

FINAL
Groundwater Monitoring Report
for the October 2005 Sampling Event
Contract F41624-03-D-8597 Task Order 0116

Air Force Plant 59
Johnson City, New York

Prepared for:

**Air Force Center for Environmental Excellence
and Aeronautical Systems Center**



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January 2006



DISCLAIMER

This *Final Groundwater Monitoring Report for the October 2005 Sampling Event* has been prepared for the United States Air Force (USAF) by Earth Tech for the purpose of monitoring the effects to groundwater from the soil removal action performed by Earth Tech in July 2005 at Air Force Plant 59 (Earth Tech, 2005). Acceptance of this report in performance of the contract under which it is prepared does not mean that the USAF adopts the conclusions, recommendations, or other views expressed herein, which are those of Earth Tech only and do not necessarily reflect the official position of the USAF.

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PREFACE

This *Final Groundwater Monitoring Report for the October 2005 Sampling Event* has been prepared by Earth Tech to describe field and laboratory operations conducted as part of the groundwater monitoring at Air Force Plant 59 (AFP 59), Johnson City, New York. Fieldwork followed guidelines set forth in the *Final Work Plan for Groundwater Monitoring at AFP 59* (Earth Tech, 1998), the Air Force Center for Environmental Excellence (AFCEE) *Model Work Plan* (USAF, 1996), and the AFCEE *Model Field Sampling Plan, Version 1.1* (USAF, 1997). All work was completed under AFCEE Contract Number F41624-03-D-8597, Task Order 0116. The groundwater monitoring is being conducted to accomplish the following objective:

- To monitor the effects to groundwater from the soil removal action performed by Earth Tech in July 2005 (Earth Tech, 2005). The excavation activities were designed to remove soil containing trichloroethene (TCE) from the soil pile located against the western wall of the East Basement (Figure 2-1).

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13. ABSTRACT (Maximum 200 words) This document is the Final Groundwater Monitoring Report for the October 2005 Sampling Event at Air Force Plant 59 (AFP 59), Johnson City, New York. It summarizes the fieldwork completed during the annual groundwater monitoring. The monitoring was conducted to accomplish the following objective: To monitor the effects to groundwater of the soil removal action performed by Earth Tech in July 2005.				
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LIST OF ACRONYMS AND ABBREVIATIONS

AFCEE	Air Force Center for Environmental Excellence
AFP 59	Air Force Plant 59
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPCs	Chemicals of Potential Concern
1,1-DCA	1,1-Dichloroethane
1,1-DCE	1,1-Dichloroethene
cis-1,2-DCE	cis-1,2-Dichloroethene
trans-1,2-DCE	trans-1,2-Dichloroethene
IRP	Installation Restoration Program
LTM	Long-Term Monitoring
µg/L	Micrograms per Liter
MDL	Method Detection Limit
N/A	Not Applicable
ND	Non-Detect
NYSDEC	New York State Department of Environmental Conservation
PCE	Tetrachloroethene
QAPP	Quality Assurance Project Plan
RI/FS	Remedial Investigation/Feasibility Study
RL	Reporting Limit
STL	Severn Trent Laboratories
1,1,1-TCA	1,1,1-Trichloroethane
TCE	Trichloroethene
USAF	United States Air Force
USEPA	United States Environmental Protection Agency
VC	Vinyl Chloride
VOC	Volatile Organic Compound



