\frac{27.82}{(B)} - \frac{13.08}{(C)} = \frac{14.74}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.65}{(A)} \times \frac{14.74}{(D)} = \frac{9.58}{(E)}$  gal

Minimum Purge Volume = 28.34 gal (3 well volumes)



Purge Date and Method: 6/20/06 bailer  
 Physical Appearance/Comments: heavy petro odor Fe<sup>3+</sup> = mg/L

FIELD MEASUREMENTS:

Allowable Range:            ± 0.1        ± 5%        ±1°C

Time	Volume Removed (gal)	pH	EC (µS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
10:32	5	7.51	0.107	10.7	193.0	7.25	189
10:40	10	7.36	0.108	10.7	133.0	4.91	10
10:45	15	7.40	0.109	10.7	118.0	4.75	5
10:51	20	7.44	0.109	10.8	137.0	5.34	20
10:57	25	7.47	0.110	10.7	131.0	4.68	11
11:00	28	7.46	0.110	10.8	94.5	6.05	29

Sample Time: 11:02 Sample ID: TF3CE3130A

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.





# AFCEE CHAIN OF CUSTODY RECORD (AC 63200)

COC#: 4\_SDG#: 134\_Cooler ID: A

Ship to: Mark Nemeo Severn Trent Laboratories 10 Hazelwood Drive, Suite 106 Amherst, NY 14228-2298 Tel: (716) 691-2600 Carrier: STL courier.	Project Name: Griffiss AFB TF 1 and 3 Sampling Sampler Name: David Forse	Send Results to: Niels van Hoesel FPM Group 153 Brooks Road Rome, NY 13441 Phone: (315) 336-7721 Ext. 205
Sampler Signature: <i>David P. Forse</i>		

Analyses Requested																
Field Sample ID	Location ID (LOCID)	Date	Time	MATRIX	SMCODE	SBD/SED	SACODE	Preservative	Filt./Unfilt.	No. of Containers	VOC note 1 40 mL vials (HCl)	SVOCs note 2 1 L amber	Total Alkalinity note 3 (zero headspace)	Nitrogen (Nitrate) note 4 16 oz poly	Total Sulfide Note 5 16 oz poly (ZnAc and NaOH)	Comments
TF3CE3130A	MW-CE	6/20	1102	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M21140A	TF3MW21	6/20	1339	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M116140A	WL-TF3MW-116	6/20	1055	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M117130A	WL-TF3MW-117	6/20	1033	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M119R120A	WL-TF3MW-119R	6/20	0935	WG	B	0/0	N	HCl	Unf.	6	3	2	1	-	-	
TF3M121R120A	WL-TF3MW-121R	6/20	1005	WG	B	0/0	N	HCl	Unf.	6	3	2	1	-	-	
TF3M123140A	WL-TF3MW-123	6/20	1129	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M126140A	WL-TF3MW-126	6/20	1126	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M127130A	WL-TF3MW-127	6/20	1006	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M128140A	WL-TF3MW-128	6/20	0940	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M133160A	WL-TF3MW-133	6/20	1154	WG	B	0/0	N	HCl	Unf.	4	3	-	1	-	-	
TF3M133160C	WL-TF3MW-133	6/20	1154	WG	B	0/0	FD	HCl	Unf.	4	3	-	1	-	-	
062006OE	FIELDQC	6/20	0815	WQ	B	0/0	EB	HCl	Unf.	5	3	1	1	-	-	
062006OF	FIELDQC	6/20	1107	WQ	NA	0/0	AB	HCl	Unf.	3	3	-	-	-	-	
062006OR	FIELDQC	6/20	0800	WQ	NA	0/0	TB	HCl	Unf.	3	3	-	-	-	-	

Collect water levels at all wells that are not sampled.

SO = Soil  
WS = Surface water

NA = Not Applicable (only for AB/TB)  
PP = Peristaltic Pump  
BP = Bladder Pump  
SP = Submersible Pump  
SS = Split Spoon

TB = Trip Blank  
EB = Equipment Blank  
FD = Field Duplicate  
MS = Matrix Spike  
SD = Matrix Spike Duplicate

Daily Health and Safety Meeting Form

Date: 6-20-06 Time: 8:15

Location: FPM office (garage)

Weather Conditions: 85° Sunny

Meeting Type: Daily Health and Safety

Personnel Present:  
D. Forse, J. Damann, P. Sorigliano, N. van Kessel

Visitors Present: ---

Visitor Training: ---

PPE Required: Modified D

Possible risks, injuries, concerns:  
trip slip fall + insects (bees, ticks, spiders)

Anticipated Releases to Environment (if so, describe and detail response action/control measures implemented):  
None

Property Damage:  
None

Description (include sequence of events describing step by step how incident happened):

Analysis for, and Implementation of Corrective/Preventative Procedure to Prevent Future Occurrences (to be formulated by SSHO + FOM, approved by PM, and SSHO implemented):

None

Report made by (Name): David P Forse

SSHP Organization Title: Site Safety and Health Officer ✓

## Daily Chemical Quality Control Report

Project/Delivery Order Number: F41624-03-D-8601-0027

Date: 09/26/06

Project Name/Site Number: Griffiss Petroleum Spills Sites sampling (Tank Farms 1 and 3).

Weather conditions: Temperature: 62 Barometric reading: 30.01  
Wind direction and speed: west 12 gusting 20 mph.  
Significant wind changes: none.

General description of tasks completed: Bailer sampling at Site Tank Farms 1 and 3 (TF3MW-21, -116, -117, -119R, -121R, -123, -126, -127, -128, -133, and TF3CE-3).

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Explain any departures from the SAP or deviations from approved procedures during the day's field activities: none.

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Explain any technical problems encountered in the field or field equipment/field analytical instrument malfunction: none.

---

Corrective actions taken or instructions obtained from AFCEE personnel: No corrective actions necessary.

---

Sampling shipment completed:  Yes  No LSL courier.

DCQCR Prepared by: Niels van Hoesel, FOM

Date: 26 September 2006

CQCC Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### ATTACHMENTS:

Checklist	Daily Chemical Quality Control Report Attachments
<input checked="" type="checkbox"/>	✓ Field sampling forms
<input checked="" type="checkbox"/>	✓ Equipment Calibration Log
<input checked="" type="checkbox"/>	✓ Copies of COCs
<input checked="" type="checkbox"/>	✓ SDG Table (See accompanying COCs)
<input checked="" type="checkbox"/>	✓ Daily Health and Safety Meeting Form

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: DB / PC  
 Location and Site Code (SITEID): TF3  
 Well No. (LOCID): TF3WW-21 Well Diameter (SDIAM): 4"  
 Date (LOGDATE): 9/26/06 Weather: cloudy / 60

**CASING VOLUME INFORMATION:**

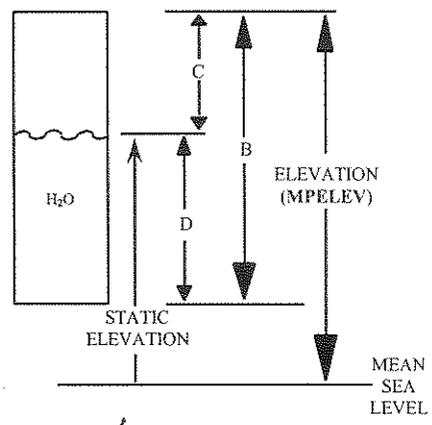
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 26.02 ft.  
 Measured Water Level Depth (C) (STATDEP) 14.33 ft.  
 Length of Static Water Column (D) =  $\frac{26.02}{(B)} - \frac{14.33}{(C)} = \frac{11.69}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.65}{(A)} \times \frac{11.69}{(D)} = \frac{7.59}{(E)}$  gal

Minimum Purge Volume = 22.8 gal (3 well volumes)



Purge Date and Method: bailed / 9-26-06

Physical Appearance/Comments: cloudy - petro odor  
iron: 2.8 mg/L

**FIELD MEASUREMENTS:**

Allowable Range:                    ± 0.1                    ± 5%                    ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1019	4	7.22	0.12	14.7	120	0.65	-113
1022	8	7.15	0.12	14.6	180	0.85	-111
1025	12	7.15	0.12	14.4	140	0.97	-110
1028	16	7.17	0.12	14.2	120	1.09	-112
1030	20	7.19	0.12	14.2	140	1.37	-112
1033	23	7.27	0.12	14.1	120	3.34	-116

Sample Time: 1035 Sample ID: TF3M214PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: PL  
 Location and Site Code (SITEID): TF3  
 Well No. (LOCID): TF3 MW - 116 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 9/2/06 Weather: 62 windy

**CASING VOLUME INFORMATION:**

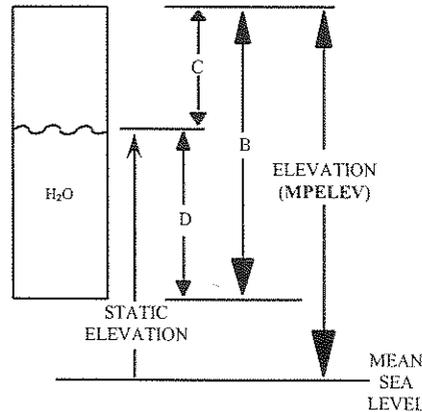
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 21.07 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.64 ft.  
 Length of Static Water Column (D) =  $\frac{21.07}{(B)} - \frac{13.64}{(C)} = \frac{7.43}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{7.43}{(D)} = \frac{1.18}{(E)}$  gal

Minimum Purge Volume = 3.56 gal (3 well volumes)



Ferrous: 3.2

Purge Date and Method: bailed  
 Physical Appearance/Comments: Silty Brown Petro odor

**FIELD MEASUREMENTS:**

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1043	1	7.51	.17	14.2	31	.29	-125
1044	2	7.39	.14	14.2	8	.61	-129
1045	3	7.31	.14	14.2	6	.77	-120
1047	4	7.30	.14	14.1	10	.70	-122

Sample Time: 1050 Sample ID: TF3M11614 P11

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: DB / PC  
 Location and Site Code (SITEID): TF3  
 Well No. (LOCID): TF3MW-117 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 9/26/06 Weather: 60 / cloudy

**CASING VOLUME INFORMATION:**

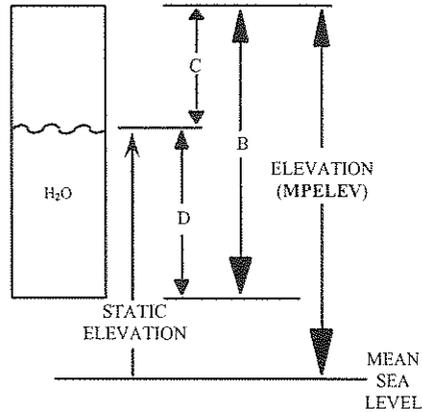
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 21.20 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.19 ft.  
 Length of Static Water Column (D) =  $\frac{21.20}{(B)} - \frac{13.19}{(C)} = \frac{8.01}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{8.01}{(D)} = \frac{1.28}{(D)}$  gal

Minimum Purge Volume = 3.84 gal (3 well volumes)



Purge Date and Method: bailey / 9-26-06

Physical Appearance/Comments: silty orange / no odor / petro odor at 3 gal  
iron: 4.0 mg/L

**FIELD MEASUREMENTS:**

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1102	1.0	7.27	0.16	15.5	46	2.18	-118
1104	2.0	7.15	0.16	15.6	47	0.00	-116
1106	3.0	7.15	0.16	15.7	63	0.00	-115
1107	4.0	7.14	0.16	15.7	61	0.51	-113

Sample Time: 1110 Sample ID: TF3M11713 PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-22 Sampled by: JW

Location and Site Code (SITEID): TF3

Well No. (LOCID): TF3MW-123 Well Diameter (SDIAM): 2"

Date (LOGDATE): 9/2/06 Weather: cloudy with a mix of rain + sun approximately 87°

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	<u>2.0</u>	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	<u>0.16</u>	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

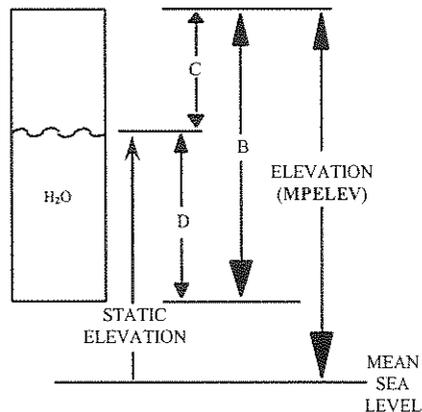
Measured Well Depth (B) (TOTDEPTH) 20.51 ft.

Measured Water Level Depth (C) (STATDEP) 13.69 ft.

Length of Static Water Column (D) =  $\frac{20.51}{(B)} - \frac{13.69}{(C)} = \frac{6.82}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{6.82}{(D)} = \frac{1.09}{(D)}$  gal

Minimum Purge Volume = 3.27 gal (3 well volumes)



Purge Date and Method: bailey

Physical Appearance/Comments: Silty orange water, ferro odor

FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
999	.75	7.87	83	15.6	170	2.96	-121
1000	1.50	7.57	82	15.2	270	2.42	-127
1001	2.25	7.37	82	15.1	10	2.48	-119
1002	3.0	7.34	82	15.0	17	2.75	-111
1003	3.75	7.33	81	14.9	3	3.09	-108

Sample Time: 1006 Sample ID: TF3M12314PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: NVIF

Location and Site Code (SITEID): TF3

Well No. (LOCID): TF3MW-119R Well Diameter (SDIAM): 2"

Date (LOGDATE): 9/2/06 Weather: 6000°C + Rain

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	<u>2.0</u>	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	<u>0.16</u>	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

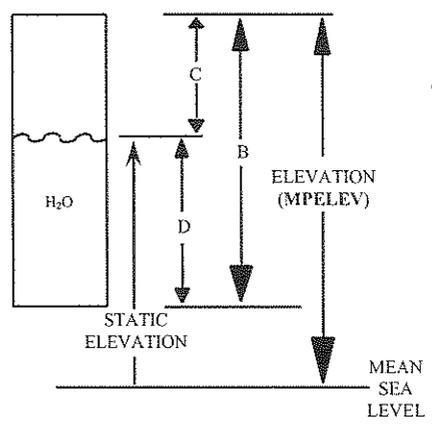
Measured Well Depth (B) (TOTDEPTH) 18.43 ft.

Measured Water Level Depth (C) (STATDEP) 12.35 ft.

Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(D)}{(D)} = 6.08$  ft.

Casing Water Volume (E) =  $\frac{(A)}{(D)} \times (D) = 0.9728$  gal

Minimum Purge Volume = 2.9244 gal (3 well volumes)



Ferrous: 0.6

Purge Date and Method: bailed

Physical Appearance/Comments: Silty Brown, no odor

Iron: 0.6 mg/L

**FIELD MEASUREMENTS:**

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
0908	0.75	5.71	93	16.7	720	0.0	152
0909	1.5	6.03	.11	16.8	710	.26	86
0910	2.25	6.27	.12	16.8	990	.84	34
0911	3	6.47	.11	16.8	400	1.13	2
0912	3.75	6.56	.10	16.5	150	11.5	-7
917	4.5	6.52	.12	16.8	240	1.65	-22

Sample Time: 9/5 Sample ID: TF3M119R12PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-22 Sampled by: DB / PC

Location and Site Code (SITEID): TF3

Well No. (LOCID): TF3mw-121R Well Diameter (SDIAM): 2"

Date (LOGDATE): 9/26/06 Weather: cloudy / 60

**CASING VOLUME INFORMATION:**

Casing ID (inch)	1.0	1.5	<u>2.0</u>	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	<u>0.16</u>	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

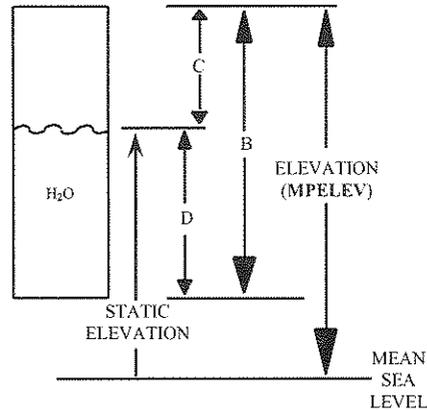
Measured Well Depth (B) (TOTDEPTH) 17.19 ft.

Measured Water Level Depth (C) (STATDEP) 11.89 ft.

Length of Static Water Column (D) =  $\frac{(B)}{(C)} - \frac{(D)}{(D)} = \frac{17.19}{11.89} - 1 = 0.44$  ft.

Casing Water Volume (E) =  $\frac{(A)}{(D)} \times (D) = \frac{0.16}{0.44} \times 17.19 = 6.2$  gal

Minimum Purge Volume = 2.5 gal (3 well volumes)



Purge Date and Method: bailed / 9-26-06

Physical Appearance/Comments: silty brown / no odor

iron: 0.0 mg/L

**FIELD MEASUREMENTS:**

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
0932	0.75	7.00	0.12	17.8	7999	2.13	20
0934	1.5	7.01	0.13	18.2	7999	0.31	24
0935	2.25	7.02	0.13	18.4	7999	0.00	14
0937	3.0	7.06	0.13	18.4	7999	0.00	29

Sample Time: 0938 Sample ID: TF3M121R12PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: NVH

Location and Site Code (SITEID): TF3

Well No. (LOCID): TF3MW-126 Well Diameter (SDIAM): 2"

Date (LOGDATE): 9/2/06 Weather: 70°C windy + snow

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

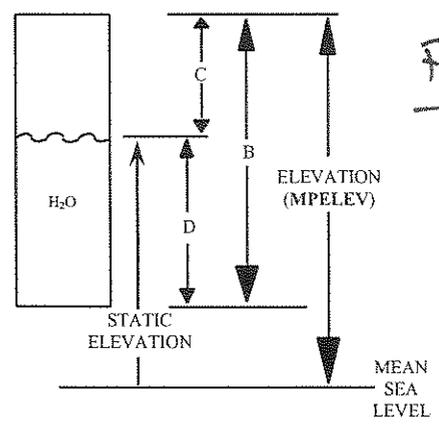
Measured Well Depth (B) (TOTDEPTH) 20.86 ft.

Measured Water Level Depth (C) (STATDEP) 13.54 ft.