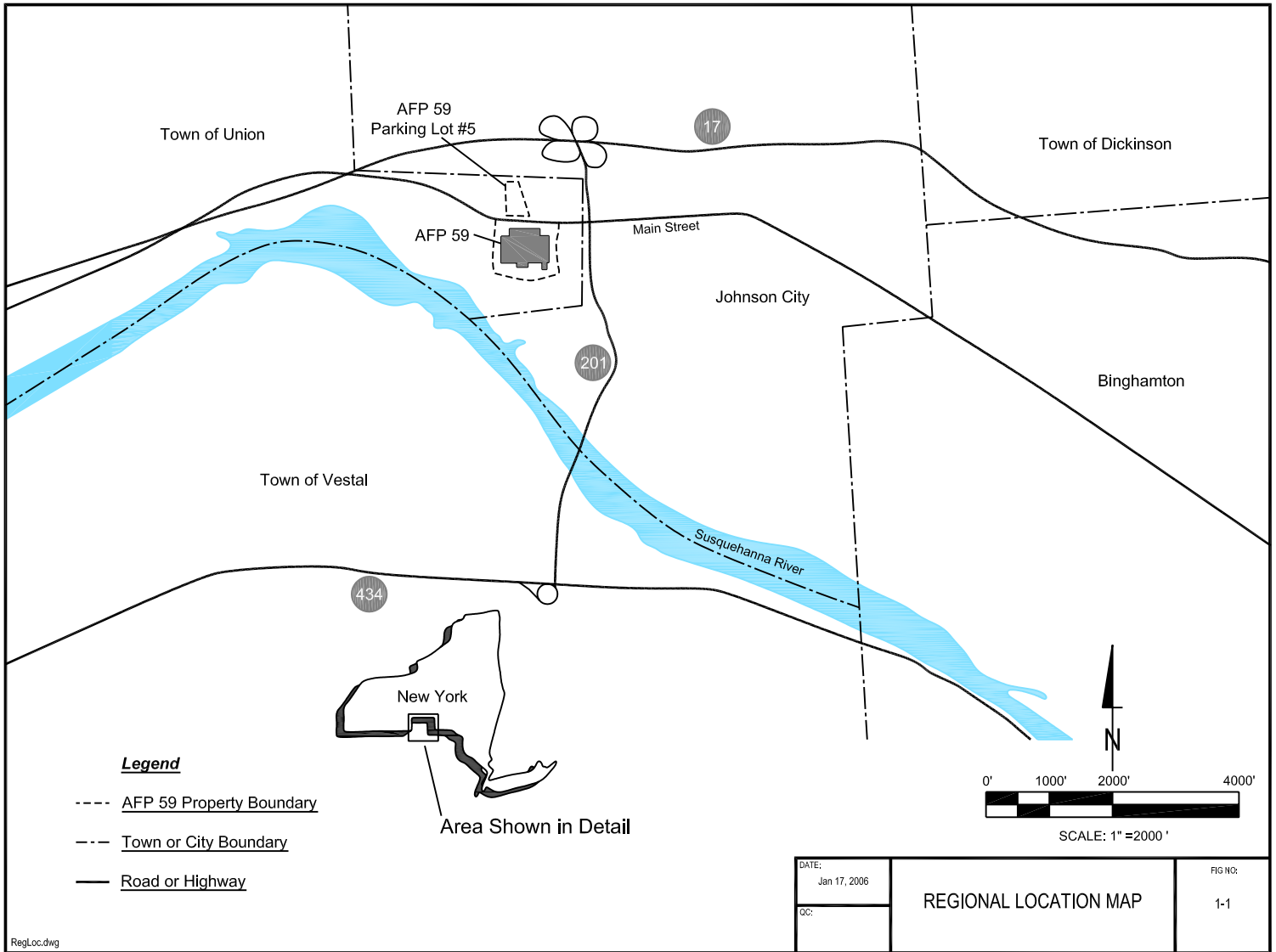
1.0 Introduction

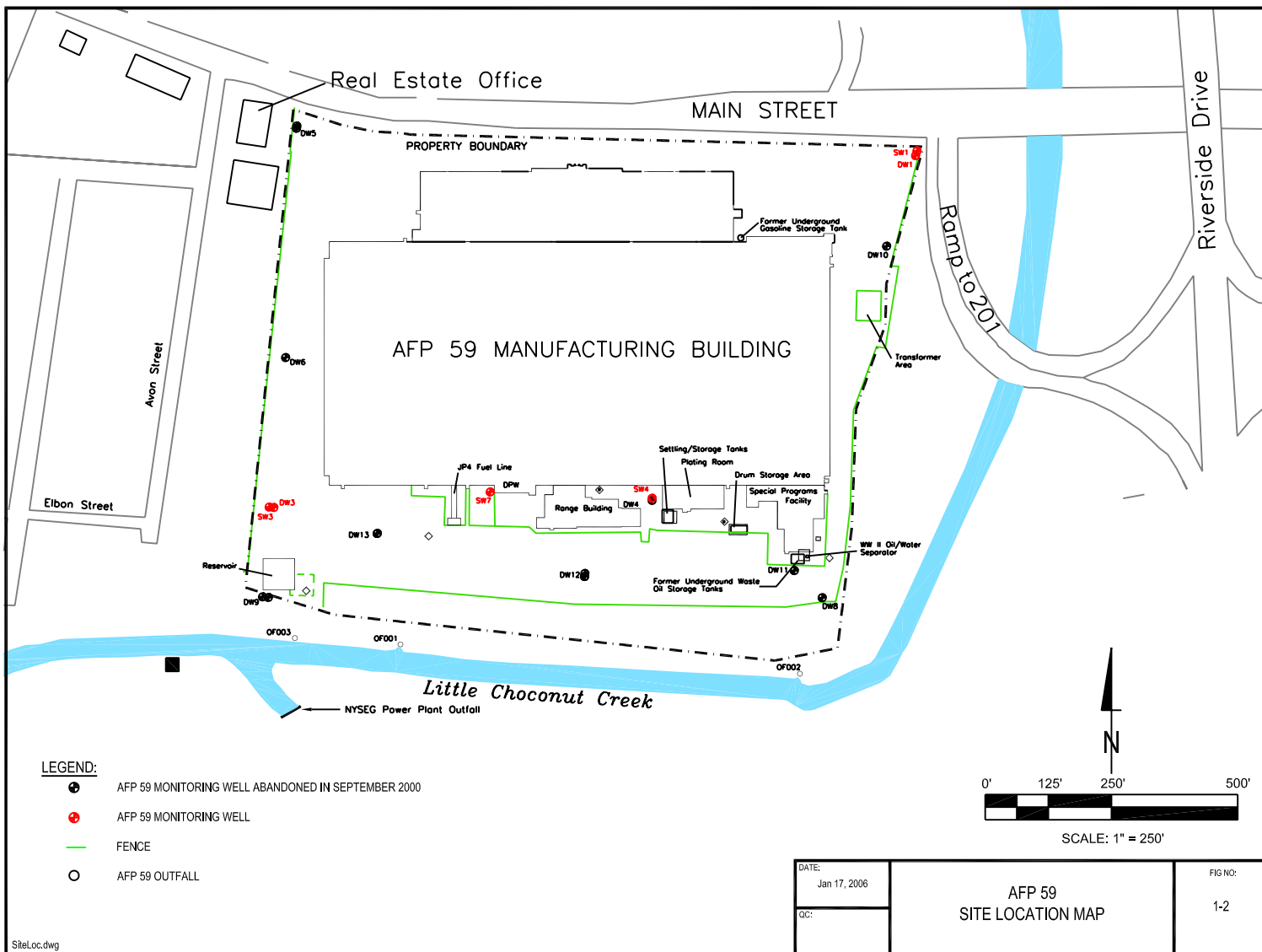
This *Final Groundwater Monitoring Report for the October 2005 Sampling Event* has been prepared by Earth Tech to describe field and laboratory operations during the October 2005 groundwater sampling event. The October 2005 sampling event was conducted as part of the groundwater monitoring at Air Force Plant 59 (AFP 59), Johnson City, New York. Earth Tech was contracted by the Air Force Center for Environmental Excellence (AFCEE) to perform two rounds of groundwater sampling at AFP 59 after the soil removal action that took place in July 2005. This report documents the findings from the first of two groundwater sampling events (the second sampling event will be conducted in October 2006). Figure 1-1 shows the regional location of AFP 59. Figure 1-2 shows the locations of buildings and monitoring wells at AFP 59. The groundwater monitoring is being conducted to accomplish the following objective:

- To monitor the effects to groundwater from the soil removal action performed by Earth Tech in July 2005 (Earth Tech, 2005). The excavation activities were designed to remove soil containing trichloroethene (TCE) from the soil pile located against the western wall of the East Basement (Figure 2-1).