Length of Static Water Column (D) =  $\frac{20.86}{(B)} - \frac{13.54}{(C)} = \frac{7.32}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{1.17}{(D)} = \frac{1.17}{(D)}$  gal

Minimum Purge Volume = 3.51 gal (3 well volumes)



Ferrous: 2.6

Purge Date and Method: \_\_\_\_\_ bailey

Physical Appearance/Comments: petro odor silty orange

FIELD MEASUREMENTS:

Allowable Range: ± 0.1    ± 5%    ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1117	1	7.36	93	14.9	400	2.62	-116
1118	2	7.30	87	14.4	56	1.63	-122
1121	3	7.29	86	14.3	0	2.50	-122
1122	4	7.28	87	14.4	0	3.00	-121

Sample Time: 1124 Sample ID: TF3M12614PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

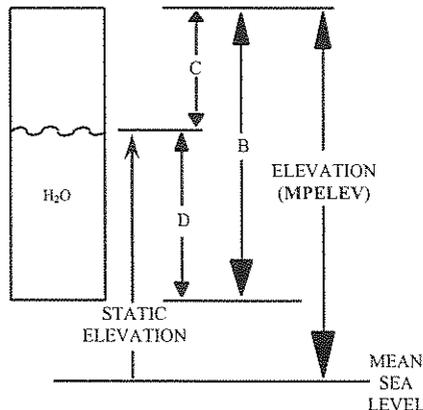
Project: 40-05-27 Sampled by: DB/PC  
 Location and Site Code (SITEID): TF3  
 Well No. (LOCID): TF3M-W-127 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 9/26/06 Weather: sun 160°

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 19.65 ft.  
 Measured Water Level Depth (C) (STATDEP) 13.41 ft.  
 Length of Static Water Column (D) =  $\frac{19.65}{(B)} - \frac{13.41}{(C)} = \frac{6.24}{(D)}$  ft.  
 Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{6.24}{(D)} = \frac{0.99}{(E)}$  gal



Minimum Purge Volume = 2.99 gal (3 well volumes)

Purge Date and Method: bailey / 9-26-06  
 Physical Appearance/Comments: clear / with petro odor  
iron = 4.2 mg/L

FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1400	0.75	7.28	82.6	14.0	70.7	7.37	51
1401	1.50	7.25	81.7	13.9	108.0	6.63	32
1402	2.25	7.23	80.9	13.5	148.1	5.35	16
1403	3.0	7.27	82.0	13.5	126.0	5.12	23

Sample Time: 1405 Sample ID: TF3M12713PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-22 Sampled by: DB / PC  
 Location and Site Code (SITEID): TF3  
 Well No. (LOCID): TF3MW-128 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 9/26/06 Weather: 60° / sun

CASING VOLUME INFORMATION:

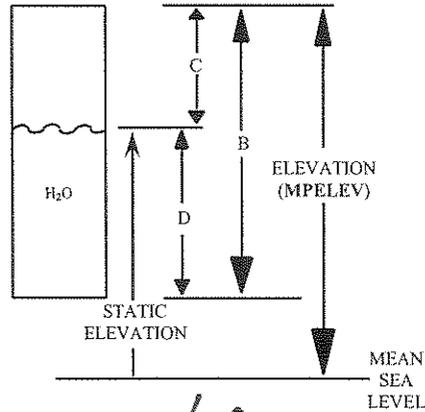
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

Measured Well Depth (B) (TOTDEPTH) 20.20 ft.  
 Measured Water Level Depth (C) (STATDEP) 14.17 ft.  
 Length of Static Water Column (D) =  $\frac{20.20}{(B)} - \frac{14.17}{(C)} = \frac{5.97}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times \frac{5.97}{(D)} = 9.95$  gal

Minimum Purge Volume = 2.86 gal (3 well volumes)



Purge Date and Method: Sober / 9-26-06  
 Physical Appearance/Comments: silty brown no odor

iron = 0.0 mg/L

FIELD MEASUREMENTS:

Allowable Range:                      ± 0.1                      ± 5%                      ± 1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1414	0.75	7.77	69.3	14.0	205.0	10.22	184
1415	1.50	7.53	71.2	13.7	60.5	5.96	150
1417	2.25	7.48	70.3	13.5	241.0	4.71	123
1419	3.0	7.43	70.0	13.5	20.3	5.11	135

Sample Time: 1420 Sample ID: TF3M12814PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-27 Sampled by: DB / PC  
 Location and Site Code (SITEID): TF3  
 Well No. (LOCID): TF3MW-133 Well Diameter (SDIAM): 2"  
 Date (LOGDATE): 9/26/08 Weather: 60 / sun

**CASING VOLUME INFORMATION:**

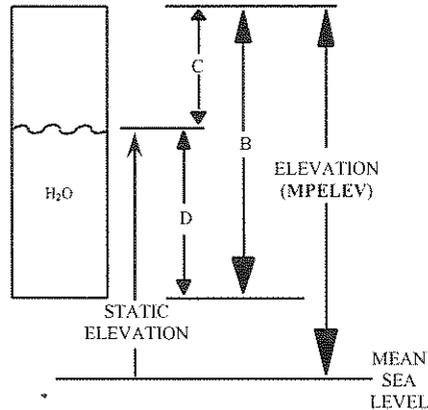
Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

**PURGING INFORMATION:**

Measured Well Depth (B) (TOTDEPTH) 22.20 ft.  
 Measured Water Level Depth (C) (STATDEP) 16.48 ft.  
 Length of Static Water Column (D) =  $\frac{22.20}{(B)} - \frac{16.48}{(C)} = \frac{5.72}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.16}{(A)} \times 5.72 = \frac{0.91}{(D)}$  gal

Minimum Purge Volume = 275 gal (3 well volumes)



Purge Date and Method: bailey / 9-26-06  
 Physical Appearance/Comments: clear / petro odor

iron = 0.4 mg/L

**FIELD MEASUREMENTS:**

Allowable Range:            ± 0.1            ± 5%            ±1°C

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1302	0.75	6.30	51.3	13.9	54.3	8.10	231
1304	1.50	6.44	63.1	13.4	90.4	5.46	204
1305	2.25	6.62	66.5	13.2	127.0	5.26	182
1306	3.00	6.69	67.5	13.1	110.0	4.84	175
1308	3.75	6.71	67.0	13.2	143.9	4.76	164

Sample Time: 1310 Sample ID: TF3m13316PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.

## WELL PURGING & SAMPLING FORM

Project: 40-05-23 Sampled by: DB / PC

Location and Site Code (SITEID): TF3

Well No. (LOCID): TF3 MW-CE3 Well Diameter (SDIAM): 4"

Date (LOGDATE): 9/2/06 Weather: windy variable clouds intermixed with rain and snow 104°

CASING VOLUME INFORMATION:

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION:

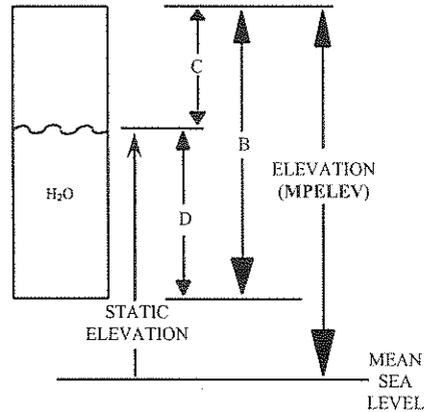
Measured Well Depth (B) (TOTDEPTH) 22.82 ft.

Measured Water Level Depth (C) (STATDEP) 12.99 ft.

Length of Static Water Column (D) =  $\frac{22.82}{(B)} - \frac{12.99}{(C)} = \frac{14.83}{(D)}$  ft.

Casing Water Volume (E) =  $\frac{0.65}{(A)} \times \frac{14.83}{(D)} = \frac{9.63}{(E)}$  gal

Minimum Purge Volume = 28.9 gal (3 well volumes)



Ferrous: 3.6

Purge Date and Method: bailed

Physical Appearance/Comments: Clear petro odor

FIELD MEASUREMENTS:

Allowable Range:  $\pm 0.1$   $\pm 5\%$   $\pm 1^\circ\text{C}$

Time	Volume Removed (gal)	pH	EC (mS/cm)	Temp. (F or C)	Turbidity (NTU)	D.O. (mg/L)	ORP (mV)
1331	5	7.30	77.2	13.0	62.6	10.34	123
1337	10	7.20	78.4	12.6	43.5	4.84	-3
1340	15	7.22	78.3	12.8	39.3	3.89	-11
1343	20	7.27	78.3	12.8	39.9	5.18	-12
1346	25	7.29	78.6	12.8	38.9	4.42	-20
1349	30	7.29	78.7	12.8	42.1	4.77	-26

Sample Time: 1350 Sample ID: TF3CE313PA

Note: Attempt to get at least 5 sets of field measurements during purging. Sample may be collected after 3 to 5 well volumes have been removed and parameters have stabilized. Sample may be collected after 6 well volumes if parameters do not stabilize. VOC and gas sensitive (e.g. alkalinity, Fe<sup>2+</sup>, CH<sub>4</sub>, H<sub>2</sub>S) parameters should be sampled first.





AFCEE

CHAIN OF CUSTODY RECORD (WO 0906018)

COC#: 4 SDG#: 139 Cooler ID: A

Ship to: Monika Santucci Life Science Laboratories, Inc. 5000 Brittonfield Pkwy, Suite 200 East Syracuse, NY 13057 Tel: (315)437-0200 Carrier: LSL courier.	Project Name: Griffiss AFB TF 1 and 3 Sampling Sampler Name: David Forse <i>MHF</i>	Send Results to: Niels van Hoesel FPM Group 153 Brooks Road Rome, NY 13441 Phone: (315) 336-7721 Ext. 205
	Sampler Signature: <i>[Signature]</i>	

Field Sample ID	Location ID (LOCID)	Date	Time	MATRIX	SMCODE	SBD/SED	SACODE	Preservative	Filt./Unfilt.	No. of Containers	Analyses Requested					Comments	
											VOC note 1	40 mL vials (HCl)	SVOCs note 2	1 L amber	Total Alkalinity note 3		Nitrogen (Nitrate) note 4
TF3CE313PA	MW-CE	9/26	1350	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M2114PA	TF3MW21	9/26	1035	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M11614PA	WL-TF3MW-116	9/26	1050	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M11713PA	WL-TF3MW-117	9/26	1110	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M119R12PA	WL-TF3MW-119R	9/26	0915	WG	B	0/0	N	HCl	Unf.	6	3	3	2	1	-	-	
TF3M121R12PA	WL-TF3MW-121R	9/26	0938	WG	B	0/0	N	HCl	Unf.	6	3	3	2	1	-	-	
TF3M12314PA	WL-TF3MW-123	9/26	1006	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M12614PA	WL-TF3MW-126	9/26	1124	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M12713PA	WL-TF3MW-127	9/26	1405	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M12814PA	WL-TF3MW-128	9/26	1420	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M13316PA	WL-TF3MW-133	9/26	1310	WG	B	0/0	N	HCl	Unf.	4	3	3	1	-	-	-	
TF3M13316PC	WL-TF3MW-133	9/26	1310	WG	B	0/0	FD	HCl	Unf.	4	3	3	1	-	-	-	sample D changed from 0925... to 0926...
092606PE	FIELDQC	9/26	0830	WQ	B	0/0	EB	HCl	Unf.	5	3	3	1	-	-	-	sample D changed from 0925... to 0926...
092606PF	FIELDQC	9/26	1320	WQ	NA	0/0	AB	HCl	Unf.	3	3	3	-	-	-	-	sample D changed from 0925... to 0926...
092606PR	FIELDQC	9/26	0820	WQ	NA	0/0	TB	HCl	Unf.	3	3	3	-	-	-	-	sample D changed from 0925... to 0926...

Collect water levels at all wells that are not sampled.

Cooler Temperature:

Sample Condition Upon Receipt at Laboratory:

Special Instructions/Comments: Analyses to be conducted in compliance with AFCEE QAPP 3.1

Note 1: VOCs: SW8260, AFCEE QAPP 3.1 List.

Note 2: SVOCs: SW8270, AFCEE QAPP 3.1 List.

Note 3: Total Alkalinity, 310.2.

Note 4: Nitrogen: 353.2, Nitrate: Automated.

Note 5: Total Sulfide: 376.2.

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date: 9/26/06	#3 Released by: (Sig)	Date:
Company Name:	Time:	Company Name: FPM Group Ltd	Time: 16:40	Company Name:	Time:
#1 Received by: (Sig) Niels van Hoesel	Date: 9/26/06	#2 Received by: (Sig)	Date: 10/1/06	#3 Received by: (Sig)	Date:
Company Name: FPM Group Ltd	Time: 1000	Company Name: LSC	Time: 9/26/06	Company Name:	Time:

**MATRIX**

WG = Ground water  
 WQ = Water Quality Control Matrix  
 SO = Soil

**SMCODE**

B = Bailor  
 G = Grab (only for EB).  
 NA = Not Applicable (only for AB/TB).  
 PP = Peristaltic Pump  
 BP = Bladder Pump  
 SP = Submersible Pump  
 SS = Split Spoon

**SACODE**

N = Normal Sample  
 AB = Ambient Blank  
 TB = Trip Blank  
 EB = Equipment Blank  
 FD = Field Duplicate  
 MS = Matrix Spike  
 SD = Matrix Spike Duplicate

Daily Health and Safety Meeting Form

Date: 9-26-06 Time: 0810

Location: FPM office (garage)

Weather Conditions: rain / cloudy / 50 to 60

Meeting Type: Daily Health and Safety

Personnel Present:

Pete Corigliano , Dan Baldega

Visitors Present: None

Visitor Training: None

PPE Required: Modified D

Possible risks, injuries, concerns:

traffic , slip/trip / fall

Anticipated Releases to Environment (if so, describe and detail response action/control measures implemented):

None

Property Damage:

None

Description (include sequence of events describing step by step how incident happened):

None

Analysis for, and Implementation of Corrective/Preventative Procedure to Prevent Future Occurrences (to be formulated by SSHO + FOM, approved by PM, and SSHO implemented):

None

Report made by (Name): Dan Baldega

SSHP Organization Title: Site Safety and Health Officer

**FPM-GROUP**  
**Data Verification and Usability Report**  
**GRIFFISS AIR FORCE BASE**  
**Site Griffiss AFB TANK FARM 1/3**  
**Water Sampling**  
**Contract No. F41624-03-D-8601**

**FPM Project No. 40-05-27**

**STL Job # A06-7102**

Laboratory: STL Buffalo  
Sample Matrix: Water  
Number of Samples: 15  
Analytical Protocol: AFCEE QAPP, Version 3.1, with AFCEE-approved lab variances  
Data Reviewer: Connie van Hoesel  
Sample Date: June 20, 2006

**LIST OF DATA VERIFICATION SAMPLES**

This verification report pertains to the following environmental samples and corresponding QC samples:

Sample ID	Date	QC Samples	Date
TF3CE313OA	6/20/06	062006OE, 062006OF, 062006OR	6/20/06
TF3M11614OA	6/20/06		
TF3M119R12OA	6/20/06		
TF3M121R12OA	6/20/06		
TF3M12713OA	6/20/06		
TF3M12814OA	6/20/06		
TF3M13316OA	6/20/06	TF3M13316OC	6/20/06
TF3M2114OA	6/20/06		
TF3M11713OA	6/20/06		
TF3M12614OA	6/20/06		
TF3M12314OA	6/20/06		

Notes:

- Refer to attached chain-of-custody for detailed sampling information and sample specific analyses requested.
- OA – Primary environmental samples
- OC – Field duplicate sample
- OE – Equipment blank
- OF – Ambient blank
- OR – Trip blank

## **DELIVERABLES**

The data deliverable report was per requirements of the AFCEE QAPP 3.1 and approved variances. The report consisted of the following major sections: lab attachment letter, case narrative, chain-of-custody, lab qualifier definitions, analytical results (sheet 2) based on analytical batch, calibration summaries, method blank summaries, laboratory control sample summaries, matrix spike/matrix spike duplicate summaries, holding time forms, performance checks, surrogate and internal standard recoveries, as applicable.

## **ANALYTICAL METHODS**

The analytical test methods and QA/QC requirements used for the soil sample analysis was per methods as specified in the AFCEE Quality Assurance Project Plan, Version 3.1 and AFCEE approved laboratory variances. The analytical methods employed included SW-846: Volatile Organic Compounds (VOCs) by Method SW8260 and Semivolatile Organic Compounds (SVOCs) by Method SW8270, and Total Alkalinity by EPA Method 310.2.

## **VERIFICATION GUIDANCE**

The analytical work was performed by Severn Trent Laboratory in accordance with the Air Force Center for Environmental Excellence (AFCEE), Quality Assurance Project Plan (QAPP), Version 3.1, with AFCEE-approved laboratory variances. The data was verified according to the protocols and QC requirements of the respective analytical methods and of the QAPP Version 3.1. For data usability purposes all values were further evaluated, including positive and non-detect results that were qualified "R" (Rejected) according to QAPP. The data usability analysis was based on the reviewer's professional judgment and on an assessment of how this data would fare with respect to the U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines for Organic (and Inorganic) Data Review (February 1994), and the AFCEE QAPP, Version 3.1.

## **QA/QC CRITERIA**

The following QA/QC criteria were reviewed, as applicable and available:

- Method detection limits and reporting limits (MDL, RL)
- Holding times, sample preservation and storage
- MS tune performance
- Initial and Continuing calibration summaries
- Second source calibration verification summary
- Method blanks
- Ambient, equipment, and trip blanks (as applicable)
- Field duplicate results
- Surrogate spike recoveries
- Internal standard areas counts and retention times
- Laboratory control samples (LCS)
- Results reported between MDL and RL (F-flag)

- Sample storage and preservation
- Data system printouts
- Qualitative and quantitative compound identification
- Chain-of-custody (COC)
- Case narrative and deliverables compliance

The items listed above were in compliance with AFCEE QAPP and USEPA criteria and protocols with exceptions discussed in the text below. The data have been verified according to the procedures outlined above and qualified accordingly.

***GENERAL NOTES:***

**MISSING SAMPLES**

None. All samples documented on the chain of custody were received by the laboratory.

**SAMPLE LABELING**

No problems were encountered with sample labeling and transcription to laboratory forms.

**BLANKS**

Whenever blanks, including method, ambient, equipment, and trip, contained low levels of contaminants (between MDL and RL), the laboratory and/or data verifier qualified the subject results with an “F” flag. Since no qualification of associated field samples are required for blanks less than the RL, no further action was taken in such instances.

**MS/MSD**

For SVOCs, the lab performed matrix spike and matrix spike duplicate samples for parent sample TF3M119R12OA. However, these samples were not requested by the client in the chain-of-custody; therefore, no action was taken for the MS/MSD criterion.

## VOLATILE ORGANIC COMPOUNDS (VOCs)

- The purpose of laboratory or field blank analysis is to determine the existence and magnitude of contamination resulting from lab or field activities. In Method Blank A6B2229802, naphthalene was detected with a concentration less than its reporting limit (RL) per the AFCEE QAPP (see Table below). According to the AFCEE QAPP, the presence of analytes in a method blank at concentrations equal to or greater than the RL indicates a need for corrective action.

Analyte	Method Blank Result (µg/L)	Reporting Limit (µg/L)
Naphthalene	0.23	1.0

**Corrective Action:** Since the detected concentration for this analyte was below its RL, no corrective action is required for this criterion and the “B” qualifiers applied by the lab to the associated samples are removed.

- Laboratory performance on individual samples is established by means of spiking all samples prior to analysis with surrogate compounds and assessing the percent recoveries. The following table summarizes QC exceedances for samples which exhibited surrogate compound recovery deficiencies. The Sample ID, surrogate compound, percent recoveries, and QC limits are listed.

Sample ID	Surrogate	%Rec	AFCEE QC Limits (%)	STL QC Limits (%)	Flag Applied	Rationale
TF3M119R12OA	1,2-Dichloroethane-d4	<b>150</b>	72-119	72-143	R	%Rec greater than upper control limit; reanalysis results used
TF3M119R12OARI	1,2-Dichloroethane-d4	<b>142</b>	72-119	72-143	None	%Rec within STL QC limits
TF3M12314OA	1,2-Dichloroethane-d4	<b>147</b>	72-119	72-143	R for positive results/ None for non-detects	%Rec greater than upper control limit; dilution sample results used for all results greater than RL (Non-detect results do not require flagging, and results between RL and MDL were flagged “F”)
TF3M12314OADL (performed at 1:4)	1,2-Dichloroethane-d4	<b>103</b>	72-119	72-143	None	%Rec within AFCEE QC

Sample ID	Surrogate	%Rec	AFCEE QC Limits (%)	STL QC Limits (%)	Flag Applied	Rationale
						limits
TF3M2114OA	1,2-Dichloroethane-d4	<b>150</b>	72-119	72-143	R for positive results/ None for non-detects	%Rec greater than upper control limit; dilution sample results used for all results greater than RL (Non-detect results do not require flagging, and results between RL and MDL were flagged "F")
TF3M2114OADL (performed at 1:4)	1,2-Dichloroethane-d4	<b>104</b>	72-119	72-143	None	%Rec within AFCEE QC limits

According to the AFCEE-approved variance, STL may apply internal control limits as a second tier evaluation. If the surrogate recovery fails both first tier (AFCEE) and second tier (STL) evaluation, corrective action shall be implemented: the sample shall be reextracted and reanalyzed. If the corrective action is ineffective in resolving the exceedance, then all analytes associated with the surrogate in that sample are qualified. As per the QAPP, for samples with recoveries greater than the upper control limit for any surrogate, positive sample results are considered estimated (flagged "J"). For samples with recoveries less than the lower control limit and greater than 10%, positive results are considered estimated (flagged "J") and non-detect results are considered unusable (flagged "R"). For samples with recoveries less than 10%, all results are considered unusable (flagged "R"). However, for data usability purposes, applying professional judgment and surrogate criteria from the USEPA National Functional Guidelines (and consistent with the AFCEE QAPP Version 4.0), data are not rejected with respect to surrogate recovery unless any surrogate had recovery of less than 10%. Therefore, for data usability purposes, applying surrogate criteria from the USEPA National Functional guidelines (and the AFCEE QAPP 4.0), the samples will be qualified for surrogate recovery criterion as follows: For samples with surrogate recoveries greater than the upper control limit, positive sample results are considered estimated (flagged "J"). For samples with surrogate recoveries greater than 10% but less than the lower control limit, positive results are considered estimated (flagged "J") and non-detect results are considered estimated (flagged "UJ"). For samples with surrogate recoveries less than 10%, the results are rejected for the analytes. However, using professional judgment, no corrective action and/or flagging is required for minimal exceedances (i.e., within 1% of the control limits).