All sampling activities followed protocols presented in the *Final Work Plan for Groundwater Monitoring at AFP 59* (Earth Tech, 1998), the *Final Sampling and Analysis Plan* (Earth Tech, 1994), the *AFCEE Model Work Plan* (USAF, 1996), and the *AFCEE Model Field Sampling Plan, Version 1.1* (USAF, 1997).

This report contains the following four sections: Section 1.0 provides the objectives of the sampling event, Section 2.0 provides a summary of the activities conducted during the sampling event, Section 3.0 summarizes the analytical results, and Section 4.0 presents conclusions from the investigation.







2.0 Project Activities

The following sections summarize activities conducted during the October 2005 sampling event. Section 2.1 summarizes the rationale for selecting the analyses performed on samples collected during the investigation. Section 2.2 outlines the groundwater sampling procedures.

2.1 Sample Analysis Summary

Based on the conclusions presented in the *Final Remedial Investigation Report* (Earth Tech, 1996) and recommendations made by the NYSDEC, it was determined that volatile organic compounds (VOCs) represent the only chemicals of potential concern (COPCs) in groundwater at AFP 59. As a result, the *Record of Decision* (Earth Tech, 1999b) for AFP 59 describes the remedial alternative (i.e., the upgrade of the Camden Street Well Field groundwater treatment system) chosen as most appropriate for treating the VOCs in groundwater at AFP 59. As part of the requirements defined in the *Record of Decision* (Earth Tech, 1999b), a long-term monitoring (LTM) program was established for AFP 59. The LTM program, which is defined in the April 27, 1999 letter to the NYSDEC (Earth Tech, 1999a), was concluded with the November 2004 sampling event. The LTM included sampling the following monitoring wells: SW1, DW1, SW3, DW3, SW4, and SW7. Monitoring wells SW1 and DW1 represent upgradient (background) wells and monitoring wells SW3 and DW3 represent downgradient wells. Monitoring wells SW4 and SW7 have historically had the highest concentrations of VOCs.

A soil pile containing TCE contamination in the East Basement of the AFP 59 facility was excavated and removed (Figure 2-1) in July 2005, three months prior to this sampling event. The soil pile was upgradient of monitoring wells SW3, DW3, SW4, and SW7. This sampling event was designed to observe what effect this removal action might have to groundwater.

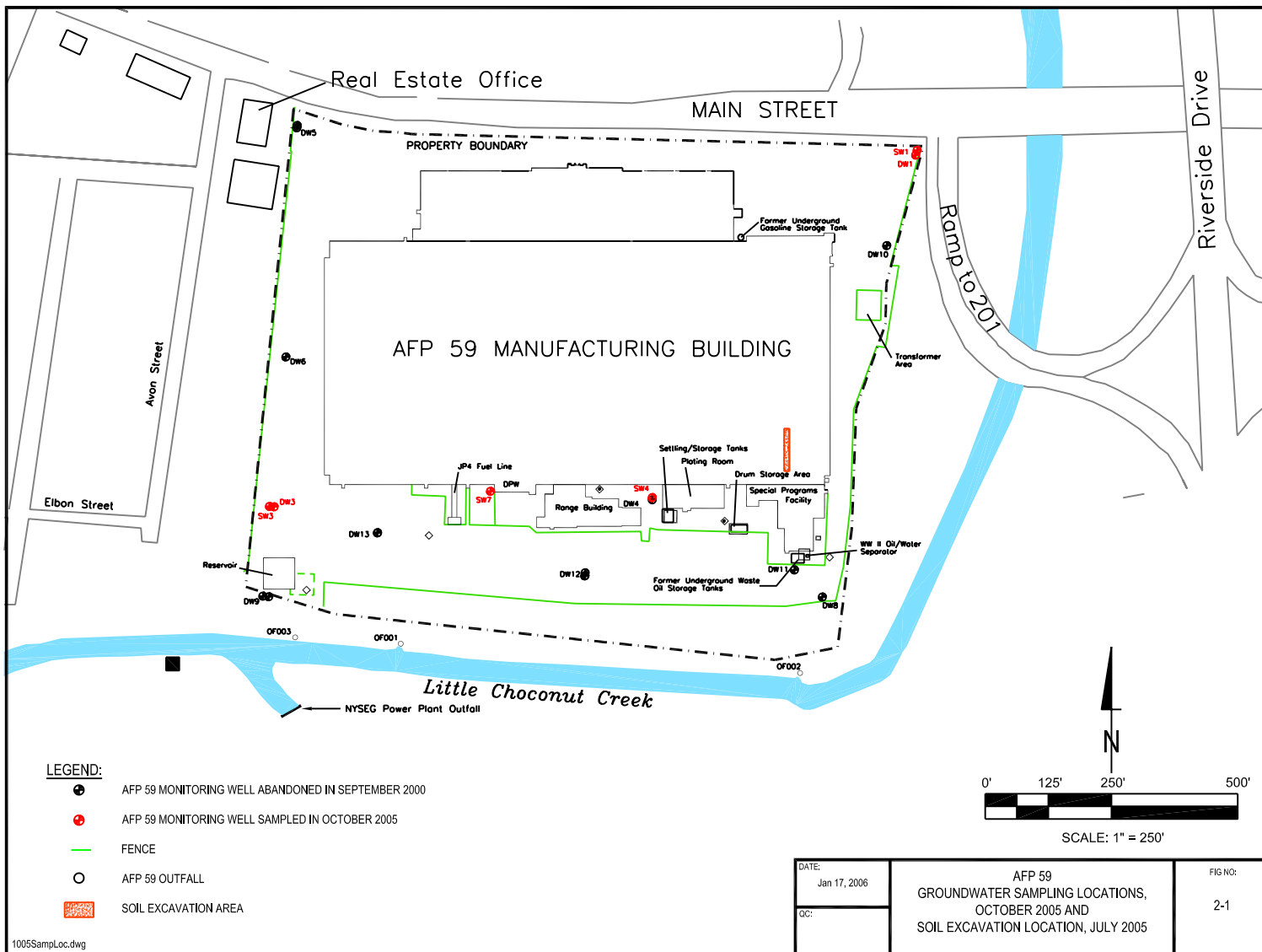
The groundwater samples collected during the October 2005 sampling event were analyzed for VOCs by United States Environmental Protection Agency (USEPA) Method SW8260. Table 2.1-1 lists the total number of groundwater samples collected for each sample type (e.g., environmental sample, duplicate sample) during the October 2005 sampling event, and Figure 2-1 shows the locations of the on-site monitoring wells sampled during the October 2005 sampling event, and the location of the TCE contaminated soil removed in July 2005.

Table 2.1-1
Sample Analysis Summary

Method	Matrix	# Samples	# Equipment Blanks	# MS/MSDs	# Trip Blanks	# Field Duplicates	Total # Samples
SW8260B Volatile Organics	Groundwater	6	0 ⁽¹⁾	2 ⁽²⁾	1	1	10

(1) No equipment blanks were collected because disposable bailers were used during groundwater sampling.

(2) One matrix spike and one matrix spike duplicate were taken for a total of 2 MS/MSD samples.





2.2 Field Activities

The primary field activity was the sampling of the monitoring wells shown in Figure 2-1. The following is a summary of the field activities:

- Measure the groundwater level in six on-site monitoring wells.
- Collect groundwater samples for VOC analysis from six on-site monitoring wells.

The groundwater sampling methods followed protocols presented in the *Final Work Plan for Groundwater Monitoring at AFP 59* (Earth Tech, 1998) and in the *Final Sampling and Analysis Plan* (Earth Tech, 1994), which was prepared for the remedial investigation conducted at AFP 59. The primary objective of the sampling event was to monitor the effects to groundwater from the soil removal action performed by Earth Tech in July 2005.

Groundwater sampling procedures included the following:

1. Measuring groundwater levels in six on-site monitoring wells,
2. Purging select on-site monitoring wells prior to sampling,
3. Measuring field-derived parameters (including temperature, pH, specific conductance, ORP, and turbidity) during monitoring well purging, and
4. Collecting groundwater samples from the purged monitoring wells using a disposable bailer.

Refer to the *Final Work Plan for Groundwater Monitoring at AFP 59* (Earth Tech, 1998) and the *Final Sampling and Analysis Plan* (Earth Tech, 1994) for a detailed description of all sampling activities and protocols.

Water level measurements were taken once within a single 24-hour period in six monitoring wells to determine the elevation of the water table (in the shallow zone of the aquifer) or piezometric surface (in the deep zone of the aquifer). Any conditions that affected water levels were recorded in the field log. Water level measurements were taken with an electric sounder and were measured to the nearest 0.01-foot. All measuring equipment was decontaminated according to the specifications in the *Final Sampling and Analysis Plan* (Earth Tech, 1994).

Static water levels were measured each time a monitoring well was sampled and before any equipment entered the monitoring well. If the casing cap was airtight, the air pressure within the monitoring well was allowed to equilibrate after the cap was removed and prior to measurement of the water level.



3.0 Investigation Results

The results of the October 2005 sampling event at AFP 59 and the historical trend of contaminants in groundwater are summarized in the following sections. Field data are provided in Appendix B, chain-of-custody forms are provided in Appendix C, analytical data are provided in Appendix D, and trend analysis graphs are provided in Appendix E.

3.1 Sampling and Analysis Results

This section summarizes the data collection activities completed during the October 2005 sampling event, presents the laboratory analytical results, and provides a trend analysis of identified VOCs.

3.1.1 Review of Field and Laboratory Data

All field procedures, sample handling documentation, and laboratory procedures followed protocols presented in the *Final Work Plan for Groundwater Monitoring at AFP 59* (Earth Tech, 1998) and the *Final Sampling and Analysis Plan* (Earth Tech, 1994). All analytical data generated as a result of the October 2005 sampling event were reported as AFCEE definitive data. Analytical protocols utilized in sample preparation, analysis, and reporting were in accordance with the specific analytical method and the guidelines given in the AFCEE *Quality Assurance Project Plan (QAPP), Version 3.1* (USAF, 1998). Laboratory analyses were performed by Severn Trent Laboratories (STL), Arvada, Colorado. Analytical methods and STL's associated method detection limits (MDLs) and reporting limits (RLs) are listed in Table 3.1-1. Data validation was performed by Earth Tech.

Data flags were applied to the analytical data by the laboratory. During the data review process, Earth Tech reviewed the analytical data and associated data flags and assigned data qualifiers as per the guidelines given in the AFCEE *QAPP, Version 3.1* (USAF, 1998); the data validation review is provided in Appendix D. The following data qualifiers were assigned to the data as a result of the data validation process and are defined below.

- **J** The analyte was positively identified, but the quantitation is an estimated value.
- **U** The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

3.1.2 Data Summary

The number and locations of groundwater samples are outlined below. Figure 2-1 shows the locations of the monitoring wells sampled during the October 2005 sampling event.