**Corrective Action:** The samples above were re-extracted and reanalyzed due to one surrogate recovery exceedance in each of the original samples, that for 1,2-dichloroethane-

d4. The results of the resample reanalysis are also shown in the above table. The determination of which sample results to use for each sample is summarized below:

- TF3M119R12OA: The original sample had one surrogate recovery exceedance, whereas the reanalysis sample was within the STL control limits. The reanalysis results were deemed usable with no qualification, and the original results were rejected.
  - TF3M12314OA: The original sample had one surrogate recovery exceedance above the AFCEE/STL control limits, and the dilution sample (performed at 1:4) was within AFCEE control limits. Since the surrogate failure in the original sample requires “J” qualifiers only for results greater than non-detect, the non-detect results are considered usable without qualification. The positive results in the original sample are rejected, and the dilution results (usable without qualification) for the compounds 1,2,4-trimethylbenzene, isopropylbenzene, and n-propylbenzene have been transferred to the original sample results and modified accordingly. Note that for the results in the original sample which were below the reporting limit but above the detection limit, using professional judgment, the “F” flag is deemed more appropriate and “J” flag were not applied. This is consistent with the AFCEE QAPP, which states that *all* results between the method detection limit and the reporting limit shall be flagged “F.”
  - TF3M2114OA: The original sample had one surrogate recovery exceedance above the AFCEE/STL control limits, and the dilution sample (performed at 1:4) was within AFCEE control limits. Since the surrogate failure in the original sample requires “J” qualifiers only for results greater than non-detect, the non-detect results are considered usable without qualification. The positive results in the original sample are rejected, and the dilution results (usable without qualification) for the compounds chloroethane, chloromethane, isopropylbenzene, n-butylbenzene, n-propylbenzene, naphthalene, p-isopropyltoluene, sec-butylbenzene and t-butylbenzene results have been transferred to the original sample results and modified accordingly. Note that results for chloroethane and chloromethane in the dilution sample were non-detect; this is possible due to the fact that the surrogate failure in the original sample caused a positive bias. Also note that for the results in the original sample which were below the reporting limit but above the detection limit, using professional judgment, the “F” flag is deemed more appropriate and “J” flag were not applied. This is consistent with the AFCEE QAPP, which states that *all* results between the method detection limit and the reporting limit shall be flagged “F.”
- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The AFCEE QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above the reporting limits (RLs) and the relative percent differences (RPDs) between the duplicate sample results exceed AFCEE QAPP’s RPD control limits. If these conditions are met for any analytes in the field duplicate samples, per the AFCEE QAPP, the specific analytes in all samples collected on the same sampling date are to be qualified as estimated (“J”) for positive results and rejected (“R”) for nondetects. Using professional judgment, it is

deemed inappropriate to consider any set of field duplicate samples to be truly representative of a site or sampling event. Therefore, if qualification of data is needed, then only the parent-duplicate sample set will be qualified as estimated (“J”) for positive results and rejected (“R”) for non-detects, and no action will be taken for this criterion in all the other samples collected on the same sampling date.

The following table summarizes QC exceedances of the relative percent differences (RPD’s) of field duplicate samples TF3M13316OA and TF3M13316OC.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (µg/L)	Field Dup Result (µg/L)	MDL (µg/L)	RPD	Flag Applied	Rationale
TF3M13316OA	TF3M13316OC	1,2,4-Trimethylbenzene	7.0	9.2	0.18	27.2	J	RPD > 20%

**Corrective Action:** 1,2,4-Trimethylbenzene exhibited an RPD exceedance (above AFCEE’s 20% limit). As discussed above, “J” qualifiers were applied to the results of samples TF3M13316OA and TF3M13316OC, and these results are considered estimated.

**SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)**

- There were no exceedances for SVOC analysis.

**TOTAL ALKALINITY**

- There were no exceedances for total alkalinity analysis.

## **DATA USABILITY RESULTS**

### **VOCs**

Based on the evaluation of all information in the analytical data groups, the results of the samples for VOCs are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

### **SVOCs**

Based on the evaluation of all information in the analytical data groups, the results of the samples for SVOCs are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

### **TOTAL ALKALINITY**

Based on the evaluation of all information in the analytical data groups, the results of the samples for total alkalinity are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

## **AFCEE SUMMARY**

All data in Job # A06-7102 are valid and usable with qualifications as noted in the data review.

Signed: Concordia van Hoeseel Date: 7/20/06

## ***ATTACHMENTS***

- Chain-of-Custody
- Laboratory's Case Narrative
- Definition of AFCEE Data Qualifiers
- Definition of USEPA Data Qualifiers
- Qualified final data verification results on annotated Lab Sheet 2s

AFCEE  
ORGANIC ANALYSES DATA PACKAGE

Analytical Method: 8260-A98AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Base/Command: Griffiss Airforce BasePrime Contractor: Fanning, Phillips & Molna

Field Sample ID

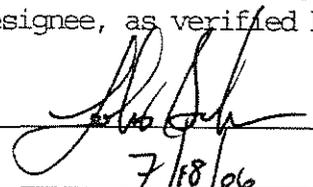
Lab Sample ID

<u>062006OE</u>	<u>A6710213</u>
<u>062006OF</u>	<u>A6710212</u>
<u>062006OR</u>	<u>A6710214</u>
<u>TF3CE313QA</u>	<u>A6710201</u>
<u>TF3M11614QA</u>	<u>A6710202</u>
<u>TF3M11713QA</u>	<u>A6710203</u>
<u>TF3M119R12QA</u>	<u>A6710204</u>
<u>TF3M121R12QA</u>	<u>A6710205</u>
<u>TF3M12314QA</u>	<u>A6710206</u>
<u>TF3M12713QA</u>	<u>A6710208</u>
<u>TF3M12814QA</u>	<u>A6710209</u>
<u>TF3M13316QA</u>	<u>A6710210</u>
<u>TF3M13316OC</u>	<u>A6710210FD</u>
<u>TF3M2114QA</u>	<u>A6710211</u>

Comments:

See Case Narrative

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: John SchoveDate: 7/18/06Title: Operations Manager

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060ELab Sample ID: A6710213Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A6I0001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	4.8	1.00	N/A	F
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060ELab Sample ID: A6710213Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.19	1.00	N/A	U
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060ELab Sample ID: A6710213Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	95	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	90	76 - 119	
1,2-DICHLOROETHANE-d4	83	72 - 119	
DIBROMOFLUOROMETHANE	90	85 - 115	

*not  
spofed*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	523315	259272 - 1037088	
CHLOROBENZENE-d5	341854	178213 - 712850	
1,4-DICHLOROBENZENE-d4	162089	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060FLab Sample ID: A6710212Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	5.1	1.00	N/A	F
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

*cont  
7/20/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060FLab Sample ID: A6710212Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.19	1.00	N/A	U
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
m,p-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060FLab Sample ID: A6710212Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	97	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	91	76 - 119	
1,2-DICHLOROETHANE-d4	85	72 - 119	
DIBROMOFLUOROMETHANE	93	85 - 115	

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Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	496601	259272 - 1037088	
CHLOROBENZENE-d5	327364	178213 - 712850	
1,4-DICHLOROENZENE-d4	154237	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 062006DRLab Sample ID: A6710214Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: B260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 062006ORLab Sample ID: A6710214Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.19	1.00	N/A	U
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 062006DRLab Sample ID: A6710214Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A6I0001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	103	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	98	76 - 119	
1,2-DICHLOROETHANE-d4	89	72 - 119	
DIBROMOFLUOROMETHANE	96	85 - 115	

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Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	498718	259272 - 1037088	
CHLOROBENZENE-d5	328203	178213 - 712850	
1,4-DICHLOROBENZENE-d4	156306	88272 - 353088	

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: B260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3CE3130ALab Sample ID: A6710201Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.36	1.00	N/A	F
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.29	1.00	N/A	F
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3CE3130ALab Sample ID: A6710201Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.29	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.30	1.00	N/A	F
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	5.2	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	1.1	1.00	N/A	
n-PROPYLBENZENE	0.19	1.0	5.8	1.00	N/A	
m,p-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	1.6	1.00	N/A	<del>B</del>
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	3.7	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	1.0	1.00	N/A	
t-BUTYLBENZENE	0.23	1.0	0.59	1.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3CE3130ALab Sample ID: A6710201Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	85	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	90	76 - 119	
1,2-DICHLOROETHANE-d4	90	72 - 119	
DIBROMOFLUOROMETHANE	89	85 - 115	

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Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	560836	259272 - 1037088	
CHLOROBENZENE-d5	379408	178213 - 712850	
1,4-DICHLOROBENZENE-d4	187132	88272 - 353088	

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M116140ALab Sample ID: A6710202Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M116140ALab Sample ID: A6710202Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.54	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.42	1.00	N/A	F
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	5.8	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	2.0	1.00	N/A	
n-PROPYLBENZENE	0.19	1.0	4.4	1.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	4.5	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	1.5	1.00	N/A	
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

cut  
2/24/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M116140ALab Sample ID: A6710202Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	85	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	93	76 - 119	
1,2-DICHLOROETHANE-d4	111	72 - 119	
DIBROMOFLUOROMETHANE	92	85 - 115	

*not  
reported*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	552729	259272 - 1037088	
CHLOROBENZENE-d5	377332	178213 - 712850	
1,4-DICHLOROBENZENE-d4	186719	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M117130ALab Sample ID: A6710203Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

*WJK*  
7/20/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M117130ALab Sample ID: A6710203Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.41	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.40	1.00	N/A	F
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.34	1.00	N/A	F
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.73	1.00	N/A	F
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.86	1.00	N/A	F
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	1.8	1.00	N/A	
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

*cut  
3/20/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M117130ALab Sample ID: A6710203Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	86	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	94	76 - 119	
1,2-DICHLOROETHANE-d4	99	72 - 119	
DIBROMOFLUOROMETHANE	91	85 - 115	

*WBT  
7/21/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	552038	259272 - 1037088	
CHLOROBENZENE-d5	374614	178213 - 712850	
1,4-DICHLOROBENZENE-d4	184881	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

DO NOT  
USE - AS  
PERMANENT  
RESULTS

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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2/2/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

DO NOT  
USE-USE  
REANALYSIS  
RESULTS

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.70	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.19	1.00	N/A	U
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.26	1.00	N/A	F
t-BUTYLBENZENE	0.23	1.0	0.45	1.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

*DO NOT  
USE - USE  
REANALYSIS  
RESULTS*

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	82	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	89	76 - 119	
1,2-DICHLOROETHANE-d4	150	72 - 119	*
DIBROMOFLUOROMETHANE	89	85 - 115	

*not  
7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	577999	259272 - 1037088	
CHLOROBENZENE-d5	391401	178213 - 712850	
1,4-DICHLOROBENZENE-d4	192887	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M121R120ALab Sample ID: A6710205Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M121R120ALab Sample ID: A6710205Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.19	1.00	N/A	U
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYME (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	1.6	1.00	N/A	
t-BUTYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: IF3M121R120ALab Sample ID: A6710205Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	89	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	94	76 - 119	
1,2-DICHLOROETHANE-d4	88	72 - 119	
DIBROMOFLUOROMETHANE	94	85 - 115	

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*7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	528912	259272 - 1037088	
CHLOROBENZENE-d5	348608	178213 - 712850	
1,4-DICHLOROBENZENE-d4	167642	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M123140ALab Sample ID: A6710206Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.37	1.00	N/A	F
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	5.5 <del>3.0</del>	1.00	N/A	±
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.47	1.00	N/A	F
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

\* Result transferred from dilution sample TF3M123140ADL

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M123140ALab Sample ID: A6710206Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.69	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.68	1.00	N/A	F
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	2.9 <del>47</del>	1.00	N/A	<del>U</del>
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	2.8 <del>47</del>	1.00	N/A	<del>U</del>
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.14	1.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.46	1.00	N/A	F
SEC-BUTYLBENZENE	0.19	1.0	0.79	1.00	N/A	F
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.77	1.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

\* Results transferred from dilute sample TF3M123140ADL

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: B260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M123140ALab Sample ID: A6710206Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	84	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	91	76 - 119	
1,2-DICHLOROETHANE-d4	147	72 - 119	*
DIBROMOFUOROMETHANE	91	85 - 115	

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Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	569778	259272 - 1037088	
CHLOROBENZENE-d5	384063	178213 - 712850	
1,4-DICHLOROBENZENE-d4	189391	88272 - 353088	

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: IF3M127130ALab Sample ID: A6710208Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	15	1.00	N/A	
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	1.4	1.00	N/A	
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M127130ALab Sample ID: A6710208Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.22	1.00	N/A	F
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	17	1.00	N/A	
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	9.9	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	9.8	1.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	8.3	1.00	N/A	
NAPHTHALENE	0.14	1.0	7.9	1.00	N/A	<del>B</del>
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.66	1.00	N/A	F
SEC-BUTYLBENZENE	0.19	1.0	1.4	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

cont  
2/20/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M127130ALab Sample ID: A6710208Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	94	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	94	76 - 119	
1,2-DICHLOROETHANE-d4	89	72 - 119	
DIBROMOFLUOROMETHANE	91	85 - 115	

*work  
7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	563370	259272 - 1037088	
CHLOROBENZENE-d5	377996	178213 - 712850	
1,4-DICHLOROBENZENE-d4	187053	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M128140ALab Sample ID: A6710209Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	8.0	1.00	N/A	
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.85	1.00	N/A	
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M128140ALab Sample ID: A6710209Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	14	1.00	N/A	
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	7.7	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	2.0	1.00	N/A	
n-PROPYLBENZENE	0.19	1.0	10	1.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	7.2	1.00	N/A	
NAPHTHALENE	0.14	1.0	6.4	1.00	N/A	<del>B</del>
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	2.0	1.00	N/A	
SEC-BUTYLBENZENE	0.19	1.0	3.4	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.40	1.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M128140ALab Sample ID: A6710209Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	94	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	92	76 - 119	
1,2-DICHLOROETHANE-d4	94	72 - 119	
DIBROMOFLUOROMETHANE	90	85 - 115	

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Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	572460	259272 - 1037088	
CHLOROBENZENE-d5	388150	178213 - 712850	
1,4-DICHLOROBENZENE-d4	190986	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160ALab Sample ID: A6710210Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	7.0	1.00	N/A	J
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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1/2/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160ALab Sample ID: A6710210Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.28	1.00	N/A	F
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	10	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	1.9	1.00	N/A	
n-PROPYLBENZENE	0.19	1.0	12	1.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.96	1.00	N/A	F
NAPHTHALENE	0.14	1.0	2.4	1.00	N/A	<del>U</del>
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYME (p-ISOPROPYLTOLUENE)	0.17	1.0	1.9	1.00	N/A	
SEC-BUTYLBENZENE	0.19	1.0	7.5	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	0.94	1.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

*cut  
2/20/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160ALab Sample ID: A6710210Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 1-Jul-2006Date Analyzed: 1-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	90	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	93	76 - 119	
1,2-DICHLOROETHANE-d4	98	72 - 119	
DIBROMOFLUOROMETHANE	90	85 - 115	

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*7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	577675	259272 - 1037088	
CHLOROBENZENE-d5	389617	178213 - 712850	
1,4-DICHLOROBENZENE-d4	192597	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160CLab Sample ID: A6710210FDMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	9.2	1.00	N/A	J
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160CLab Sample ID: A6710210FDMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.18	1.00	N/A	U
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.31	1.00	N/A	F
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	11	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	2.2	1.00	N/A	
n-PROPYLBENZENE	0.19	1.0	13	1.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	1.1	1.00	N/A	F
NAPHTHALENE	0.14	1.0	2.5	1.00	N/A	<del>F</del>
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	2.2	1.00	N/A	
SEC-BUTYLBENZENE	0.19	1.0	8.3	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	1.0	1.00	N/A	
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160CLab Sample ID: A6710210FDMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	95	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	98	76 - 119	
1,2-DICHLOROETHANE-d4	98	72 - 119	
DIBROMOFLUOROMETHANE	93	85 - 115	

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7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	553567	259272 - 1037088	
CHLOROBENZENE-d5	370963	178213 - 712850	
1,4-DICHLOROBENZENE-d4	183527	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M21140ALab Sample ID: A6710211Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M21140ALab Sample ID: A6710211Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.72 <del>1.3</del>	1.00	N/A	F U *
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.62 <del>1.8</del>	1.00	N/A	F U *
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	52.54	1.00	N/A	F *
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	4.0 <del>1.8</del>	1.00	N/A	F *
n-PROPYLBENZENE	0.19	1.0	8.1 <del>8.8</del>	1.00	N/A	F *
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	1.1	1.00	N/A	F
NAPHTHALENE	0.14	1.0	1.6 <del>1.8</del>	1.00	N/A	F F *
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYME (p-ISOPROPYLTOLUENE)	0.17	1.0	3.2 <del>3.0</del>	1.00	N/A	F F *
SEC-BUTYLBENZENE	0.19	1.0	5.1 <del>5.3</del>	1.00	N/A	F *
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	1.2 <del>1.4</del>	1.00	N/A	F F *
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

\* Results transferred from dilution sample TF3M21140ADL

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: B260-A98Preparatory Method: SW5030AAB #: A6B22298Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M21140ALab Sample ID: A6710211Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	88	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	95	76 - 119	
1,2-DICHLOROETHANE-d4	150	72 - 119	*
DIBROMOFLUOROMETHANE	91	85 - 115	

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*7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	585768	259272 - 1037088	
CHLOROBENZENE-d5	395879	178213 - 712850	
1,4-DICHLOROBENZENE-d4	198473	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA PACKAGE

Analytical Method: 8260-A98

AAB #: A6B22301

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Base/Command: Griffiss Airforce Base

Prime Contractor: Fanning, Phillips & Molna

Field Sample ID

Lab Sample ID

TF3M119R120A

A6710204RI

TF3M123140A

A6710206DL

TF3M126140A

A6710207

TF3M21140A

A6710211DL

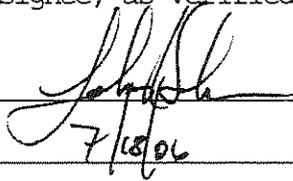
Comments:

See Case Narrative

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I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: John Schove

Date: 7/18/06

Title: Operations Manager

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204R1Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLOROETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204RIMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.58	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	0.19	1.00	N/A	U
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.20	1.00	N/A	F
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	0.19	1.00	N/A	U
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.25	1.00	N/A	F
t-BUTYLBENZENE	0.23	1.0	0.50	1.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

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7/20/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204R1Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A6I0001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	88	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	94	76 - 119	
1,2-DICHLOROETHANE-d4	142	72 - 119	↗
DIBROMOFLUOROMETHANE	90	85 - 115	

*any  
7/13/06*  
*cut  
7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	629062	259272 - 1037088	
CHLOROBENZENE-d5	421486	178213 - 712850	
1,4-DICHLOROBENZENE-d4	206049	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M123140ALab Sample ID: A6710206DLMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.84	2.0	0.84	4.00	N/A	U
1,1,1-TRICHLOROETHANE	1.1	4.0	1.1	4.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.84	2.0	0.84	4.00	N/A	U
1,1,2-TRICHLOROETHANE	0.86	4.0	0.86	4.00	N/A	U
1,1-DICHLOROETHANE	1.1	4.0	1.1	4.00	N/A	U
1,1-DICHLOROETHENE	1.1	4.0	1.1	4.00	N/A	U
1,1-DICHLOROPROPENE	0.92	4.0	0.92	4.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.51	4.0	0.51	4.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.76	4.0	0.76	4.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.56	4.0	0.56	4.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.74	4.0	5.5	4.00	N/A	U
1,2-DICHLOROETHANE	0.93	2.0	0.93	4.00	N/A	U
1,2-DICHLOROBENZENE	0.71	4.0	0.71	4.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	1.2	8.0	1.2	4.00	N/A	U
1,2-DICHLOROPROPANE	1.0	4.0	1.0	4.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.81	4.0	0.81	4.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.81	4.0	0.88	4.00	N/A	F
1,3-DICHLOROBENZENE	0.64	4.0	0.64	4.00	N/A	U
1,3-DICHLOROPROPANE	0.89	2.0	0.89	4.00	N/A	U
1,4-DICHLOROBENZENE	0.77	2.0	0.77	4.00	N/A	U
1-CHLOROHEXANE	1.2	4.0	1.2	4.00	N/A	U
2,2-DICHLOROPROPANE	1.1	4.0	1.1	4.00	N/A	U
2-CHLOROTOLUENE	0.83	4.0	0.83	4.00	N/A	U
4-CHLOROTOLUENE	0.74	4.0	0.74	4.00	N/A	U
ACETONE	3.8	40	3.8	4.00	N/A	U
BENZENE	0.99	2.0	0.99	4.00	N/A	U
BROMOBENZENE	0.93	4.0	0.93	4.00	N/A	U
BROMOCHLOROMETHANE	0.99	4.0	0.99	4.00	N/A	U
BROMODICHLOROMETHANE	0.69	2.0	0.69	4.00	N/A	U
BROMOFORM	0.54	4.0	0.54	4.00	N/A	U