Table 3.1-1
Analytical Parameters, Method Detection Limits, and
Reporting Limits for Severn Trent Laboratories

Parameter/Method	Analyte	Water			
		MDL	Unit	RL	Unit
VOCs SW8260B	1,1,1,2-Tetrachloroethane	0.17	µg/L	0.5	µg/L
	1,1,1-TCA	0.15	µg/L	1.0	µg/L
	1,1,2,2-Tetrachloroethane	0.18	µg/L	0.5	µg/L
	1,1,2-TCA	0.30	µg/L	1.0	µg/L
	1,1-DCA	0.16	µg/L	1.0	µg/L
	1,1-DCE	0.17	µg/L	1.0	µg/L
	1,1-Dichloropropene	0.17	µg/L	1.0	µg/L
	1,2,3-Trichlorobenzene	0.24	µg/L	1.0	µg/L
	1,2,3-Trichloropropane	0.18	µg/L	1.0	µg/L
	1,2,4-Trichlorobenzene	0.26	µg/L	1.0	µg/L
	1,2,4-Trimethylbenzene	0.18	µg/L	1.0	µg/L
	1,2-Dichloroethane	0.18	µg/L	0.5	µg/L
	1,2-Dichlorobenzene	0.15	µg/L	1.0	µg/L
	1,2-Dibromo-3-chloropropane	0.28	µg/L	2.0	µg/L
	1,2-Dichloropropane	0.17	µg/L	1.0	µg/L
	1,2-Dibromoethane (EDB)	0.20	µg/L	1.0	µg/L
	1,3,5-Trimethylbenzene	0.19	µg/L	1.0	µg/L
	1,3-Dichlorobenzene	0.26	µg/L	1.0	µg/L
	1,3-Dichloropropane	0.18	µg/L	0.4	µg/L
	1,4-Dichlorobenzene	0.23	µg/L	0.5	µg/L
	1-Chlorohexane	0.20	µg/L	1.0	µg/L
	2,2-Dichloropropane	0.21	µg/L	1.0	µg/L
	2-Chlorotoluene	0.17	µg/L	1.0	µg/L
	4-Chlorotoluene	0.23	µg/L	1.0	µg/L
	Acetone	0.63	µg/L	10	µg/L
	Benzene	0.15	µg/L	0.4	µg/L
	Bromobenzene	0.20	µg/L	1.0	µg/L
	Bromochloromethane	0.18	µg/L	1.0	µg/L
	Bromodichloromethane	0.19	µg/L	0.5	µg/L
	Bromoform	0.20	µg/L	1.0	µg/L
	Bromomethane	0.24	µg/L	3.0	µg/L
	Carbon tetrachloride	0.18	µg/L	1.0	µg/L
	Chlorobenzene	0.15	µg/L	0.5	µg/L
	Chloroethane	0.46	µg/L	1.0	µg/L
	Chloroform	0.15	µg/L	0.3	µg/L
	Chloromethane	0.20	µg/L	1.0	µg/L
	Cis-1,2-DCE	0.20	µg/L	1.0	µg/L
	Cis-1,3-Dichloropropene	0.18	µg/L	0.5	µg/L



Table 3.1-1
Analytical Parameters, Method Detection Limits, and
Reporting Limits for Severn Trent Laboratories (Continued)

Parameter/Method	Analyte	Water			
		MDL	Unit	RL	Unit
VOCs SW8260B	Dibromochloromethane	0.19	µg/L	0.5	µg/L
	Dibromomethane	0.19	µg/L	1.0	µg/L
	Dichlorodifluoromethane	0.19	µg/L	1.0	µg/L
	Ethylbenzene	0.16	µg/L	1.0	µg/L
	Hexachlorobutadiene	0.26	µg/L	0.6	µg/L
	Isopropylbenzene	0.20	µg/L	1.0	µg/L
	Methylene chloride	0.17	µg/L	2.0	µg/L
	Methyl t-butyl ether (MTBE)	0.42	µg/L	5.0	µg/L
	MEK (2-Butanone)	0.90	µg/L	10	µg/L
	MIBK (methyl isobutyl ketone)	0.54	µg/L	10	µg/L
	n-Butylbenzene	0.22	µg/L	1.0	µg/L
	n-Propylbenzene	0.21	µg/L	1.0	µg/L
	m,p-Xylene	0.37	µg/L	2.0	µg/L
	Naphthalene	0.23	µg/L	1.0	µg/L
	o-Xylene	0.14	µg/L	1.0	µg/L
	p-Isopropyltoluene	0.20	µg/L	1.0	µg/L
	Sec-Butylbenzene	0.22	µg/L	1.0	µg/L
	Styrene	0.17	µg/L	1.0	µg/L
	Trichloroethene	0.16	µg/L	1.0	µg/L
	Tert-Butylbenzene	0.20	µg/L	1.0	µg/L
	Tetrachloroethene	0.17	µg/L	1.0	µg/L
	Toluene	0.17	µg/L	1.0	µg/L
	Trans-1,2-DCE	0.16	µg/L	1.0	µg/L
	Trans-1,3-Dichloropropene	0.21	µg/L	1.0	µg/L
	Trichlorofluoromethane	0.13	µg/L	1.0	µg/L
	Vinyl chloride	0.21	µg/L	1.0	µg/L



The following monitoring wells were sampled:

- Shallow monitoring wells SW1, SW3, SW4, and SW7, and
- Deep monitoring wells DW1 and DW3.

3.1.3 VOCs Detected in Groundwater Samples

This section discusses the VOCs that were detected in the groundwater samples, including those samples collected from both site and background monitoring wells. The analytical results for groundwater samples collected from monitoring wells installed in the shallow and deep zones of the aquifer are discussed separately below. The analytical results for all groundwater samples collected during the October 2005 sampling event are summarized in Table 3.1-2. Appendix D provides a complete listing of all groundwater analytical results.