\*Result transferred to original sample TF3M123140A

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 826D-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M123140ALab Sample ID: A67102060LMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	1.1	12	1.1	4.00	N/A	U
CARBON TETRACHLORIDE	0.88	4.0	0.88	4.00	N/A	U
CHLOROBENZENE	0.77	2.0	0.77	4.00	N/A	U
CHLOROETHANE	0.72	4.0	0.72	4.00	N/A	U
CHLOROFORM	1.0	2.0	1.0	4.00	N/A	U
CHLOROMETHANE	0.62	4.0	0.62	4.00	N/A	U
cis-1,2-DICHLOROETHYLENE	1.3	4.0	1.3	4.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.95	2.0	0.95	4.00	N/A	U
DIBROMOCHLOROMETHANE	0.61	2.0	0.61	4.00	N/A	U
DIBROMOMETHANE	1.1	4.0	1.1	4.00	N/A	U
DICHLORODIFLUOROMETHANE	0.62	4.0	0.62	4.00	N/A	U
ETHYLBENZENE	0.93	4.0	0.93	4.00	N/A	U
HEXACHLOROBUTADIENE	0.43	2.4	0.43	4.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.76	4.0	29 <del>✖</del>	4.00	N/A	U
METHYLENE CHLORIDE	1.2	4.0	1.2	4.00	N/A	U
tert-BUTYL METHYL ETHER	0.49	20	0.49	4.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	3.3	40	3.3	4.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	3.0	40	3.0	4.00	N/A	U
n-BUTYLBENZENE	0.71	4.0	0.71	4.00	N/A	U
n-PROPYLBENZENE	0.76	4.0	2.8 <del>✖</del>	4.00	N/A	F
M,P-XYLENE(SUM OF ISOMERS)	1.8	8.0	1.8	4.00	N/A	U
NAPHTHALENE	0.56	4.0	0.56	4.00	N/A	U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.84	4.0	0.84	4.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.68	4.0	0.68	4.00	N/A	U
SEC-BUTYLBENZENE	0.78	4.0	0.78	4.00	N/A	U
STYRENE	0.82	4.0	0.82	4.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.94	4.0	0.94	4.00	N/A	U
t-BUTYLBENZENE	0.92	4.0	0.92	4.00	N/A	U
TETRACHLOROETHYLENE(PCE)	0.76	4.0	0.76	4.00	N/A	U
TOLUENE	0.90	4.0	0.90	4.00	N/A	U

*\* Results transferred to original sample TF3M123140A*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: IF3M123140ALab Sample ID: A67102060LMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	1.5	4.0	1.5	4.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.63	4.0	0.63	4.00	N/A	U
TRICHLOROFUOROMETHANE	0.63	4.0	0.63	4.00	N/A	U
VINYL CHLORIDE	1.0	4.0	1.0	4.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	91	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	92	76 - 119	
1,2-DICHLOROETHANE-d4	103	72 - 119	
DIBROMOFLUOROMETHANE	89	85 - 115	

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*7/22/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	572434	259272 - 1037088	
CHLOROBENZENE-d5	383351	178213 - 712850	
1,4-DICHLOROBENZENE-d4	186502	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M126140ALab Sample ID: A6710207Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,1-TRICHLOROETHANE	0.28	1.0	0.28	1.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.21	0.50	0.21	1.00	N/A	U
1,1,2-TRICHLOROETHANE	0.22	1.0	0.22	1.00	N/A	U
1,1-DICHLOROETHANE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROETHENE	0.27	1.0	0.27	1.00	N/A	U
1,1-DICHLOROPROPENE	0.23	1.0	0.23	1.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.13	1.0	0.13	1.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.19	1.0	0.19	1.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.14	1.0	0.14	1.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DICHLORODETHANE	0.23	0.50	0.23	1.00	N/A	U
1,2-DICHLOROBENZENE	0.18	1.0	0.18	1.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	0.31	2.0	0.31	1.00	N/A	U
1,2-DICHLOROPROPANE	0.25	1.0	0.25	1.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.20	1.0	0.20	1.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.20	1.0	0.20	1.00	N/A	U
1,3-DICHLOROBENZENE	0.16	1.0	0.16	1.00	N/A	U
1,3-DICHLOROPROPANE	0.22	0.50	0.22	1.00	N/A	U
1,4-DICHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
1-CHLOROHEXANE	0.30	1.0	0.30	1.00	N/A	U
2,2-DICHLOROPROPANE	0.27	1.0	0.27	1.00	N/A	U
2-CHLOROTOLUENE	0.21	1.0	0.21	1.00	N/A	U
4-CHLOROTOLUENE	0.18	1.0	0.18	1.00	N/A	U
ACETONE	0.94	10	0.94	1.00	N/A	U
BENZENE	0.25	0.50	0.25	1.00	N/A	U
BROMOBENZENE	0.23	1.0	0.23	1.00	N/A	U
BROMOCHLOROMETHANE	0.25	1.0	0.25	1.00	N/A	U
BROMODICHLOROMETHANE	0.17	0.50	0.17	1.00	N/A	U
BROMOFORM	0.13	1.0	0.13	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6822301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M126140ALab Sample ID: A6710207Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	0.27	3.0	0.27	1.00	N/A	U
CARBON TETRACHLORIDE	0.22	1.0	0.22	1.00	N/A	U
CHLOROBENZENE	0.19	0.50	0.19	1.00	N/A	U
CHLOROETHANE	0.18	1.0	0.62	1.00	N/A	F
CHLOROFORM	0.26	0.50	0.26	1.00	N/A	U
CHLOROMETHANE	0.15	1.0	0.69	1.00	N/A	F
cis-1,2-DICHLOROETHYLENE	0.32	1.0	0.32	1.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.24	0.50	0.24	1.00	N/A	U
DIBROMOCHLOROMETHANE	0.15	0.50	0.15	1.00	N/A	U
DIBROMOMETHANE	0.26	1.0	0.26	1.00	N/A	U
DICHLORODIFLUOROMETHANE	0.15	1.0	0.15	1.00	N/A	U
ETHYLBENZENE	0.23	1.0	0.23	1.00	N/A	U
HEXACHLOROBUTADIENE	0.11	0.60	0.11	1.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.19	1.0	9.6	1.00	N/A	
METHYLENE CHLORIDE	0.31	1.0	0.31	1.00	N/A	U
tert-BUTYL METHYL ETHER	0.12	5.0	0.12	1.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	0.82	10	0.82	1.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0.76	10	0.76	1.00	N/A	U
n-BUTYLBENZENE	0.18	1.0	0.18	1.00	N/A	U
n-PROPYLBENZENE	0.19	1.0	1.4	1.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	0.44	2.0	0.44	1.00	N/A	U
NAPHTHALENE	0.14	1.0	0.22	1.00	N/A	F
O-XYLENE (1,2-DIMETHYLBENZENE)	0.21	1.0	0.21	1.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.17	1.0	0.17	1.00	N/A	U
SEC-BUTYLBENZENE	0.19	1.0	4.4	1.00	N/A	
STYRENE	0.21	1.0	0.21	1.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.23	1.0	0.23	1.00	N/A	U
t-BUTYLBENZENE	0.23	1.0	2.4	1.00	N/A	
TETRACHLOROETHYLENE(PCE)	0.19	1.0	0.19	1.00	N/A	U
TOLUENE	0.22	1.0	0.22	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M126140ALab Sample ID: A6710207Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	0.38	1.0	0.38	1.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.16	1.0	0.16	1.00	N/A	U
TRICHLOROFLUOROMETHANE	0.16	1.0	0.16	1.00	N/A	U
VINYL CHLORIDE	0.26	1.0	0.26	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	82	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	92	76 - 119	
1,2-DICHLOROETHANE-d4	114	72 - 119	
DIBROMOFLUOROMETHANE	88	85 - 115	

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7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	625685	259272 - 1037088	
CHLOROBENZENE-d5	418621	178213 - 712850	
1,4-DICHLOROBENZENE-d4	208116	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M21140ALab Sample ID: A6710211DLMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-TETRACHLOROETHANE	0.84	2.0	0.84	4.00	N/A	U
1,1,1-TRICHLOROETHANE	1.1	4.0	1.1	4.00	N/A	U
1,1,2,2-TETRACHLOROETHANE	0.84	2.0	0.84	4.00	N/A	U
1,1,2-TRICHLOROETHANE	0.86	4.0	0.86	4.00	N/A	U
1,1-DICHLOROETHANE	1.1	4.0	1.1	4.00	N/A	U
1,1-DICHLOROETHENE	1.1	4.0	1.1	4.00	N/A	U
1,1-DICHLOROPROPENE	0.92	4.0	0.92	4.00	N/A	U
1,2,3-TRICHLOROBENZENE	0.51	4.0	0.51	4.00	N/A	U
1,2,3-TRICHLOROPROPANE	0.76	4.0	0.76	4.00	N/A	U
1,2,4-TRICHLOROBENZENE	0.56	4.0	0.56	4.00	N/A	U
1,2,4-TRIMETHYLBENZENE	0.74	4.0	0.74	4.00	N/A	U
1,2-DICHLOROETHANE	0.93	2.0	0.93	4.00	N/A	U
1,2-DICHLOROBENZENE	0.71	4.0	0.71	4.00	N/A	U
1,2-DIBROMO-3-CHLOROPROPANE	1.2	8.0	1.2	4.00	N/A	U
1,2-DICHLOROPROPANE	1.0	4.0	1.0	4.00	N/A	U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.81	4.0	0.81	4.00	N/A	U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.81	4.0	0.81	4.00	N/A	U
1,3-DICHLOROBENZENE	0.64	4.0	0.64	4.00	N/A	U
1,3-DICHLOROPROPANE	0.89	2.0	0.89	4.00	N/A	U
1,4-DICHLOROBENZENE	0.77	2.0	0.77	4.00	N/A	U
1-CHLOROHXANE	1.2	4.0	1.2	4.00	N/A	U
2,2-DICHLOROPROPANE	1.1	4.0	1.1	4.00	N/A	U
2-CHLOROTOLUENE	0.83	4.0	0.83	4.00	N/A	U
4-CHLOROTOLUENE	0.74	4.0	0.74	4.00	N/A	U
ACETONE	3.8	40	3.8	4.00	N/A	U
BENZENE	0.99	2.0	0.99	4.00	N/A	U
BROMOBENZENE	0.93	4.0	0.93	4.00	N/A	U
BROMOCHLOROMETHANE	0.99	4.0	0.99	4.00	N/A	U
BROMODICHLOROMETHANE	0.69	2.0	0.69	4.00	N/A	U
BROMOFORM	0.54	4.0	0.54	4.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M21140ALab Sample ID: A6710211DLMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
BROMOMETHANE	1.1	12	1.1	4.00	N/A	U
CARBON TETRACHLORIDE	0.88	4.0	0.88	4.00	N/A	U
CHLOROBENZENE	0.77	2.0	0.77	4.00	N/A	U
CHLOROETHANE	0.72	4.0	0.72 *	4.00	N/A	U
CHLOROFORM	1.0	2.0	1.0	4.00	N/A	U
CHLOROMETHANE	0.62	4.0	0.62 *	4.00	N/A	U
cis-1,2-DICHLOROETHYLENE	1.3	4.0	1.3	4.00	N/A	U
cis-1,3-DICHLOROPROPENE	0.95	2.0	0.95	4.00	N/A	U
DIBROMOCHLOROMETHANE	0.61	2.0	0.61	4.00	N/A	U
DIBROMOMETHANE	1.1	4.0	1.1	4.00	N/A	U
DICHLORODIFLUOROMETHANE	0.62	4.0	0.62	4.00	N/A	U
ETHYLBENZENE	0.93	4.0	0.93	4.00	N/A	U
HEXACHLOROBUTADIENE	0.43	2.4	0.43	4.00	N/A	U
ISOPROPYLBENZENE (CUMENE)	0.76	4.0	54 *	4.00	N/A	
METHYLENE CHLORIDE	1.2	4.0	1.2	4.00	N/A	U
tert-BUTYL METHYL ETHER	0.49	20	0.49	4.00	N/A	U
METHYL ETHYL KETONE (2-BUTANONE)	3.3	40	3.3	4.00	N/A	U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	3.0	40	3.0	4.00	N/A	U
n-BUTYLBENZENE	0.71	4.0	4.0 *	4.00	N/A	
n-PROPYLBENZENE	0.76	4.0	8.1 *	4.00	N/A	
M,P-XYLENE(SUM OF ISOMERS)	1.8	8.0	1.8	4.00	N/A	U
NAPHTHALENE	0.56	4.0	1.6 *	4.00	N/A	F
O-XYLENE (1,2-DIMETHYLBENZENE)	0.84	4.0	0.84	4.00	N/A	U
P-CYMENE (p-ISOPROPYLTOLUENE)	0.68	4.0	3.2 *	4.00	N/A	F
SEC-BUTYLBENZENE	0.78	4.0	5.1 *	4.00	N/A	
STYRENE	0.82	4.0	0.82	4.00	N/A	U
TRICHLOROETHYLENE (TCE)	0.94	4.0	0.94	4.00	N/A	U
t-BUTYLBENZENE	0.92	4.0	1.2 *	4.00	N/A	F
TETRACHLOROETHYLENE(PCE)	0.76	4.0	0.76	4.00	N/A	U
TOLUENE	0.90	4.0	0.90	4.00	N/A	U

\* Results transferred to original sample TF3M21140A

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8260-A98Preparatory Method: SW5030AAB #: A6B22301Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M21140ALab Sample ID: A6710211DLMatrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A6I0001680Date Received: 21-Jun-2006Date Prepared: 2-Jul-2006Date Analyzed: 2-Jul-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
trans-1,2-DICHLOROETHENE	1.5	4.0	1.5	4.00	N/A	U
trans-1,3-DICHLOROPROPENE	0.63	4.0	0.63	4.00	N/A	U
TRICHLOROFUOROMETHANE	0.63	4.0	0.63	4.00	N/A	U
VINYL CHLORIDE	1.0	4.0	1.0	4.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
TOLUENE-D8	88	81 - 120	
1-BROMO-4-FLUOROBENZENE (4-BROMOFLUOROBENZENE)	91	76 - 119	
1,2-DICHLOROETHANE-d4	104	72 - 119	
DIBROMOFLUOROMETHANE	88	85 - 115	

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*7/20/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
FLUOROBENZENE	571233	259272 - 1037088	
CHLOROBENZENE-d5	383596	178213 - 712850	
1,4-DICHLOROBENZENE-d4	189115	88272 - 353088	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA PACKAGE

Analytical Method: 8270-A98

AAB #: A6B21680

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Base/Command: Griffiss Airforce Base

Prime Contractor: Fanning, Phillips & Molna

Field Sample ID

Lab Sample ID

062006OE

A6710213

TF3ML19R12QA

A6710204

TF3ML19R12QA

A6710204MS

TF3ML19R12QA

A6710204SD

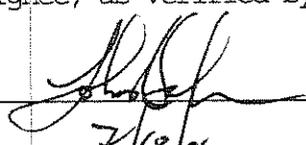
TF3ML21R12QA

A6710205

Comments:

See Case Narrative

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  \_\_\_\_\_

Name: John Schove

Date: 7/18/04

Title: Operations Manager

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6821680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060ELab Sample ID: A6710213Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-TRICHLOROBENZENE	2	10	2	1.00	N/A	U
1,2-DICHLOROBENZENE	2	10	2	1.00	N/A	U
1,3-DICHLOROBENZENE	2	10	2	1.00	N/A	U
1,4-DICHLOROBENZENE	2	10	2	1.00	N/A	U
2,4-DINITROTOLUENE	2	10	2	1.00	N/A	U
2,6-DINITROTOLUENE	2	10	2	1.00	N/A	U
2-CHLORONAPHTHALENE	2	10	2	1.00	N/A	U
2-METHYLNAPHTHALENE	0.09	10	0.09	1.00	N/A	U
2-NITROANILINE	2	50	2	1.00	N/A	U
3-NITROANILINE	2	50	2	1.00	N/A	U
3,3'-DICHLOROBENZIDINE	10	20	10	1.00	N/A	U
4-BROMOPHENYL PHENYL ETHER	2	10	2	1.00	N/A	U
4-CHLOROANILINE	4	20	4	1.00	N/A	U
4-CHLOROPHENYL PHENYL ETHER	2	10	2	1.00	N/A	U
4-NITROANILINE	2	50	2	1.00	N/A	U
ACENAPHTHYLENE	0.09	10	0.09	1.00	N/A	U
ACENAPHTHENE	0.1	10	0.1	1.00	N/A	U
ANTHRACENE	0.1	10	0.1	1.00	N/A	U
BENZO(a)ANTHRACENE	0.2	10	0.2	1.00	N/A	U
BENZO(a)PYRENE	0.09	10	0.09	1.00	N/A	U
BENZO(k)FLUORANTHENE	0.1	10	0.1	1.00	N/A	U
BENZO(b)FLUORANTHENE	0.2	10	0.2	1.00	N/A	U
BENZO(g,h,i)PERYLENE	0.1	10	0.1	1.00	N/A	U
BENZYL ALCOHOL	2	20	2	1.00	N/A	U
bis(2-CHLOROETHOXY) METHANE	2	10	2	1.00	N/A	U
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHE	2	10	2	1.00	N/A	U
bis(2-CHLOROISOPROPYL) ETHER	2	10	2	1.00	N/A	U
bis(2-ETHYLHEXYL) PHTHALATE	2	10	2	1.00	N/A	U
BENZYL BUTYL PHTHALATE	2	10	2	1.00	N/A	U
CHRYSENE	0.2	10	0.2	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6B21680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060ELab Sample ID: A6710213Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
DI-n-BUTYL PHTHALATE	3	10	3	1.00	N/A	U
DI-n-OCTYL PHTHALATE	2	10	2	1.00	N/A	U
DIBENZ(a,h)ANTHRACENE	0.1	10	0.1	1.00	N/A	U
DIBENZOFURAN	0.1	10	0.1	1.00	N/A	U
DIETHYL PHTHALATE	2	10	2	1.00	N/A	U
DIMETHYL PHTHALATE	2	10	2	1.00	N/A	U
FLUORANTHENE	0.1	10	0.1	1.00	N/A	U
FLUORENE	0.1	10	0.1	1.00	N/A	U
HEXACHLOROBENZENE	2	10	2	1.00	N/A	U
HEXACHLOROBUTADIENE	4	10	4	1.00	N/A	U
HEXACHLOROETHANE	3	10	3	1.00	N/A	U
INDENO(1,2,3-c,d)PYRENE	0.1	10	0.1	1.00	N/A	U
ISOPHORONE	1	10	1	1.00	N/A	U
N-NITROSODIPHENYLAMINE	3	10	3	1.00	N/A	U
N-NITROSODI-n-PROPYLAMINE	2	10	2	1.00	N/A	U
NAPHTHALENE	0.1	10	0.1	1.00	N/A	U
NITROBENZENE	1	10	1	1.00	N/A	U
PHENANTHRENE	0.1	10	0.1	1.00	N/A	U
PYRENE	0.2	10	0.2	1.00	N/A	U
2,4,5-TRICHLOROPHENOL	2	50	2	1.00	N/A	U
2,4,6-TRICHLOROPHENOL	2	10	2	1.00	N/A	U
2,4-DICHLOROPHENOL	2	10	2	1.00	N/A	U
2,4-DIMETHYLPHENOL	1	10	1	1.00	N/A	U
2,4-DINITROPHENOL	10	50	10	1.00	N/A	U
2-CHLOROPHENOL	1	10	1	1.00	N/A	U
2-METHYLPHENOL (o-CRESOL)	2	10	2	1.00	N/A	U
2-NITROPHENOL	1	10	1	1.00	N/A	U
4,6-DINITRO-2-METHYLPHENOL	9	50	9	1.00	N/A	U
4-CHLORO-3-METHYLPHENOL	2	20	2	1.00	N/A	U
4-METHYLPHENOL (p-CRESOL)	3	50	3	1.00	N/A	U

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98      Preparatory Method: SW3510      AAB #: A6B21680  
 Lab Name: STL Buffalo      Contract #: \_\_\_\_\_  
 Field Sample ID: 0620060E      Lab Sample ID: A6710213      Matrix: WATER  
 % Solids: \_\_\_\_\_      Initial Calibration ID: A610001637  
 Date Received: 21-Jun-2006      Date Prepared: 26-Jun-2006      Date Analyzed: 28-Jun-2006  
 Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
4-NITROPHENOL	4	50	4	1.00	N/A	U
BENZOIC ACID	31	100	31	1.00	N/A	U
PENTACHLOROPHENOL	11	50	11	1.00	N/A	U
PHENOL	3	10	3	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
NITROBENZENE-D5	74	41 - 120	
2-FLUOROBIPHENYL	82	48 - 120	
TERPHENYL-D14	89	51 - 135	
PHENOL-D5	30	20 - 120	
2-FLUOROPHENOL	42	20 - 120	
2,4,6-TRIBROMOPHENOL	82	42 - 124	

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7/28/06*

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-DICHLOROBENZENE-d4	97046	51959 - 207836	
NAPHTHALENE-d8	420401	230752 - 923008	
ACENAPHTHENE-d10	225206	122046 - 488184	
PHENANTHRENE-d10	414987	200494 - 801974	
CHRYSENE-d12	384586	193477 - 773908	
PERYLENE-d12	358796	196322 - 785286	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: B270-A98Preparatory Method: SW3510AAB #: A6B21680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-TRICHLOROENZENE	2	10	2	1.00	N/A	U
1,2-DICHLOROENZENE	2	10	2	1.00	N/A	U
1,3-DICHLOROENZENE	2	10	2	1.00	N/A	U
1,4-DICHLOROENZENE	2	10	2	1.00	N/A	U
2,4-DINITROTOLUENE	2	10	2	1.00	N/A	U
2,6-DINITROTOLUENE	2	10	2	1.00	N/A	U
2-CHLORONAPHTHALENE	2	10	2	1.00	N/A	U
2-METHYLNAPHTHALENE	0.09	10	0.09	1.00	N/A	U
2-NITROANILINE	2	48	2	1.00	N/A	U
3-NITROANILINE	2	48	2	1.00	N/A	U
3,3'-DICHLOROBENZIDINE	9	19	9	1.00	N/A	U
4-BROMOPHENYL PHENYL ETHER	2	10	2	1.00	N/A	U
4-CHLOROANILINE	4	19	4	1.00	N/A	U
4-CHLOROPHENYL PHENYL ETHER	2	10	2	1.00	N/A	U
4-NITROANILINE	2	48	2	1.00	N/A	U
ACENAPHTHYLENE	0.09	10	0.09	1.00	N/A	U
ACENAPHTHENE	0.1	10	0.1	1.00	N/A	U
ANTHRACENE	0.1	10	0.1	1.00	N/A	U
BENZO(a)ANTHRACENE	0.2	10	0.2	1.00	N/A	U
BENZO(a)PYRENE	0.09	10	0.09	1.00	N/A	U
BENZO(k)FLUORANTHENE	0.1	10	0.1	1.00	N/A	U
BENZO(b)FLUORANTHENE	0.2	10	0.2	1.00	N/A	U
BENZO(g,h,i)PERYLENE	0.1	10	0.1	1.00	N/A	U
BENZYL ALCOHOL	2	19	2	1.00	N/A	U
bis(2-CHLOROETHOXY) METHANE	2	10	2	1.00	N/A	U
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHE	1	10	1	1.00	N/A	U
bis(2-CHLOROISOPROPYL) ETHER	2	10	2	1.00	N/A	U
bis(2-ETHYLHEXYL) PHTHALATE	2	10	2	1.00	N/A	U
BENZYL BUTYL PHTHALATE	2	10	2	1.00	N/A	U
CHRYSENE	0.2	10	0.2	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6821680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: IF3M119R120ALab Sample ID: A6710204Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
DI-n-BUTYL PHTHALATE	3	10	3	1.00	N/A	U
DI-n-OCTYL PHTHALATE	2	10	2	1.00	N/A	U
DIBENZ(a,h)ANTHRACENE	0.1	10	0.1	1.00	N/A	U
DIBENZOFURAN	0.1	10	0.1	1.00	N/A	U
DIETHYL PHTHALATE	2	10	2	1.00	N/A	U
DIMETHYL PHTHALATE	2	10	2	1.00	N/A	U
FLUORANTHENE	0.1	10	0.6	1.00	N/A	F
FLUORENE	0.1	10	0.1	1.00	N/A	U
HEXACHLOROBENZENE	2	10	2	1.00	N/A	U
HEXACHLOROBUTADIENE	4	10	4	1.00	N/A	U
HEXACHLOROETHANE	3	10	3	1.00	N/A	U
INDENO(1,2,3-c,d)PYRENE	0.1	10	0.1	1.00	N/A	U
ISOPHORONE	1	10	1	1.00	N/A	U
N-NITROSODIPHENYLAMINE	3	10	3	1.00	N/A	U
N-NITROSODI-n-PROPYLAMINE	1	10	1	1.00	N/A	U
NAPHTHALENE	0.1	10	0.1	1.00	N/A	U
NITROBENZENE	1	10	1	1.00	N/A	U
PHENANTHRENE	0.1	10	0.1	1.00	N/A	U
PYRENE	0.2	10	0.7	1.00	N/A	F
2,4,5-TRICHLOROPHENOL	2	48	2	1.00	N/A	U
2,4,6-TRICHLOROPHENOL	2	10	2	1.00	N/A	U
2,4-DICHLOROPHENOL	2	10	2	1.00	N/A	U
2,4-DIMETHYLPHENOL	1	10	1	1.00	N/A	U
2,4-DINITROPHENOL	10	48	10	1.00	N/A	U
2-CHLOROPHENOL	1	10	1	1.00	N/A	U
2-METHYLPHENOL (o-CRESOL)	2	10	2	1.00	N/A	U
2-NITROPHENOL	1	10	1	1.00	N/A	U
4,6-DINITRO-2-METHYLPHENOL	9	48	9	1.00	N/A	U
4-CHLORO-3-METHYLPHENOL	2	19	2	1.00	N/A	U
4-METHYLPHENOL (p-CRESOL)	3	48	3	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6821680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120ALab Sample ID: A6710204Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A6I0001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
4-NITROPHENOL	4	48	4	1.00	N/A	U
BENZOIC ACID	30	97	30	1.00	N/A	U
PENTACHLOROPHENOL	10	48	10	1.00	N/A	U
PHENOL	3	10	3	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
NITROBENZENE-D5	57	41 - 120	
2-FLUOROBIPHENYL	61	48 - 120	
TERPHEYL-D14	62	51 - 135	
PHENOL-D5	22	20 - 120	
2-FLUOROPHENOL	31	20 - 120	
2,4,6-TRIBROMOPHENOL	68	42 - 124	

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Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-DICHLOROBENZENE-d4	106650	51959 - 207836	
NAPHTHALENE-d8	461593	230752 - 923008	
ACENAPHTHENE-d10	252977	122046 - 488184	
PHENANTHRENE-d10	457702	200494 - 801974	
CHRYSENE-d12	429349	193477 - 773908	
PERYLENE-d12	400056	196322 - 785286	

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6821680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M121R120ALab Sample ID: A6710205Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2,4-TRICHLOROBENZENE	2	10	2	1.00	N/A	U
1,2-DICHLOROBENZENE	2	10	2	1.00	N/A	U
1,3-DICHLOROBENZENE	2	10	2	1.00	N/A	U
1,4-DICHLOROBENZENE	2	10	2	1.00	N/A	U
2,4-DINITROTOLUENE	2	10	2	1.00	N/A	U
2,6-DINITROTOLUENE	2	10	2	1.00	N/A	U
2-CHLORONAPHTHALENE	2	10	2	1.00	N/A	U
2-METHYLNAPHTHALENE	0.09	10	0.09	1.00	N/A	U
2-NITROANILINE	2	50	2	1.00	N/A	U
3-NITROANILINE	2	50	2	1.00	N/A	U
3,3'-DICHLOROBENZIDINE	10	20	10	1.00	N/A	U
4-BROMOPHENYL PHENYL ETHER	2	10	2	1.00	N/A	U
4-CHLORANILINE	4	20	4	1.00	N/A	U
4-CHLOROPHENYL PHENYL ETHER	2	10	2	1.00	N/A	U
4-NITROANILINE	2	50	2	1.00	N/A	U
ACENAPHTHYLENE	0.09	10	0.09	1.00	N/A	U
ACENAPHTHENE	0.1	10	0.1	1.00	N/A	U
ANTHRACENE	0.1	10	0.1	1.00	N/A	U
BENZO(a)ANTHRACENE	0.2	10	0.2	1.00	N/A	U
BENZO(a)PYRENE	0.09	10	0.09	1.00	N/A	U
BENZO(k)FLUORANTHENE	0.1	10	0.1	1.00	N/A	U
BENZO(b)FLUORANTHENE	0.2	10	0.2	1.00	N/A	U
BENZO(g,h,i)PERYLENE	0.1	10	0.1	1.00	N/A	U
BENZYL ALCOHOL	2	20	2	1.00	N/A	U
bis(2-CHLOROETHOXY) METHANE	2	10	2	1.00	N/A	U
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHE	1	10	1	1.00	N/A	U
bis(2-CHLOROISOPROPYL) ETHER	2	10	2	1.00	N/A	U
bis(2-ETHYLHEXYL) PHTHALATE	2	10	2	1.00	N/A	U
BENZYL BUTYL PHTHALATE	2	10	2	1.00	N/A	U
CHRYSENE	0.2	10	0.2	1.00	N/A	U

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6B21680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M121R120ALab Sample ID: A6710205Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A6I0001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
DI-n-BUTYL PHTHALATE	3	10	3	1.00	N/A	U
DI-n-OCTYL PHTHALATE	2	10	2	1.00	N/A	U
DIBENZ(a,h)ANTHRACENE	0.1	10	0.1	1.00	N/A	U
DIBENZOFURAN	0.1	10	0.1	1.00	N/A	U
DIETHYL PHTHALATE	2	10	2	1.00	N/A	U
DIMETHYL PHTHALATE	2	10	2	1.00	N/A	U
FLUORANTHENE	0.1	10	0.1	1.00	N/A	U
FLUORENE	0.1	10	0.1	1.00	N/A	U
HEXACHLOROBENZENE	2	10	2	1.00	N/A	U
HEXACHLOROBUTADIENE	4	10	4	1.00	N/A	U
HEXACHLOROETHANE	3	10	3	1.00	N/A	U
INDENO(1,2,3-c,d)PYRENE	0.1	10	0.1	1.00	N/A	U
ISOPHORONE	1	10	1	1.00	N/A	U
N-NITROSODIPHENYLAMINE	3	10	3	1.00	N/A	U
N-NITROSODI-n-PROPYLAMINE	1	10	1	1.00	N/A	U
NAPHTHALENE	0.1	10	0.1	1.00	N/A	U
NITROBENZENE	1	10	1	1.00	N/A	U
PHENANTHRENE	0.1	10	0.1	1.00	N/A	U
PYRENE	0.2	10	0.2	1.00	N/A	U
2,4,5-TRICHLOROPHENOL	2	50	2	1.00	N/A	U
2,4,6-TRICHLOROPHENOL	2	10	2	1.00	N/A	U
2,4-DICHLOROPHENOL	2	10	2	1.00	N/A	U
2,4-DIMETHYLPHENOL	1	10	1	1.00	N/A	U
2,4-DINITROPHENOL	10	50	10	1.00	N/A	U
2-CHLOROPHENOL	1	10	1	1.00	N/A	U
2-METHYLPHENOL (o-CRESOL)	2	10	2	1.00	N/A	U
2-NITROPHENOL	1	10	1	1.00	N/A	U
4,6-DINITRO-2-METHYLPHENOL	9	50	9	1.00	N/A	U
4-CHLORO-3-METHYLPHENOL	2	20	2	1.00	N/A	U
4-METHYLPHENOL (p-CRESOL)	3	50	3	1.00	N/A	U

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 8270-A98Preparatory Method: SW3510AAB #: A6B21680Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M121R120ALab Sample ID: A6710205Matrix: WATER

% Solids: \_\_\_\_\_

Initial Calibration ID: A610001637Date Received: 21-Jun-2006Date Prepared: 26-Jun-2006Date Analyzed: 28-Jun-2006Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
4-NITROPHENOL	4	50	4	1.00	N/A	U
BENZOIC ACID	31	99	31	1.00	N/A	U
PENTACHLOROPHENOL	11	50	11	1.00	N/A	U
PHENOL	3	10	3	1.00	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
NITROBENZENE-D5	68	41 - 120	
2-FLUOROBIPHENYL	78	48 - 120	
TERPHENYL-D14	69	51 - 135	
PHENOL-D5	22	20 - 120	
2-FLUDROPHENOL	31	20 - 120	
2,4,6-TRIBROMOPHENOL	65	42 - 124	

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Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-DICHLOROBENZENE-d4	100841	51959 - 207836	
NAPHTHALENE-d8	440166	230752 - 923008	
ACENAPHTHENE-d10	234763	122046 - 488184	
PHENANTHRENE-d10	433400	200494 - 801974	
CHRYSENE-d12	395302	193477 - 773908	
PERYLENE-d12	373532	196322 - 785286	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA PACKAGEAnalytical Method: 310.2-A98AAB #: A6B21677Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Base/Command: Griffiss Airforce BasePrime Contractor: Fanning, Phillips & M

Field Sample ID

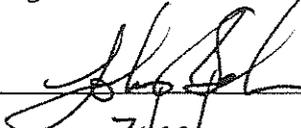
Lab Sample ID

062006OEA6710213

Comments:

See Case Narrative  
\_\_\_\_\_  
\_\_\_\_\_

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: John SchoveDate: 7/18/06Title: Operations Manager

AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21677

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: 0620060E

Lab Sample ID: A6710213

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 23-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	2.7	5.0	2.7	1.00	U

Comments:

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AFCEE  
WET CHEM ANALYSES DATA PACKAGE

Analytical Method: 310.2-A98AAB #: A6B21856Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Base/Command: Griffiss Airforce BasePrime Contractor: Fanning, Phillips & M

Field Sample ID

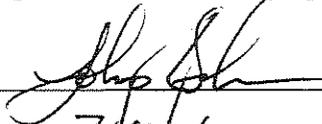
Lab Sample ID

<u>TF3CE3130A</u>	<u>A6710201</u>
<u>TF3M116140A</u>	<u>A6710202</u>
<u>TF3M117130A</u>	<u>A6710203</u>
<u>TF3M119R120A</u>	<u>A6710204</u>
<u>TF3M121R120A</u>	<u>A6710205</u>
<u>TF3M123140A</u>	<u>A6710206</u>
<u>TF3M126140A</u>	<u>A6710207</u>
<u>TF3M127130A</u>	<u>A6710208</u>
<u>TF3M128140A</u>	<u>A6710209</u>
<u>TF3M133160A</u>	<u>A6710210</u>
<u>TF3M133160C</u>	<u>A6710210FD</u>
<u>TF3M21140A</u>	<u>A6710211</u>

Comments:

See Case Narrative

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: John SchoveDate: 7/18/06Title: Operations Manager

AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3CE3130A

Lab Sample ID: A6710201

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	5.3	10	192	2.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M11614DA

Lab Sample ID: A6710202

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	5.3	10	178	2.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M117130A

Lab Sample ID: A6710203

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	8.0	15.0	224	3.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A9B

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M119R120A

Lab Sample ID: A6710204

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	5.3	10	159	2.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6821856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M121R120A

Lab Sample ID: A6710205

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	8.0	15.0	203	3.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M123140A

Lab Sample ID: A6710206

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	5.3	10	156	2.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: IF3M126140A

Lab Sample ID: A6710207

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	8.0	15.0	217	3.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: IF3M127130A

Lab Sample ID: A6710208

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	8.0	15.0	209	3.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M128140A

Lab Sample ID: A6710209

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	10.6	20.0	332	4.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160A

Lab Sample ID: A6710210

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	8.0	15.0	273	3.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6821856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M133160C

Lab Sample ID: A6710210FD

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	8.0	15.0	250	3.00	

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: 310.2-A98

AAB #: A6B21856

Lab Name: STL Buffalo

Contract #: \_\_\_\_\_

Field Sample ID: TF3M2114DA

Lab Sample ID: A6710211

Matrix: WATER

% Solids: 0.0

Date Received: 21-Jun-2006

Date Analyzed: 27-Jun-2006

Concentration Units: MG/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
ALKALINITY, TOTAL (AS CaCO3)	5.3	10	147	2.00	

Comments:

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2/27/06*

**FPM-GROUP**  
**Data Verification and Usability Report**  
**GRIFFISS AIR FORCE BASE**  
**Site Griffiss AFB TANK FARM 1/3**  
**Water Sampling**  
**Contract No. F41624-03-D-8601**

**FPM Project No. 40-05-27**

**LSL Job # 0609018**

Laboratory: Life Sciences Laboratories, Inc.  
Sample Matrix: Water  
Number of Samples: 15  
Analytical Protocol: AFCEE QAPP, Version 4.0, with AFCEE-approved lab variances  
Data Reviewer: Connie van Hoesel  
Sample Date: June 26, 2006

**LIST OF DATA VERIFICATION SAMPLES**

This verification report pertains to the following environmental samples and corresponding QC samples:

Sample ID	Date	QC Samples	Date
TF3CE313PA	9/26/06	092606PE, 092606PF, 092606PR	9/26/06
TF3M2114PA	9/26/06		
TF3M11614PA	9/26/06		
TF3M11713PA	9/26/06		
TF3M119R12PA	9/26/06		
TF3M121R12PA	9/26/06		
TF3M12314PA	9/26/06		
TF3M12614PA	9/26/06		
TF3M12713PA	9/26/06		
TF3M13316PA	9/26/06		
TF3M12814PA	9/26/06		

Notes:

Refer to attached chain-of-custody for detailed sampling information and sample specific analyses requested.

PA – Primary environmental samples

PC – Field duplicate sample

PE – Equipment blank

PF – Ambient blank

PR – Trip blank

## **DELIVERABLES**

The data deliverable report was per requirements of the AFCEE QAPP 4.0 and approved variances. The report consisted of the following major sections: lab attachment letter, case narrative, chain-of-custody, lab qualifier definitions, analytical results (sheet 2) based on analytical batch, calibration summaries, method blank summaries, laboratory control sample summaries, matrix spike/matrix spike duplicate summaries, holding time forms, performance checks, surrogate and internal standard recoveries, as applicable.

## **ANALYTICAL METHODS**

The analytical test methods and QA/QC requirements used for the soil sample analysis was per methods as specified in the AFCEE Quality Assurance Project Plan, Version 4.0 and AFCEE approved laboratory variances. The analytical methods employed included SW-846: Volatile Organic Compounds (VOCs) by Method SW8260 and Semivolatile Organic Compounds (SVOCs) by Method SW8270, and Total Alkalinity by EPA Method 310.2.

## **VERIFICATION GUIDANCE**

The analytical work was performed by Life Sciences Laboratories, Inc. in accordance with the Air Force Center for Environmental Excellence (AFCEE), Quality Assurance Project Plan (QAPP), Version 4.0, with AFCEE-approved laboratory variances. The data was verified according to the protocols and QC requirements of the respective analytical methods and of the QAPP Version 4.0. For data usability purposes all values were further evaluated, including positive and non-detect results that were qualified “R” (Rejected) according to QAPP. The data usability analysis was based on the reviewer’s professional judgment and on an assessment of how this data would fare with respect to the U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines for Organic (and Inorganic) Data Review (February 1994), and the AFCEE QAPP, Version 4.0.

## **QA/QC CRITERIA**

The following QA/QC criteria were reviewed, as applicable and available:

- Method detection limits and reporting limits (MDL, RL)
- Holding times, sample preservation and storage
- MS tune performance
- Initial and Continuing calibration summaries
- Second source calibration verification summary
- Method blanks
- Ambient, equipment, and trip blanks (as applicable)
- Field duplicate results
- Surrogate spike recoveries
- Internal standard areas counts and retention times
- Laboratory control samples (LCS)
- Results reported between MDL and RL (F-flag)

- Sample storage and preservation
- Data system printouts
- Qualitative and quantitative compound identification
- Chain-of-custody (COC)
- Case narrative and deliverables compliance

The items listed above were in compliance with AFCEE QAPP and USEPA criteria and protocols with exceptions discussed in the text below. The data have been verified according to the procedures outlined above and qualified accordingly.

***GENERAL NOTES:***

**MISSING SAMPLES**

None. All samples documented on the chain of custody were received by the laboratory.

**SAMPLE LABELING**

No problems were encountered with sample labeling and transcription to laboratory forms.

**BLANKS**

Whenever blanks, including method, ambient, equipment, and trip, contained low levels of contaminants (between MDL and RL), the laboratory and/or data verifier qualified the subject results with an “F” flag. Since no qualification of associated field samples are required for blanks less than the RL, no further action was taken in such instances.

**MS/MSD**

For SVOCs, the lab performed matrix spike and matrix spike duplicate samples for parent sample TF3M119R12OA. However, these samples were not requested by the client in the chain-of-custody; therefore, no action was taken for the MS/MSD criterion.