Shallow Zone of the Aquifer. VOCs detected in groundwater samples are shown in Figure 3-1. Table 3.1-3 summarizes all VOCs detected in groundwater samples collected from monitoring wells screened in the shallow zone, the number of samples above the laboratory MDL, the minimum and maximum concentrations detected, and the location of the maximum concentration.

VOCs were detected in the groundwater samples collected from monitoring wells SW3, SW4, and SW7 (see Figure 3-1). Chlorinated hydrocarbons were the only detected VOCs in the samples collected from the shallow zone of the aquifer. No VOCs were detected in the groundwater sample collected from monitoring well SW1.

The following maximum concentrations were detected in the groundwater sample collected from monitoring well SW4: 1,1,1-trichloroethane (1,1,1-TCA) at 2.2 µg/L, 1,1-dichloroethane (1,1-DCA) at 1.7 µg/L, 1,1-dichloroethene (1,1-DCE) at 1 µg/L, tetrachloroethene (PCE) at 0.28 µg/L, trans-1,2-dichloroethene (trans-1,2-DCE) at 0.43 µg/L, trichlorofluoromethane at 1.3 µg/L, and TCE at 43 µg/L. The following maximum concentrations were detected in the regular and duplicate groundwater sample collected from monitoring well SW7: cis-1,2-dichloroethene (cis-1,2-DCE) at 12 µg/L.

Deep Zone of the Aquifer. VOCs detected in groundwater samples are shown in Figure 3-1. Table 3.1-4 summarizes all VOCs detected in groundwater samples collected from monitoring wells screened in the deep zone, the number of samples above the laboratory MDL, the minimum and maximum concentrations detected, and the location of the maximum concentration.

DW3 was the only well in the deep zone of the aquifer where VOCs were detected. The following concentrations of VOCs were detected in DW3: cis-1,2-DCE at 3 µg/L, naphthalene at 0.27 µg/L, and p-isopropyltoluene at 20 µg/L. Acetone was detected, but this is a common laboratory contaminant. No VOCs were detected in the groundwater sample collected from monitoring well DW1.



Table 3.1-2
Groundwater Data Summary for VOCs (µg/L)

Parameters	Action Levels*	59SW1WG1	59DW1WG1	59SW3WG1	59DW3WG1	59SW4WG1	59SW7WG1	59SW7WG9 (Duplicate Sample)
1,1,1-Trichloroethane	5	--	--	0.47 J	--	2.2	0.69 J	0.73 J
Trichloroethene	5	--	--	0.86 J	--	43	3	3.1
Cis-1,2-Dichloroethene	5	--	--	0.55 J	3	6.3	12	12
1,1-Dichloroethane	5	--	--	--	--	1.7	1.4	1.4
1,1-Dichloroethene	5	--	--	--	--	1	--	--
Tetrachloroethene	5	--	--	--	--	0.28 J	0.23 J	0.24 J
Trans-1,2-Dichloroethene	5	--	--	--	--	0.43 J	--	--
Trichlorofluoromethane	5	--	--	--	--	1.3	--	--
Naphthalene	10	--	--	--	0.27 J	--	--	--
p-Isopropyltoluene	-	--	--	--	20	--	--	--

Key: * = New York State Drinking Water Standard.
 -- = Analyte was analyzed for but not detected.

Qualifiers: J = The analyte was positively identified, but the quantitation is an estimation.

Note: Concentrations in bold font and shaded cells exceed the New York State Drinking Water Standard for the associated compound.