## VOLATILE ORGANIC COMPOUNDS (VOCs)

- The analyte isopropylbenzene required additional dilution (1:2) in original samples TF3M2114NA and TF3M12314PA, which were analyzed at 1:1. Also, the analytes ethylbenzene and 1,2,4-trimethylbenzene required additional dilution (1:5) in original sample TF3M12713PA, which was analyzed at 1:1. Use diluted sample results for these compounds only. Original sample results are modified accordingly.

## SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)

- Laboratory performance on individual samples is established by means of spiking all samples prior to analysis with surrogate compounds and assessing the percent recoveries. The following table summarizes QC exceedances for samples which exhibited surrogate compound recovery deficiencies. The Sample ID, surrogate compound, percent recoveries, and QC limits are listed.

Sample ID	Surrogate	%Rec	AFCEE QC Limits (%)	Flag Applied	Rationale
TF3M121R12PA	2,4,6-Tribromophenol	<i>18</i>	42-124	J/UJ	%Rec lower than lower control limit but greater than 10%
TF3M121R12PA (reanalysis)	2,4,6-Tribromophenol	<i>26</i>	42-124	R	Reanalysis performed outside holding time; original results used
Method Blank-3922	2,4,6-Tribromophenol	<i>129</i>	42-124	None	QC sample relevant only to reanalyzed sample TF3M121R12PA (rejected)
LCS-3922	2,4,6-Tribromophenol	<i>132</i>	42-124	None	QC sample relevant only to reanalyzed sample TF3M121R12PA (rejected)
LCSD-3922	2,4,6-Tribromophenol	<i>137</i>	42-124	None	QC sample relevant only to reanalyzed sample TF3M121R12PA (rejected)

If the surrogate recovery is not within AFCEE limits, corrective action shall be implemented: the sample shall be reextracted and reanalyzed. If the corrective action is ineffective in resolving the exceedance, then all analytes associated with the surrogate in that sample are qualified. As per the QAPP, for samples with recoveries greater than the upper control limit,

positive sample results are considered estimated (flagged “J”). For samples with surrogate recoveries greater than 10% but less than the lower control limit, positive results are considered estimated (flagged “J”) and non-detect results are considered estimated (flagged “UJ”). For samples with surrogate recoveries less than 10%, the results are rejected for the analytes. However, using professional judgment, no corrective action and/or flagging is required for minimal exceedances (i.e., within 1% of the control limits).

**Corrective Action:** The sample TF3M121R12PA above was re-extracted and reanalyzed due to one surrogate recovery exceedance, that for 2,4,6-tribromophenol. The results of the resample reanalysis are also shown in the above table. The determination of which sample results to use for each sample is summarized below:

- TF3M121R12PA: The reanalyzed sample confirmed a matrix effect, according to the case narrative. However, the reanalyzed sample was re-extracted outside of holding time (maximum holding time 7 days, time to re-extraction 8.2 days). Therefore, the reanalysis results were rejected, and the original results were deemed usable with qualifiers as discussed above (“J” for detected results, “UJ” for non-detect results). Note that this surrogate is associated with seven analytes: 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, 4-chloro-3-methylphenol, 4-nitrophenol, and pentachlorophenol.
  - MB-3922, LCS-3922, and LCSD-3922: These QC samples are only relevant to the reanalyzed sample TF3M121R12PA, which was rejected. No corrective action or qualification of the original sample results is required.
- According to the case narrative, the following analytes exhibited percent differences greater than 20% for the purposes of the continuing calibration verification (CCV):

Analyte	CCV %D
<i>LSL Job # 0609018, CCV CC100506A5</i>	
Benzoic Acid	21.6
Hexachlorobutadiene	-27.8
2,4,6-Tribromophenol	-24.4
Indeno[1,2,3-cd]pyrene	-25.4
Dibenz[a,h]anthracene	-26.6

**Corrective Action:** This CCV was relevant only to the reanalyzed sample TF3M121R12PA, which was rejected. No corrective action or qualification of the original sample results is required.

- Laboratory control samples (LCS) are samples spiked with all analytes of interest at known concentrations. The following table summarizes QC exceedances of the LCS analysis. The LCS ID, percent recovery, and QC limits are listed.

<i>LCS Job Number Spike Analytes</i>	<i>LCS %Rec</i>	<i>QC Limits (%)</i>	<i>Flag Applied</i>	<i>Rationale</i>
<i>LSL Job # 0609018: LCS-3904</i>				
Benzoic Acid	<b>0</b>	20-120	None	%Rec within marginal exceedance limits (0-150) and parameters of approved variance
<i>LSL Job # 0609018: LCSD-3904</i>				
Benzoic Acid	<b>10</b>	20-120	None	%Rec within marginal exceedance limits

<i>LCS Job Number Spike Analytes</i>	<i>LCS %Rec</i>	<i>QC Limits (%)</i>	<i>Flag Applied</i>	<i>Rationale</i>
				(0-150) and parameters of approved variance

The LCS analyses are used to assess the overall laboratory performance pertaining to the analytical method. The QAPP includes method-specific QC acceptance criteria for the percent recovery of the spike compounds. The LCS results are used to evaluate each AFCEE analytical batch and to determine if the method is within control limits. When an LCS analyte is outside the acceptance limit, the laboratory shall perform corrective action. If the corrective action is ineffective in resolving the exceedance, then that analyte's results in all the associated samples are qualified. According to the QAPP, when the percent recovery (%Rec) is greater than the upper control limit, positive results are considered estimated (flagged "J"); and when the %Rec is less than the lower control limit, positive values are estimated (flagged "J") and non-detects are rejected (flagged "R"). Note that the QAPP also allows for up to three marginal exceedances of LCS control limits for an LCS with 64 analytes.

**Corrective Action:** In accordance with the case narrative, no corrective action was required since %Rec was within marginal exceedance limits. Furthermore, LSL has an approved variance which states that corrective action is not required if benzoic acid (a poor-performing analyte) exceeds acceptance criteria. Note that benzoic acid is not a project-specific analyte of concern for the site.

## **TOTAL ALKALINITY**

- There were no exceedances for total alkalinity analysis.

## **DATA USABILITY RESULTS**

### **VOCs**

Based on the evaluation of all information in the analytical data groups, the results of the samples for VOCs are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

### **SVOCs**

Based on the evaluation of all information in the analytical data groups, the results of the samples for SVOCs are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

### **TOTAL ALKALINITY**

Based on the evaluation of all information in the analytical data groups, the results of the samples for total alkalinity are highly usable with the data qualifiers as noted. Using the verification approach as presented above, the results for all above samples are 100% usable.

## **AFCEE SUMMARY**

All data in Job # 0609018 are valid and usable with qualifications as noted in the data review.

Signed: Concordia van Hoesel Date: 11/3/06

## ***ATTACHMENTS***

- Chain-of-Custody
- Laboratory's Case Narrative
- Definition of AFCEE Data Qualifiers
- Definition of USEPA Data Qualifiers
- Qualified final data verification results on annotated Lab Sheet 2s





AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3CE313PA                      Lab Sample ID: 0609018-001A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0058.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06

Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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*CAF*  
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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3CE313PA                      Lab Sample ID: 0609018-001A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0058.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	6.40	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	1.31	1	
n-Propylbenzene	0.00900	1.0	6.68	1	
Naphthalene	0.0240	1.0	2.33	1	
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	4.06	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.850	1	F
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	1.13	1	
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3CE313PA                      Lab Sample ID: 0609018-001A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0058.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	98	72 - 119	
4-Bromofluorobenzene	103	76 - 119	
Dibromofluoromethane	101	85 - 115	
Toluene-d8	112	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	359807	178690 - 714758	
Chlorobenzene-d5	383900	199960 - 799842	
Fluorobenzene	1143274	571263 - 2285052	

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Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260E                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M2114PA                      Lab Sample ID: 0609018-002A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0059.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	1.18	1	F
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.670	1	F
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.230	1	F
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #:                      R6783  
 Lab Name:                      Life Science Laboratories, Inc.                      Contract #:                      \_\_\_\_\_  
 Field Sample ID:                      TF3M2114PA                      Lab Sample ID:                      0609018-002A                      Matrix:                      Groundwater  
 % Solids:                      0                      Initial Calibration ID:                      663                      File ID:                      J0059.D  
 Date Received:                      27-Sep-06                      Date Extracted:                      \_\_\_\_\_                      Date Analyzed:                      02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.150	1	F
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	<del>54.0</del> 62.9	# 2	J *
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	2.96	1	
n-Propylbenzene	0.00900	1.0	10.8	1	
Naphthalene	0.0240	1.0	2.76	1	
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	3.84	1	
sec-Butylbenzene	0.0170	1.0	5.10	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	1.53	1	
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.240	1	F
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	1.18	1	F

Comments: \* Result transferred from dilution sample TF3M2114PA(1:2)

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M2114PA                      Lab Sample ID: 0609018-002A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0059.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	94	72 - 119	
4-Bromofluorobenzene	110	76 - 119	
Dibromofluoromethane	96	85 - 115	
Toluene-d8	116	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	439817	178690 - 714758	
Chlorobenzene-d5	449222	199960 - 799842	
Fluorobenzene	1303642	571263 - 2285052	

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Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M2114PA                      Lab Sample ID: 0609018-002A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0073.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0560	4.0	1.12	2	F
1,1,1,2-Tetrachloroethane	0.108	1.0	0.108	2	U
1,1,1-Trichloroethane	0.0300	2.0	0.0300	2	U
1,1,2,2-Tetrachloroethane	0.162	1.0	0.162	2	U
1,1,2-Trichloroethane	0.0560	2.0	0.0560	2	U
1,1-Dichloroethane	0.0660	2.0	0.0660	2	U
1,1-Dichloroethene	0.0920	2.0	0.0920	2	U
1,1-Dichloropropene	0.0480	2.0	0.0480	2	U
1,2,3-Trichlorobenzene	0.0720	2.0	0.0720	2	U
1,2,3-Trichloropropane	0.0920	2.0	0.0920	2	U
1,2,4-Trichlorobenzene	0.0500	2.0	0.0500	2	U
1,2,4-Trimethylbenzene	0.0240	2.0	1.04	2	F
1,2-Dibromo-3-chloropropane	0.522	4.0	0.522	2	U
1,2-Dibromoethane	0.0700	2.0	0.0700	2	U
1,2-Dichlorobenzene	0.0380	2.0	0.0380	2	U
1,2-Dichloroethane	0.0480	1.0	0.0480	2	U
1,2-Dichloropropane	0.0520	2.0	0.0520	2	U
1,3,5-Trimethylbenzene	0.0260	2.0	0.0260	2	U
1,3-Dichlorobenzene	0.0400	2.0	0.0400	2	U
1,3-Dichloropropane	0.0460	1.0	0.0460	2	U
1,4-Dichlorobenzene	0.0340	1.0	0.0340	2	U
1-Chlorohexane	0.0940	2.0	0.0940	2	U
2,2-Dichloropropane	0.164	2.0	0.164	2	U
2-Butanone	1.30	20	1.30	2	U
2-Chlorotoluene	0.0240	2.0	0.0240	2	U
4-Chlorotoluene	0.0340	2.0	0.0340	2	U
4-Methyl-2-pentanone	0.750	20	0.750	2	U
Acetone	1.65	20	1.65	2	U
Benzene	0.0200	1.0	0.200	2	F
Bromobenzene	0.0560	2.0	0.0560	2	U
Bromochloromethane	0.118	2.0	0.118	2	U
Bromodichloromethane	0.0620	1.0	0.0620	2	U
Bromoform	0.0940	2.0	0.0940	2	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B      Preparatory Method:      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.      Contract #:        
 Field Sample ID: TF3M2114PA      Lab Sample ID: 0609018-002A      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 663      File ID: J0073.D  
 Date Received: 27-Sep-06      Date Extracted:      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.118	6.0	0.118	2	U
Carbon tetrachloride	0.0640	2.0	0.0640	2	U
Chlorobenzene	0.0220	1.0	0.0220	2	U
Chloroethane	0.232	2.0	0.232	2	U
Chloroform	0.0580	1.0	0.0580	2	U
Chloromethane	0.252	2.0	0.252	2	U
cis-1,2-Dichloroethene	0.0640	2.0	0.0640	2	U
cis-1,3-Dichloropropene	0.0420	1.0	0.0420	2	U
Dibromochloromethane	0.0820	1.0	0.0820	2	U
Dibromomethane	0.0760	2.0	0.0760	2	U
Dichlorodifluoromethane	0.134	2.0	0.134	2	U
Ethylbenzene	0.0480	2.0	0.0480	2	U
Hexachlorobutadiene	0.122	1.2	0.122	2	U
Isopropylbenzene	0.0420	2.0	62.9	2	
Methyl tert-butyl ether	0.0500	10	0.0500	2	U
Methylene chloride	0.0680	2.0	0.0680	2	U
n-Butylbenzene	0.0260	2.0	3.20	2	
n-Propylbenzene	0.0180	2.0	10.2	2	
Naphthalene	0.0480	2.0	3.26	2	
o-Xylene	0.0280	2.0	0.0280	2	U
p-Isopropyltoluene	0.0280	2.0	4.10	2	
sec-Butylbenzene	0.0340	2.0	5.06	2	
Styrene	0.0400	2.0	0.0400	2	U
tert-Butylbenzene	0.0320	2.0	1.84	2	F
Tetrachloroethene	0.0600	2.0	0.0600	2	U
Toluene	0.0360	2.0	0.0360	2	U
trans-1,2-Dichloroethene	0.0540	2.0	0.0540	2	U
trans-1,3-Dichloropropene	0.0580	2.0	0.0580	2	U
Trichloroethene	0.0540	2.0	0.0540	2	U
Trichlorofluoromethane	0.0400	2.0	0.0400	2	U
Vinyl chloride	0.0760	2.0	0.0760	2	U
Xylenes (total)	0.0840	4.0	1.12	2	F

*\*use this result only*

Comments:

*\*Result transferred to original sample TF32114PA (1:1)*

*cont  
11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M2114PA                      Lab Sample ID: 0609018-002A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0073.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	90	72 - 119	
4-Bromofluorobenzene	108	76 - 119	
Dibromofluoromethane	98	85 - 115	
Toluene-d8	112	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	499017	178690 - 714758	
Chlorobenzene-d5	532900	199960 - 799842	
Fluorobenzene	1547334	571263 - 2285052	

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*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M11614PA                      Lab Sample ID: 0609018-003A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0060.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M11614PA                      Lab Sample ID: 0609018-003A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0060.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	7.44	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	1.80	1	
n-Propylbenzene	0.00900	1.0	4.18	1	
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	4.03	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	1.54	1	
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M11614PA                      Lab Sample ID: 0609018-003A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0060.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	94	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Dibromofluoromethane	99	85 - 115	
Toluene-d8	118	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	470281	178690 - 714758	
Chlorobenzene-d5	495443	199960 - 799842	
Fluorobenzene	1424548	571263 - 2285052	

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*11/3/06*

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M11713PA                      Lab Sample ID: 0609018-004A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0061.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.120	1	F
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M11713PA                      Lab Sample ID: 0609018-004A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0061.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.200	1	F
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	0.150	1	F
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	0.00900	1	U
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	0.550	1	F
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	1.36 <sup>6</sup>	1	
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M11713PA                      Lab Sample ID: 0609018-004A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0061.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	91	72 - 119	
4-Bromofluorobenzene	113	76 - 119	
Dibromofluoromethane	99	85 - 115	
Toluene-d8	106	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	476489	178690 - 714758	
Chlorobenzene-d5	486938	199960 - 799842	
Fluorobenzene	1495789	571263 - 2285052	

*Wst*  
*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #:                      R6783  
 Lab Name:                      Life Science Laboratories, Inc.                      Contract #:                      \_\_\_\_\_  
 Field Sample ID:                      TF3M119R12PA                      Lab Sample ID:                      0609018-005A                      Matrix:                      Groundwater  
 % Solids:                      0                      Initial Calibration ID:                      663                      File ID:                      J0062.D  
 Date Received:                      27-Sep-06                      Date Extracted:                      \_\_\_\_\_                      Date Analyzed:                      02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	2.22	1	F
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M119R12PA                      Lab Sample ID: 0609018-005A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0062.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	0.0210	1	U
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	0.00900	1	U
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	0.0170	1	U
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.600	1	F
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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*WJH*  
 11/3/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M119R12PA                      Lab Sample ID: 0609018-005A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0062.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	92	72 - 119	
4-Bromofluorobenzene	105	76 - 119	
Dibromofluoromethane	99	85 - 115	
Toluene-d8	111	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	466214	178690 - 714758	
Chlorobenzene-d5	510677	199960 - 799842	
Fluorobenzene	1529776	571263 - 2285052	

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11/3/06

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B      Preparatory Method:      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.      Contract #:      Matrix: Groundwater  
 Field Sample ID: TF3M121R12PA      Lab Sample ID: 0609018-006A      File ID: J0063.D  
 % Solids: 0      Initial Calibration ID: 663      Date Analyzed: 02-Oct-06  
 Date Received: 27-Sep-06      Date Extracted:      Date Analyzed: 02-Oct-06

Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M121R12PA                      Lab Sample ID: 0609018-006A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0063.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	0.0210	1	U
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	0.00900	1	U
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	0.0170	1	U
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.0160	1	U
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	1.20	1	
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M121R12PA                      Lab Sample ID: 0609018-006A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0063.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	94	72 - 119	
4-Bromofluorobenzene	105	76 - 119	
Dibromofluoromethane	97	85 - 115	
Toluene-d8	102	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	441309	178690 - 714758	
Chlorobenzene-d5	463040	199960 - 799842	
Fluorobenzene	1487368	571263 - 2285052	

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*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12314PA                      Lab Sample ID: 0609018-007A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0064.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.340	1	F
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	22.5	1	
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	3.88	1	
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12314PA                      Lab Sample ID: 0609018-007A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0064.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.170	1	F
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	57.9 58.4	1 2	F
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.980	1	F
n-Propylbenzene	0.00900	1.0	7.35	1	
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	1.38	1	
sec-Butylbenzene	0.0170	1.0	1.39	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	1.14	1	
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.340	1	F

Comments: Result transferred from dilution sample TF3M12314PA (1:2)

*EWB*  
11/3/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:  
 Field Sample ID: TF3M12314PA                      Lab Sample ID: 0609018-007A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0064.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	94	72 - 119	
4-Bromofluorobenzene	107	76 - 119	
Dibromofluoromethane	101	85 - 115	
Toluene-d8	114	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	472911	178690 - 714758	
Chlorobenzene-d5	481208	199960 - 799842	
Fluorobenzene	1408509	571263 - 2285052	