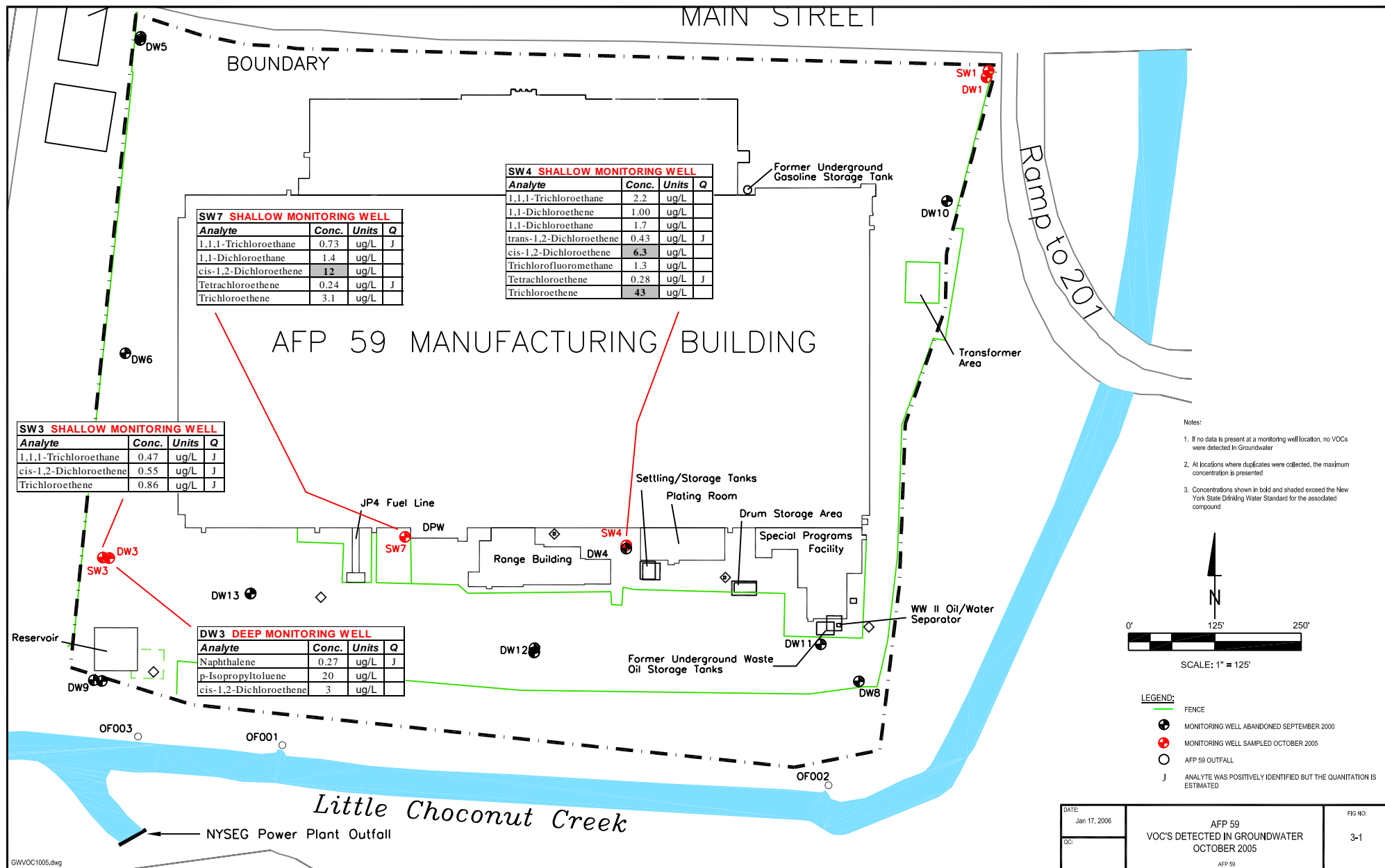




Table 3.1-3
VOCs Detected in Shallow Zone Groundwater Samples

Analyte	Number of Samples Above MDL	Range (µg/L)		Location of Maximum Detection
		Minimum Detected	Maximum Detected	
1,1,1-Trichloroethane	4 of 5	0.69 J	2.2	SW4
Trichloroethene	4 of 5	0.86 J	43	SW4
Cis-1,2-Dichloroethene	4 of 5	0.55 J	12	SW7
Trans-1,2-Dichloroethene	1 of 5	0.43 J	0.43 J	SW4
1,1-Dichloroethane	3 of 5	1.4	1.7	SW4
1,1-Dichloroethene	1 of 5	1	1	SW4
Tetrachloroethene	3 of 5	0.23 J	0.28 J	SW4
Trichlorofluoromethane	1 of 5	1.3	1.3	SW4

Key: µg/L = Micrograms per liter
 MDL = Method detection limit

Qualifiers: J = The analyte was positively identified, but the quantitation is an estimation.

Note: Only analytes detected in one or more of the groundwater samples are included in this summary table.



Table 3.1-4
VOCs Detected in Deep Zone Groundwater Samples

Analyte	Number of Samples Above MDL	Range (µg/L)		Location of Maximum Detection
		Minimum Detected	Maximum Detected	
Cis-1,2-Dichloroethene	1 of 2	2.1	2.1	DW3
Naphthalene	1 of 2	0.27 J	0.27 J	DW3
p-Isopropyltoluene	1 of 2	20	20	DW3

Key: µg/L = Micrograms per liter
 MDL = Method detection limit

Qualifiers: J = The analyte was positively identified, but the quantitation is an estimation.

Note: Only analytes detected in one or more of the groundwater samples are included in this summary table.
Acetone was detected in one of two samples; however, this is a common laboratory contaminant.



3.1.4 Trend Analysis

Table 3.1-5 presents concentrations of the most commonly detected chlorinated hydrocarbons in groundwater at AFP 59 over time. Only monitoring wells that were sampled as part of the groundwater monitoring program are included in the table. Trend analysis graphs of the wells sampled are provided in Appendix E.

In the groundwater samples collected from the shallow monitoring wells during the October 2005 sampling event, concentrations of the chlorinated hydrocarbons in monitoring well SW3 remained relatively constant (TCE and 1,1,1-trichloroethane [1,1,1-TCA]), decreased (cis-1,2-DCE), or went to non-detect (ND) (vinyl chloride [VC] and 1,1-DCA) when compared to the previous sampling event of November 2004.

The concentrations of the chlorinated hydrocarbons in monitoring well SW4 remained relatively constant, with only a slight variation when compared to the November 2004 sampling event. The concentrations of TCA (3.1 µg/L to 2.2 µg/L), TCE (56 µg/L to 43 µg/L), and trans-1,2-DCE (0.19 J µg/L to ND) each decreased during the October 2005 sampling event. The concentration of 1,1-DCE (0.88 J µg/L to 1 µg/L), cis-1,2-DCE (4.1 µg/L to 6.3 µg/L), and 1,1-DCA (1.4 µg/L to 1.7 µg/L) all slightly increased compared to the November 2004 sampling event.

The concentrations of the chlorinated hydrocarbons in monitoring well SW7 had only slight variations when compared to the November 2004 sampling event. The concentrations of TCA (1.5 µg/L to 0.73 J µg/L), VC (0.47 J µg/L to ND), 1,1-DCE (0.25 J µg/L to ND) and 1,1-DCA (1.5 J µg/L to 1.4 µg/L) each decreased during the October 2005 sampling event. The concentrations of TCE (2.1 µg/L to 3.1 µg/L) and cis-1,2-DCE (10 J µg/L to 12 µg/L) each increased compared to the November 2004 sampling event.

In the groundwater sample collected from deep monitoring well DW3 during the October 2005 sampling event, the concentrations of chlorinated hydrocarbons remained at ND with the exception of cis-1,2-DCE, which increased from 2.1 µg/L in November 2004 to 3 µg/L in October 2005. No VOCs were detected in the groundwater sample collected from deep monitoring well DW1 and shallow monitoring well SW1. This is consistent with previous sampling events.