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*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12314PA                      Lab Sample ID: 0609018-007A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0086.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0560	4.0	0.280	2	F
1,1,1,2-Tetrachloroethane	0.108	1.0	0.108	2	U
1,1,1-Trichloroethane	0.0300	2.0	0.0300	2	U
1,1,2,2-Tetrachloroethane	0.162	1.0	0.162	2	U
1,1,2-Trichloroethane	0.0560	2.0	0.0560	2	U
1,1-Dichloroethane	0.0660	2.0	0.0660	2	U
1,1-Dichloroethene	0.0920	2.0	0.0920	2	U
1,1-Dichloropropene	0.0480	2.0	0.0480	2	U
1,2,3-Trichlorobenzene	0.0720	2.0	0.0720	2	U
1,2,3-Trichloropropane	0.0920	2.0	0.0920	2	U
1,2,4-Trichlorobenzene	0.0500	2.0	0.0500	2	U
1,2,4-Trimethylbenzene	0.0240	2.0	18.5	2	
1,2-Dibromo-3-chloropropane	0.522	4.0	0.522	2	U
1,2-Dibromoethane	0.0700	2.0	0.0700	2	U
1,2-Dichlorobenzene	0.0380	2.0	0.0380	2	U
1,2-Dichloroethane	0.0480	1.0	0.0480	2	U
1,2-Dichloropropane	0.0520	2.0	0.0520	2	U
1,3,5-Trimethylbenzene	0.0260	2.0	3.56	2	
1,3-Dichlorobenzene	0.0400	2.0	0.0400	2	U
1,3-Dichloropropane	0.0460	1.0	0.0460	2	U
1,4-Dichlorobenzene	0.0340	1.0	0.0340	2	U
1-Chlorohexane	0.0940	2.0	0.0940	2	U
2,2-Dichloropropane	0.164	2.0	0.164	2	U
2-Butanone	1.30	20	1.30	2	U
2-Chlorotoluene	0.0240	2.0	0.0240	2	U
4-Chlorotoluene	0.0340	2.0	0.0340	2	U
4-Methyl-2-pentanone	0.750	20	0.750	2	U
Acetone	1.65	20	1.65	2	U
Benzene	0.0200	1.0	0.0200	2	U
Bromobenzene	0.0560	2.0	0.0560	2	U
Bromochloromethane	0.118	2.0	0.118	2	U
Bromodichloromethane	0.0620	1.0	0.0620	2	U
Bromoform	0.0940	2.0	0.0940	2	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12314PA                      Lab Sample ID: 0609018-007A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0086.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.118	6.0	0.118	2	U
Carbon tetrachloride	0.0640	2.0	0.0640	2	U
Chlorobenzene	0.0220	1.0	0.0220	2	U
Chloroethane	0.232	2.0	0.232	2	U
Chloroform	0.0580	1.0	0.0580	2	U
Chloromethane	0.252	2.0	0.252	2	U
cis-1,2-Dichloroethene	0.0640	2.0	0.0640	2	U
cis-1,3-Dichloropropene	0.0420	1.0	0.0420	2	U
Dibromochloromethane	0.0820	1.0	0.0820	2	U
Dibromomethane	0.0760	2.0	0.0760	2	U
Dichlorodifluoromethane	0.134	2.0	0.134	2	U
Ethylbenzene	0.0480	2.0	0.0480	2	U
Hexachlorobutadiene	0.122	1.2	0.122	2	U
Isopropylbenzene	0.0420	2.0	58.4	2	
Methyl tert-butyl ether	0.0500	10	0.0500	2	U
Methylene chloride	0.0680	2.0	0.0680	2	U
n-Butylbenzene	0.0260	2.0	1.44	2	F
n-Propylbenzene	0.0180	2.0	6.16	2	
Naphthalene	0.0480	2.0	0.0480	2	U
o-Xylene	0.0280	2.0	0.0280	2	U
p-Isopropyltoluene	0.0280	2.0	1.82	2	F
sec-Butylbenzene	0.0340	2.0	1.52	2	F
Styrene	0.0400	2.0	0.0400	2	U
tert-Butylbenzene	0.0320	2.0	1.42	2	F
Tetrachloroethene	0.0600	2.0	0.0600	2	U
Toluene	0.0360	2.0	0.0360	2	U
trans-1,2-Dichloroethene	0.0540	2.0	0.0540	2	U
trans-1,3-Dichloropropene	0.0580	2.0	0.0580	2	U
Trichloroethene	0.0540	2.0	0.0540	2	U
Trichlorofluoromethane	0.0400	2.0	0.0400	2	U
Vinyl chloride	0.0760	2.0	0.0760	2	U
Xylenes (total)	0.0840	4.0	0.280	2	F

*\*Use the results only*

Comments: *Result transferred to original sample TF3M12314PA (1:1)*

*WAF  
11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12314PA                      Lab Sample ID: 0609018-007A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0086.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	91	72 - 119	
4-Bromofluorobenzene	112	76 - 119	
Dibromofluoromethane	96	85 - 115	
Toluene-d8	109	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	479525	178690 - 714758	
Chlorobenzene-d5	496577	199960 - 799842	
Fluorobenzene	1533108	571263 - 2285052	

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Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12614PA                      Lab Sample ID: 0609018-008A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0065.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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*CAF*  
*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12614PA                      Lab Sample ID: 0609018-008A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0065.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	6.28	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	5.81	1	
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	5.33	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	1.58	1	
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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*cont*  
*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12614PA                      Lab Sample ID: 0609018-008A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0065.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	91	72 - 119	
4-Bromofluorobenzene	111	76 - 119	
Dibromofluoromethane	99	85 - 115	
Toluene-d8	118	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	485074	178690 - 714758	
Chlorobenzene-d5	497376	199960 - 799842	
Fluorobenzene	1488045	571263 - 2285052	

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*11/3/06*

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12713PA                      Lab Sample ID: 0609018-009A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0066.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	31.6	1	
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	<del>10</del> 78.6	1	<del>U</del> *
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	3.05	1	
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments: *\* Result transferred from dilution sample TF3M12713PA (1:5)*

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11/3/06*

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12713PA                      Lab Sample ID: 0609018-009A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0066.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	35.2 <del>47.8</del> <del>78.6</del>	15	J
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	25.5	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	1.56	1	
n-Propylbenzene	0.00900	1.0	27.5	1	
Naphthalene	0.0240	1.0	25.8	1	
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	2.25	1	
sec-Butylbenzene	0.0170	1.0	3.39	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.0160	1	U
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	31.6	1	

Comments: \*Result transferred from dilution sample TF3M12713PA (1:15)

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11/3/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12713PA                      Lab Sample ID: 0609018-009A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0066.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	90	72 - 119	
4-Bromofluorobenzene	110	76 - 119	
Dibromofluoromethane	97	85 - 115	
Toluene-d8	108	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	565026	178690 - 714758	
Chlorobenzene-d5	540971	199960 - 799842	
Fluorobenzene	1642481	571263 - 2285052	

*cut*  
*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12713PA                      Lab Sample ID: 0609018-009A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0087.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.140	10	22.2	5	
1,1,1,2-Tetrachloroethane	0.270	2.5	0.270	5	U
1,1,1-Trichloroethane	0.0750	5.0	0.0750	5	U
1,1,2,2-Tetrachloroethane	0.405	2.5	0.405	5	U
1,1,2-Trichloroethane	0.140	5.0	0.140	5	U
1,1-Dichloroethane	0.165	5.0	0.165	5	U
1,1-Dichloroethene	0.230	5.0	0.230	5	U
1,1-Dichloropropene	0.120	5.0	0.120	5	U
1,2,3-Trichlorobenzene	0.180	5.0	0.180	5	U
1,2,3-Trichloropropane	0.230	5.0	0.230	5	U
1,2,4-Trichlorobenzene	0.125	5.0	0.125	5	U
1,2,4-Trimethylbenzene	0.0600	5.0	78.6	5	
1,2-Dibromo-3-chloropropane	1.31	10	1.31	5	U
1,2-Dibromoethane	0.175	5.0	0.175	5	U
1,2-Dichlorobenzene	0.0950	5.0	0.0950	5	U
1,2-Dichloroethane	0.120	2.5	0.120	5	U
1,2-Dichloropropane	0.130	5.0	0.130	5	U
1,3,5-Trimethylbenzene	0.0650	5.0	0.0650	5	U
1,3-Dichlorobenzene	0.100	5.0	0.100	5	U
1,3-Dichloropropane	0.115	2.5	0.115	5	U
1,4-Dichlorobenzene	0.0850	2.5	0.0850	5	U
1-Chlorohexane	0.235	5.0	0.235	5	U
2,2-Dichloropropane	0.410	5.0	0.410	5	U
2-Butanone	3.24	50	3.24	5	U
2-Chlorotoluene	0.0600	5.0	0.0600	5	U
4-Chlorotoluene	0.0850	5.0	0.0850	5	U
4-Methyl-2-pentanone	1.88	50	1.88	5	U
Acetone	4.12	50	4.12	5	U
Benzene	0.0500	2.5	2.40	5	F
Bromobenzene	0.140	5.0	0.140	5	U
Bromochloromethane	0.295	5.0	0.295	5	U
Bromodichloromethane	0.155	2.5	0.155	5	U
Bromoform	0.235	5.0	0.235	5	U

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U  
M

Comments: \* Result transferred to original sample TF3M12713PA (1:1)  
\* Result transferred to original sample TF3M12713PA (1:1)

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12713PA                      Lab Sample ID: 0609018-009A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0087.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.295	15	0.295	5	U
Carbon tetrachloride	0.160	5.0	0.160	5	U
Chlorobenzene	0.0550	2.5	0.0550	5	U
Chloroethane	0.580	5.0	0.580	5	U
Chloroform	0.145	2.5	0.145	5	U
Chloromethane	0.630	5.0	0.630	5	U
cis-1,2-Dichloroethene	0.160	5.0	0.160	5	U
cis-1,3-Dichloropropene	0.105	2.5	0.105	5	U
Dibromochloromethane	0.205	2.5	0.205	5	U
Dibromomethane	0.190	5.0	0.190	5	U
Dichlorodifluoromethane	0.335	5.0	0.335	5	U
Ethylbenzene	0.120	5.0	35.2	5	
Hexachlorobutadiene	0.305	3.0	0.305	5	U
Isopropylbenzene	0.105	5.0	18.0	5	
Methyl tert-butyl ether	0.125	25	0.125	5	U
Methylene chloride	0.170	5.0	0.170	5	U
n-Butylbenzene	0.0650	5.0	0.0650	5	U
n-Propylbenzene	0.0450	5.0	20.3	5	
Naphthalene	0.120	5.0	21.7	5	
o-Xylene	0.0700	5.0	0.0700	5	U
p-Isopropyltoluene	0.0700	5.0	3.90	5	F
sec-Butylbenzene	0.0850	5.0	3.70	5	F
Styrene	0.100	5.0	0.100	5	U
tert-Butylbenzene	0.0800	5.0	0.0800	5	U
Tetrachloroethene	0.150	5.0	0.150	5	U
Toluene	0.0900	5.0	0.0900	5	U
trans-1,2-Dichloroethene	0.135	5.0	0.135	5	U
trans-1,3-Dichloropropene	0.145	5.0	0.145	5	U
Trichloroethene	0.135	5.0	0.135	5	U
Trichlorofluoromethane	0.100	5.0	0.100	5	U
Vinyl chloride	0.190	5.0	0.190	5	U
Xylenes (total)	0.210	10	22.2	5	

*\* Use this result*

Comments: *\* Result transferred to original sample TF3M12713PA (1:1)*

*AWA  
11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12713PA                      Lab Sample ID: 0609018-009A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0087.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	94	72 - 119	
4-Bromofluorobenzene	107	76 - 119	
Dibromofluoromethane	95	85 - 115	
Toluene-d8	104	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	466140	178690 - 714758	
Chlorobenzene-d5	472275	199960 - 799842	
Fluorobenzene	1474454	571263 - 2285052	

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*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M12814PA                      Lab Sample ID: 0609018-010A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0084.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	4.37	1	
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	4.25	1	
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.330	1	F
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B      Preparatory Method:      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.      Contract #:      Matrix: Groundwater  
 Field Sample ID: TF3M12814PA      Lab Sample ID: 0609018-010A      File ID: J0084.D  
 % Solids: 0      Initial Calibration ID: 663      Date Analyzed: 03-Oct-06  
 Date Received: 27-Sep-06      Date Extracted:      Date Analyzed: 03-Oct-06

Concentration Units (ug/L or mg/Kg dry weight):      ug/L      Sample Size:      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	6.50	1	
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	2.05	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	2.49	1	
Naphthalene	0.0240	1.0	3.04	1	
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.860	1	F
sec-Butylbenzene	0.0170	1.0	0.890	1	F
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.0160	1	U
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	4.37	1	

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #:                      R6816  
 Lab Name:                      Life Science Laboratories, Inc.                      Contract #:  
 Field Sample ID:                      TF3M12814PA                      Lab Sample ID:                      0609018-010A                      Matrix:                      Groundwater  
 % Solids:                      0                      Initial Calibration ID:                      663                      File ID:                      J0084.D  
 Date Received:                      27-Sep-06                      Date Extracted:                                           Date Analyzed:                      03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	95	72 - 119	
4-Bromofluorobenzene	105	76 - 119	
Dibromofluoromethane	104	85 - 115	
Toluene-d8	103	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	406917	178690 - 714758	
Chlorobenzene-d5	426160	199960 - 799842	
Fluorobenzene	1331785	571263 - 2285052	

*CWA*  
*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                      Matrix: Groundwater  
 Field Sample ID: TF3M13316PA                      Lab Sample ID: 0609018-011A                      File ID: J0085.D  
 % Solids: 0                      Initial Calibration ID: 663                      Date Analyzed: 03-Oct-06  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06

Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.490	1	F
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	2.88	1	
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M13316PA                      Lab Sample ID: 0609018-011A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0085.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.160	1	F
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	5.16	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	1.19	1	
n-Propylbenzene	0.00900	1.0	6.59	1	
Naphthalene	0.0240	1.0	2.09	1	
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	1.29	1	
sec-Butylbenzene	0.0170	1.0	4.53	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.920	1	F
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.490	1	F

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6816  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M13316PA                      Lab Sample ID: 0609018-011A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0085.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 03-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	95	72 - 119	
4-Bromofluorobenzene	106	76 - 119	
Dibromofluoromethane	101	85 - 115	
Toluene-d8	112	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	439994	178690 - 714758	
Chlorobenzene-d5	455433	199960 - 799842	
Fluorobenzene	1339116	571263 - 2285052	

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Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M13316PC                      Lab Sample ID: 0609018-012A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0069.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.470	1	F
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,1,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	2.79	1	
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #:                      R6783  
 Lab Name:                      Life Science Laboratories, Inc.                      Contract #:                      \_\_\_\_\_  
 Field Sample ID:                      TF3M13316PC                      Lab Sample ID:                      0609018-012A                      Matrix:                      Groundwater  
 % Solids:                      0                      Initial Calibration ID:                      663                      File ID:                      J0069.D  
 Date Received:                      27-Sep-06                      Date Extracted:                      \_\_\_\_\_                      Date Analyzed:                      02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.160	1	F
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	5.00	1	
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	1.15	1	
n-Propylbenzene	0.00900	1.0	6.12	1	
Naphthalene	0.0240	1.0	1.99	1	
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	1.26	1	
sec-Butylbenzene	0.0170	1.0	4.31	1	
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.880	1	F
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.470	1	F

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: TF3M13316PC                      Lab Sample ID: 0609018-012A                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0069.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	93	72 - 119	
4-Bromofluorobenzene	115	76 - 119	
Dibromofluoromethane	99	85 - 115	
Toluene-d8	110	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	546976	178690 - 714758	
Chlorobenzene-d5	547776	199960 - 799842	
Fluorobenzene	1704006	571263 - 2285052	

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Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: 092606PE                      Lab Sample ID: 0609018-013A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0070.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: 092606PE                      Lab Sample ID: 0609018-013A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0070.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	0.0210	1	U
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	0.00900	1	U
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	0.0170	1	U
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.0160	1	U
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: 092606PE                      Lab Sample ID: 0609018-013A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0070.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L. or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	91	72 - 119	
4-Bromofluorobenzene	108	76 - 119	
Dibromofluoromethane	98	85 - 115	
Toluene-d8	103	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	508461	178690 - 714758	
Chlorobenzene-d5	523629	199960 - 799842	
Fluorobenzene	1646051	571263 - 2285052	

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*11/3/06*

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #:                      R6783  
 Lab Name:                      Life Science Laboratories, Inc.                      Contract #:                      \_\_\_\_\_  
 Field Sample ID:                      092606PF                      Lab Sample ID:                      0609018-014A                      Matrix:                      Groundwater Q  
 % Solids:                      0                      Initial Calibration ID:                      663                      File ID:                      J0071.D  
 Date Received:                      27-Sep-06                      Date Extracted:                      \_\_\_\_\_                      Date Analyzed:                      02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight):                      µg/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: 092606PF                      Lab Sample ID: 0609018-014A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0071.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06

Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	0.0210	1	U
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	0.00900	1	U
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	0.0170	1	U
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.0160	1	U
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:  
 Field Sample ID: 092606PF                      Lab Sample ID: 0609018-014A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0071.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	91	72 - 119	
4-Bromofluorobenzene	104	76 - 119	
Dibromofluoromethane	97	85 - 115	
Toluene-d8	102	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	478330	178690 - 714758	
Chlorobenzene-d5	508216	199960 - 799842	
Fluorobenzene	1599491	571263 - 2285052	

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Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: 092606PR                      Lab Sample ID: 0609018-015A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0072.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
(m+p)-Xylene	0.0280	2.0	0.0280	1	U
1,1,1,2-Tetrachloroethane	0.0540	0.50	0.0540	1	U
1,1,1-Trichloroethane	0.0150	1.0	0.0150	1	U
1,1,2,2-Tetrachloroethane	0.0810	0.50	0.0810	1	U
1,1,2-Trichloroethane	0.0280	1.0	0.0280	1	U
1,1-Dichloroethane	0.0330	1.0	0.0330	1	U
1,1-Dichloroethene	0.0460	1.0	0.0460	1	U
1,1-Dichloropropene	0.0240	1.0	0.0240	1	U
1,2,3-Trichlorobenzene	0.0360	1.0	0.0360	1	U
1,2,3-Trichloropropane	0.0460	1.0	0.0460	1	U
1,2,4-Trichlorobenzene	0.0250	1.0	0.0250	1	U
1,2,4-Trimethylbenzene	0.0120	1.0	0.0120	1	U
1,2-Dibromo-3-chloropropane	0.261	2.0	0.261	1	U
1,2-Dibromoethane	0.0350	1.0	0.0350	1	U
1,2-Dichlorobenzene	0.0190	1.0	0.0190	1	U
1,2-Dichloroethane	0.0240	0.50	0.0240	1	U
1,2-Dichloropropane	0.0260	1.0	0.0260	1	U
1,3,5-Trimethylbenzene	0.0130	1.0	0.0130	1	U
1,3-Dichlorobenzene	0.0200	1.0	0.0200	1	U
1,3-Dichloropropane	0.0230	0.50	0.0230	1	U
1,4-Dichlorobenzene	0.0170	0.50	0.0170	1	U
1-Chlorohexane	0.0470	1.0	0.0470	1	U
2,2-Dichloropropane	0.0820	1.0	0.0820	1	U
2-Butanone	0.649	10	0.649	1	U
2-Chlorotoluene	0.0120	1.0	0.0120	1	U
4-Chlorotoluene	0.0170	1.0	0.0170	1	U
4-Methyl-2-pentanone	0.375	10	0.375	1	U
Acetone	0.823	10	0.823	1	U
Benzene	0.0100	0.50	0.0100	1	U
Bromobenzene	0.0280	1.0	0.0280	1	U
Bromochloromethane	0.0590	1.0	0.0590	1	U
Bromodichloromethane	0.0310	0.50	0.0310	1	U
Bromoform	0.0470	1.0	0.0470	1	U

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #:                      R6783  
 Lab Name:                      Life Science Laboratories, Inc.                      Contract #:                      \_\_\_\_\_  
 Field Sample ID:                      092606PR                      Lab Sample ID:                      0609018-015A                      Matrix:                      Groundwater Q  
 % Solids:                      0                      Initial Calibration ID:                      663                      File ID:                      J0072.D  
 Date Received:                      27-Sep-06                      Date Extracted:                      \_\_\_\_\_                      Date Analyzed:                      02-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight):                      ug/L                      Sample Size:                      10 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Bromomethane	0.0590	3.0	0.0590	1	U
Carbon tetrachloride	0.0320	1.0	0.0320	1	U
Chlorobenzene	0.0110	0.50	0.0110	1	U
Chloroethane	0.116	1.0	0.116	1	U
Chloroform	0.0290	0.50	0.0290	1	U
Chloromethane	0.126	1.0	0.126	1	U
cis-1,2-Dichloroethene	0.0320	1.0	0.0320	1	U
cis-1,3-Dichloropropene	0.0210	0.50	0.0210	1	U
Dibromochloromethane	0.0410	0.50	0.0410	1	U
Dibromomethane	0.0380	1.0	0.0380	1	U
Dichlorodifluoromethane	0.0670	1.0	0.0670	1	U
Ethylbenzene	0.0240	1.0	0.0240	1	U
Hexachlorobutadiene	0.0610	0.60	0.0610	1	U
Isopropylbenzene	0.0210	1.0	0.0210	1	U
Methyl tert-butyl ether	0.0250	5.0	0.0250	1	U
Methylene chloride	0.0340	1.0	0.0340	1	U
n-Butylbenzene	0.0130	1.0	0.0130	1	U
n-Propylbenzene	0.00900	1.0	0.00900	1	U
Naphthalene	0.0240	1.0	0.0240	1	U
o-Xylene	0.0140	1.0	0.0140	1	U
p-Isopropyltoluene	0.0140	1.0	0.0140	1	U
sec-Butylbenzene	0.0170	1.0	0.0170	1	U
Styrene	0.0200	1.0	0.0200	1	U
tert-Butylbenzene	0.0160	1.0	0.0160	1	U
Tetrachloroethene	0.0300	1.0	0.0300	1	U
Toluene	0.0180	1.0	0.0180	1	U
trans-1,2-Dichloroethene	0.0270	1.0	0.0270	1	U
trans-1,3-Dichloropropene	0.0290	1.0	0.0290	1	U
Trichloroethene	0.0270	1.0	0.0270	1	U
Trichlorofluoromethane	0.0200	1.0	0.0200	1	U
Vinyl chloride	0.0380	1.0	0.0380	1	U
Xylenes (total)	0.0420	2.0	0.0420	1	U

Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8260B                      Preparatory Method:                      AAB #: R6783  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:                        
 Field Sample ID: 092606PR                      Lab Sample ID: 0609018-015A                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 663                      File ID: J0072.D  
 Date Received: 27-Sep-06                      Date Extracted:                      Date Analyzed: 02-Oct-06  
 Concentration Units (ug/L. or mg/Kg dry weight): ug/L                      Sample Size: 10 mL

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	92	72 - 119	
4-Bromofluorobenzene	104	76 - 119	
Dibromofluoromethane	97	85 - 115	
Toluene-d8	101	81 - 120	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	453520	178690 - 714758	
Chlorobenzene-d5	467122	199960 - 799842	
Fluorobenzene	1499781	571263 - 2285052	

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Comments:

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ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: TF3M119R12PA      Lab Sample ID: 0609018-005C      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5143.D  
 Date Received: 27-Sep-06      Date Extracted: 27-Sep-06      Date Analyzed: 29-Sep-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 1000 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
1,2,4-Trichlorobenzene	0.10	10	0.10	1	U
1,2-Dichlorobenzene	0.07	10	0.07	1	U
1,3-Dichlorobenzene	0.06	10	0.06	1	U
1,4-Dichlorobenzene	0.07	10	0.07	1	U
2,4,5-Trichlorophenol	0.14	50	0.14	1	U
2,4,6-Trichlorophenol	0.10	10	0.10	1	U
2,4-Dichlorophenol	0.08	10	0.08	1	U
2,4-Dimethylphenol	0.25	10	0.25	1	U
2,4-Dinitrophenol	0.27	50	0.27	1	U
2,4-Dinitrotoluene	0.14	10	0.14	1	U
2,6-Dinitrotoluene	0.20	10	0.20	1	U
2-Chloronaphthalene	0.11	10	0.11	1	U
2-Chlorophenol	0.12	10	0.12	1	U
2-Methylnaphthalene	0.05	10	0.05	1	U
2-Methylphenol	0.07	10	0.07	1	U
2-Nitroaniline	0.20	50	0.20	1	U
2-Nitrophenol	0.07	10	0.07	1	U
3,3'-Dichlorobenzidine	0.51	20	0.51	1	U
3-Nitroaniline	0.08	50	0.08	1	U
4,6-Dinitro-2-methylphenol	0.35	50	0.35	1	U
4-Bromophenyl phenyl ether	0.15	10	0.15	1	U
4-Chloro-3-methylphenol	0.08	20	0.08	1	U
4-Chloroaniline	0.10	20	0.10	1	U
4-Chlorophenyl phenyl ether	0.12	10	0.12	1	U
4-Methylphenol	0.11	50	0.11	1	U
4-Nitroaniline	0.19	50	0.19	1	U
4-Nitrophenol	0.40	50	0.40	1	U
Acenaphthene	0.08	10	0.560	1	F
Acenaphthylene	0.10	10	0.10	1	U
Anthracene	0.14	10	0.14	1	U
Benzo[a]anthracene	0.08	10	0.08	1	U
Benzo[a]pyrene	0.15	10	0.15	1	U
Benzo[b]fluoranthene	0.50	10	0.50	1	U

Comments:

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*cut*  
*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: TF3M119R12PA      Lab Sample ID: 0609018-005C      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5143.D  
 Date Received: 27-Sep-06      Date Extracted: 27-Sep-06      Date Analyzed: 29-Sep-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 1000 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Benzo[g,h,i]perylene	0.10	10	0.10	1	U
Benzo[k]fluoranthene	0.33	10	0.33	1	U
Benzoic acid	5.19	100	5.19	1	U
Benzyl alcohol	0.11	20	0.11	1	U
bis(2-Chloroethoxy)methane	0.10	10	0.10	1	U
bis(2-chloroethyl)ether	0.04	10	0.04	1	U
bis(2-chloroisopropyl)ether	0.13	10	0.13	1	U
bis(2-Ethylhexyl)phthalate	0.45	10	0.820	1	F
Butyl benzyl phthalate	0.16	10	0.16	1	U
Chrysene	0.08	10	0.08	1	U
Di-n-butyl phthalate	1.58	10	1.58	1	U
Di-n-octyl phthalate	0.18	10	0.18	1	U
Dibenz[a,h]anthracene	0.09	10	0.09	1	U
Dibenzofuran	0.14	10	0.14	1	U
Diethyl phthalate	0.13	10	0.13	1	U
Dimethyl phthalate	0.10	10	0.10	1	U
Fluoranthene	0.06	10	0.700	1	F
Fluorene	0.11	10	0.11	1	U
Hexachlorobenzene	0.11	10	0.11	1	U
Hexachlorobutadiene	0.13	10	0.13	1	U
Hexachloroethane	0.08	10	0.08	1	U
Indeno[1,2,3-cd]pyrene	0.09	10	0.09	1	U
Isophorone	0.12	10	0.12	1	U
N-Nitroso-di-n-propylamine	0.15	10	0.15	1	U
N-Nitrosodiphenylamine	0.08	10	0.08	1	U
Naphthalene	0.06	10	0.06	1	U
Nitrobenzene	0.12	10	0.12	1	U
Pentachlorophenol	0.23	50	0.23	1	U
Phenanthrene	0.10	10	0.10	1	U
Phenol	0.09	10	0.09	1	U
Pyrene	0.07	10	0.660	1	F

Surrogate	Recovery	Control Limits	Qualifier
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Comments:

*cut*  
*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C                      Preparatory Method: SW3520C                      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:  
 Field Sample ID: TF3M119R12PA                      Lab Sample ID: 0609018-005C                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 686                      File ID: N5143.D  
 Date Received: 27-Sep-06                      Date Extracted: 27-Sep-06                      Date Analyzed: 29-Sep-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 1000 mL

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol	115	42 - 124	
2-Fluorobiphenyl	79	48 - 120	
2-Fluorophenol	76	20 - 120	
Nitrobenzene-d5	90	41 - 120	
Phenol-d5	82	20 - 120	
Terphenyl-d14	88	51 - 135	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	195715	106288 - 425152	
Acenaphthene-d10	381877	197321 - 789284	
Chrysene-d12	508780	257362 - 1029448	
Naphthalene-d8	704311	372642 - 1490570	
Perylene-d12	431500	212374 - 849496	
Phenanthrene-d10	641125	321928 - 1287714	

*CWA*  
*11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: TF3M121R12PA      Lab Sample ID: 0609018-006C      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5144.D  
 Date Received: 27-Sep-06      Date Extracted: 27-Sep-06      Date Analyzed: 29-Sep-06

Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 910 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
1,2,4-Trichlorobenzene	0.11	11	0.11	1	U
1,2-Dichlorobenzene	0.08	11	0.08	1	U
1,3-Dichlorobenzene	0.07	11	0.07	1	U
1,4-Dichlorobenzene	0.08	11	0.08	1	U
2,4,5-Trichlorophenol	0.15	55	0.15	1	UJ
2,4,6-Trichlorophenol	0.11	11	0.11	1	UJ
2,4-Dichlorophenol	0.09	11	0.09	1	U
2,4-Dimethylphenol	0.27	11	0.27	1	U
2,4-Dinitrophenol	0.30	55	0.30	1	UJ
2,4-Dinitrotoluene	0.15	11	0.15	1	U
2,6-Dinitrotoluene	0.22	11	0.22	1	U
2-Chloronaphthalene	0.12	11	0.12	1	U
2-Chlorophenol	0.13	11	0.13	1	U
2-Methylnaphthalene	0.05	11	0.05	1	U
2-Methylphenol	0.08	11	0.08	1	U
2-Nitroaniline	0.22	55	0.22	1	U
2-Nitrophenol	0.08	11	0.08	1	U
3,3'-Dichlorobenzidine	0.56	22	0.56	1	U
3-Nitroaniline	0.09	55	0.09	1	U
4,6-Dinitro-2-methylphenol	0.38	55	0.38	1	UJ
4-Bromophenyl phenyl ether	0.16	11	0.16	1	U
4-Chloro-3-methylphenol	0.09	22	0.09	1	UJ
4-Chloroaniline	0.11	22	0.11	1	U
4-Chlorophenyl phenyl ether	0.13	11	0.13	1	U
4-Methylphenol	0.12	55	0.12	1	U
4-Nitroaniline	0.21	55	0.21	1	U
4-Nitrophenol	0.44	55	0.44	1	UJ
Acenaphthene	0.09	11	0.09	1	U
Acenaphthylene	0.11	11	0.11	1	U
Anthracene	0.15	11	0.15	1	U
Benzo[a]anthracene	0.09	11	0.09	1	U
Benzo[a]pyrene	0.16	11	0.16	1	U
Benzo[b]fluoranthene	0.55	11	0.55	1	U

Comments:

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*CAF*  
*11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: TF3M121R12PA      Lab Sample ID: 0609018-006C      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5144.D  
 Date Received: 27-Sep-06      Date Extracted: 27-Sep-06      Date Analyzed: 29-Sep-06

Concentration Units (ug/L or mg/Kg dry weight): µg/L      Sample Size: 910 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Benzo[g,h,i]perylene	0.11	11	0.11	1	U
Benzo[k]fluoranthene	0.36	11	0.36	1	U
Benzoic acid	5.70	110	5.70	1	U
Benzyl alcohol	0.12	22	0.12	1	U
bis(2-Chloroethoxy)methane	0.11	11	0.11	1	U
bis(2-chloroethyl)ether	0.04	11	0.04	1	U
bis(2-chloroisopropyl)ether	0.14	11	0.14	1	U
bis(2-Ethylhexyl)phthalate	0.49	11	0.824	1	F
Butyl benzyl phthalate	0.18	11	0.18	1	U
Chrysene	0.09	11	0.09	1	U
Di-n-butyl phthalate	1.74	11	1.74	1	U
Di-n-octyl phthalate	0.20	11	0.20	1	U
Dibenz[a,h]anthracene	0.10	11	0.10	1	U
Dibenzofuran	0.15	11	0.15	1	U
Diethyl phthalate	0.14	11	0.14	1	U
Dimethyl phthalate	0.11	11	0.11	1	U
Fluoranthene	0.07	11	0.07	1	U
Fluorene	0.12	11	0.12	1	U
Hexachlorobenzene	0.12	11	0.12	1	U
Hexachlorobutadiene	0.14	11	0.14	1	U
Hexachloroethane	0.09	11	0.09	1	U
Indeno[1,2,3-cd]pyrene	0.10	11	0.10	1	U
Isophorone	0.13	11	0.13	1	U
N-Nitroso-di-n-propylamine	0.16	11	0.16	1	U
N-Nitrosodiphenylamine	0.09	11	0.09	1	U
Naphthalene	0.07	11	0.07	1	U
Nitrobenzene	0.13	11	0.13	1	U
Pentachlorophenol	0.25	55	0.25	1	UJ
Phenanthrene	0.11	11	0.11	1	U
Phenol	0.10	11	0.10	1	U
Pyrene	0.08	11	0.08	1	U

Surrogate	Recovery	Control Limits	Qualifier
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Comments:

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*CWA  
11/3/06*

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C                      Preparatory Method: SW3520C                      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:  
 Field Sample ID: TF3M121R12PA                      Lab Sample ID: 0609018-006C                      Matrix: Groundwater  
 % Solids: 0                      Initial Calibration ID: 686                      File ID: N5144.D  
 Date Received: 27-Sep-06                      Date Extracted: 27-Sep-06                      Date Analyzed: 29-Sep-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L                      Sample Size: 910 mL

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol	18	42 - 124	*
2-Fluorobiphenyl	84	48 - 120	
2-Fluorophenol	50	20 - 120	
Nitrobenzene-d5	91	41 - 120	
Phenol-d5	62	20 - 120	
Terphenyl-d14	61	51 - 135	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	174689	106288 - 425152	
Acenaphthene-d10	343716	197321 - 789284	
Chrysene-d12	445776	257362 - 1029448	
Naphthalene-d8	632061	372642 - 1490570	
Perylene-d12	360627	212374 - 849496	
Phenanthrene-d10	574402	321928 - 1287714	

*CAA  
11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: 092606PE      Lab Sample ID: 0609018-013C      Matrix: Groundwater Q  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5145.D  
 Date Received: 27-Sep-06      Date Extracted: 27-Sep-06      Date Analyzed: 29-Sep-06

Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 940 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
1,2,4-Trichlorobenzene	0.11	11	0.11	1	U
1,2-Dichlorobenzene	0.07	11	0.07	1	U
1,3-Dichlorobenzene	0.06	11	0.06	1	U
1,4-Dichlorobenzene	0.07	11	0.07	1	U
2,4,5-Trichlorophenol	0.15	53	0.15	1	U
2,4,6-Trichlorophenol	0.11	11	0.11	1	U
2,4-Dichlorophenol	0.09	11	0.09	1	U
2,4-Dimethylphenol	0.27	11	0.27	1	U
2,4-Dinitrophenol	0.29	53	0.29	1	U
2,4-Dinitrotoluene	0.15	11	0.15	1	U
2,6-Dinitrotoluene	0.21	11	0.21	1	U
2-Chloronaphthalene	0.12	11	0.12	1	U
2-Chlorophenol	0.13	11	0.13	1	U
2-Methylnaphthalene	0.05	11	0.05	1	U
2-Methylphenol	0.07	11	0.07	1	U
2-Nitroaniline	0.21	53	0.21	1	U
2-Nitrophenol	0.07	11	0.07	1	U
3,3'-Dichlorobenzidine	0.54	21	0.54	1	U
3-Nitroaniline	0.09	53	0.09	1	U
4,6-Dinitro-2-methylphenol	0.37	53	0.37	1	U
4-Bromophenyl phenyl ether	0.16	11	0.16	1	U
4-Chloro-3-methylphenol	0.09	21	0.09	1	U
4-Chloroaniline	0.11	21	0.11	1	U
4-Chlorophenyl phenyl ether	0.13	11	0.13	1	U
4-Methylphenol	0.12	53	0.12	1	U
4-Nitroaniline	0.20	53	0.20	1	U
4-Nitrophenol	0.43	53	0.43	1	U
Acenaphthene	0.09	11	0.09	1	U
Acenaphthylene	0.11	11	0.11	1	U
Anthracene	0.15	11	0.15	1	U
Benzo[a]anthracene	0.09	11	0.09	1	U
Benzo[a]pyrene	0.16	11	0.16	1	U
Benzo[b]fluoranthene	0.53	11	0.53	1	U

Comments:

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*WJH*  
 11/3/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3922  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: TF3M121R12PA      Lab Sample ID: 0609018-006C      Matrix: Groundwater  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5209.D  
 Date Received: 27-Sep-06      Date Extracted: 02-Oct-06      Date Analyzed: 05-Oct-06  
 Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 1000 mL

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol	26	42 - 124	*
2-Fluorobiphenyl	60	48 - 120	
2-Fluorophenol	43	20 - 120	
Nitrobenzene-d5	78	41 - 120	
Phenol-d5	52	20 - 120	
Terphenyl-d14	64	51 - 135	

*DO NOT USE*

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	120416	106288 - 425152	
Acenaphthene-d10	243964	197321 - 789284	
Chrysene-d12	411626	257362 - 1029448	
Naphthalene-d8	411844	372642 - 1490570	
Perylene-d12	380214	212374 - 849496	
Phenanthrene-d10	437381	321928 - 1287714	

*OK  
11/3/06*

Comments:

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AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C      Preparatory Method: SW3520C      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.      Contract #: \_\_\_\_\_  
 Field Sample ID: 092606PE      Lab Sample ID: 0609018-013C      Matrix: Groundwater Q  
 % Solids: 0      Initial Calibration ID: 686      File ID: N5145.D  
 Date Received: 27-Sep-06      Date Extracted: 27-Sep-06      Date Analyzed: 29-Sep-06

Concentration Units (ug/L or mg/Kg dry weight): ug/L      Sample Size: 940 mL

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Benzo[g,h,i]perylene	0.11	11	0.11	1	U
Benzo[k]fluoranthene	0.35	11	0.35	1	U
Benzoic acid	5.52	110	5.52	1	U
Benzyl alcohol	0.12	21	0.12	1	U
bis(2-Chloroethoxy)methane	0.11	11	0.11	1	U
bis(2-chloroethyl)ether	0.04	11	0.04	1	U
bis(2-chloroisopropyl)ether	0.14	11	0.14	1	U
bis(2-Ethylhexyl)phthalate	0.48	11	0.840	1	F
Butyl benzyl phthalate	0.17	11	0.17	1	U
Chrysene	0.09	11	0.09	1	U
Di-n-butyl phthalate	1.68	11	1.68	1	U
Di-n-octyl phthalate	0.19	11	0.19	1	U
Dibenz[a,h]anthracene	0.10	11	0.10	1	U
Dibenzofuran	0.15	11	0.15	1	U
Diethyl phthalate	0.14	11	0.14	1	U
Dimethyl phthalate	0.11	11	0.11	1	U
Fluoranthene	0.06	11	0.06	1	U
Fluorene	0.12	11	0.12	1	U
Hexachlorobenzene	0.12	11	0.12	1	U
Hexachlorobutadiene	0.14	11	0.14	1	U
Hexachloroethane	0.09	11	0.09	1	U
Indeno[1,2,3-cd]pyrene	0.10	11	0.10	1	U
Isophorone	0.13	11	0.13	1	U
N-Nitroso-di-n-propylamine	0.16	11	0.16	1	U
N-Nitrosodiphenylamine	0.09	11	0.09	1	U
Naphthalene	0.06	11	0.06	1	U
Nitrobenzene	0.13	11	0.13	1	U
Pentachlorophenol	0.24	53	0.24	1	U
Phenanthrene	0.11	11	0.11	1	U
Phenol	0.10	11	0.10	1	U
Pyrene	0.07	11	0.07	1	U

Surrogate	Recovery	Control Limits	Qualifier
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Comments:

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*cut*  
11/3/06

AFCEE  
ORGANIC ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: SW8270C                      Preparatory Method: SW3520C                      AAB #: 3904  
 Lab Name: Life Science Laboratories, Inc.                      Contract #:  
 Field Sample ID: 092606PE                      Lab Sample ID: 0609018-013C                      Matrix: Groundwater Q  
 % Solids: 0                      Initial Calibration ID: 686                      File ID: N5145.D  
 Date Received: 27-Sep-06                      Date Extracted: 27-Sep-06                      Date Analyzed: 29-Sep-06  
 Concentration Units (ug/L or mg/Kg dry weight): µg/L                      Sample Size: 940 mL

Surrogate	Recovery	Control Limits	Qualifier
2,4,6-Tribromophenol	102	42 - 124	
2-Fluorobiphenyl	78	48 - 120	
2-Fluorophenol	77	20 - 120	
Nitrobenzene-d5	87	41 - 120	
Phenol-d5	80	20 - 120	
Terphenyl-d14	97	51 - 135	

Internal Std	Area Counts	Area Count Limits	Qualifier
1,4-Dichlorobenzene-d4	168311	106288 - 425152	
Acenaphthene-d10	328290	197321 - 789284	
Chrysene-d12	433643	257362 - 1029448	
Naphthalene-d8	605604	372642 - 1490570	
Perylene-d12	342563	212374 - 849496	
Phenanthrene-d10	550649	321928 - 1287714	

*CVB*  
*11/3/06*

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: E310.1 AAB #: R6847  
 Lab Name: Life Science Laboratories, Inc. Contract #:  
 Field Sample ID: TF3M12713PA Lab Sample ID: 0609018-009B Matrix: Groundwater  
 % Solids: 0 Initial Calibration ID: 0  
 Date Received: 27-Sep-06 Date Prepared: Date Analyzed: 03-Oct-06  
 Concentration Units (mg/L or mg/kg dry weight): mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Alkalinity, Total (As CaCO3)	10	10	380	1	

*cut  
11/3/06*

Comments:

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AFCEE  
WET CHEM ANALYSES DATA SHEET 2  
RESULTS

Analytical Method: E310.1 AAB #: R6847  
 Lab Name: Life Science Laboratories, Inc. Contract #:  
 Field Sample ID: TF3M13316PC Lab Sample ID: 0609018-012B Matrix: Groundwater  
 % Solids: 0 Initial Calibration ID: 0  
 Date Received: 27-Sep-06 Date Prepared: Date Analyzed: 03-Oct-06  
 Concentration Units (mg/L or mg/kg dry weight): mg/L

Analyte	MDL	RL	Concentration	Dilution	Qualifier
Alkalinity, Total (As CaCO3)	10	10	330	1	

*WST*  
*11/3/06*

Comments:

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