Table 3.1-5
Trend Analysis of VOCs in Groundwater

Well ID	Date Sampled	Concentration of Analyte in Groundwater (µg/L)					
		TCA	TCE	VC	1,1-DCE	1,2-DCE	1,1-DCA
SW1	Sept. 1986 ¹	--	--	--	--	--	--
	Jan. 1992 ²	0.5	--	--	--	--	--
	Dec. 1994 ³	--	--	--	--	--	--
	Nov. 1999 ³	--	--	--	--	--	--
	May 2000 ³	--	--	--	--	--	--
	Nov. 2000 ³	--	--	--	--	--	--
	May 2001 ³	--	--	--	--	--	--
	Nov. 2001 ³	0.11 J	--	--	--	--	--
	May 2002 ³	--	--	--	--	--	--
	May 2003 ³	--	--	--	--	--	--
	Nov. 2003 ³	--	--	--	--	--	--
	Jun. 2004 ³	--	--	--	--	--	--
	Nov. 2004 ³	--	--	--	--	--	--
	Oct. 2005 ³	--	--	--	--	--	--
DW1	Jan. 1992 ²	0.6	--	--	--	--	--
	Dec. 1994 ³	--	--	--	--	1.8 (c)	--
	Nov. 1999 ³	--	--	--	--	--	--
	May 2000 ³	--	--	--	--	--	--
	Nov. 2000 ³	--	--	--	--	--	--
	May 2001 ³	--	--	--	--	--	--
	Nov. 2001 ³	--	--	--	--	--	--
	May 2002 ³	--	--	--	--	--	--
	May 2003 ³	--	--	--	--	--	--
	Nov. 2003 ³	--	--	--	--	--	--
	Jun. 2004 ³	--	--	--	--	--	--
	Nov. 2004 ³	--	--	--	--	--	--
	Oct. 2005 ³	--	--	--	--	--	--



Table 3.1-5
Trend Analysis of VOCs in Groundwater (Continued)

Well ID	Date Sampled	Concentration of Analyte in Groundwater (µg/L)					
		TCA	TCE	VC	1,1-DCE	1,2-DCE	1,1-DCA
SW3	Sept. 1986 ¹	--	6	--	--	--	--
	Jan. 1992 ²	12	9	--	--	--	5
	Dec. 1994 ³	0.50	1.8	--	--	--	--
	Dec. 1995 ³	0.86	2.8	--	--	0.44 (c)	--
	July 1997 ⁴	--	1	--	--	--	--
	Nov. 1998 ³	0.22	0.81	--	--	0.10 (c)	--
	Apr. 1999 ³	0.51	0.71	--	--	0.17 (c)	--
	Nov. 1999 ³	0.29	0.9	--	--	0.39 (c)	--
	May 2000 ³	0.69	1	--	--	1.29 (c)	0.55
	Nov. 2000 ³	0.43	0.9	--	--	0.22 (c)	--
	May 2001 ³	0.46	0.8	--	--	1.29 (c)	0.32
	Nov. 2001 ³	0.32 J	0.5 J	--	--	--	--
	May 2002 ³	0.42 J	0.8 J	--	--	0.46 J	--
	May 2003 ³	0.584 J	0.893 J	--	--	1.37 J (c)	0.302 J
	Nov. 2003 ³	0.398 J	0.856 J	--	--	0.511 J (c)	--
	Jun. 2004 ³	0.9 J	0.94 J	--	--	3.7 (c)	0.95 J
	Nov. 2004 ³	0.52 J	1.0	0.26 J	--	1.5 (c)	0.38 J
	Oct. 2005 ³	0.47 J	0.86 J	--	--	0.55 J (c)	--
DW3	Jan. 1992 ²	0.3	--	--	--	--	0.3
	Dec. 1994 ³	--	--	0.28	--	36 (c)	0.26
	Dec. 1995 ³	--	--	--	--	5.2 (c)	--
	April 1997 ⁴	--	--	--	--	41 (c)	--
	July 1997 ⁴	--	--	--	--	49 (c)	--
	Nov. 1998 ³	--	--	0.35	--	66 (c)	0.34
	Apr. 1999 ³	--	--	0.28	0.11	67 (c)	0.35
	Nov 1999 ³	--	--	--	--	--	0.11
	May 2000 ³	--	--	--	--	0.25 (t) 24.98 (c)	0.16
	Nov. 2000 ³	--	--	--	--	16.85 (c)	--
	May 2001 ³	--	--	--	--	13.29 (c)	--



Table 3.1-5
Trend Analysis of VOCs in Groundwater (Continued)

Well ID	Date Sampled	Concentration of Analyte in Groundwater (µg/L)					
		TCA	TCE	VC	1,1-DCE	1,2-DCE	1,1-DCA
DW3 (cont'd)	Nov. 2001 ³	--	--	--	--	13.58 (c)	--
	May 2002 ³	--	--	--	--	21.08 (c)	0.1 J
	May 2003 ³	--	--	--	--	--	--
	Nov. 2003 ³	--	--	--	--	1.18 J (c)	--
	Jun. 2004 ³	--	--	--	--	1.3 (c)	--
	Nov. 2004 ³	--	--	--	--	2.1 (c)	--
	Oct. 2005 ³	--	--	--	--	3 (c)	--
SW4	Jan. 1992 ²	2	97	--	0.3	--	0.6
	Dec. 1994 ³	20	370	--	2.1	19 (c)	8.5
	Dec. 1995 ³	34	1200	--	4.9	2.1 (t) 34 (c)	6.9
	April 1997 ⁴	--	--	--	--	71 (c)	7.1
	July 1997 ⁴	23	290	--	--	15 (c)	--
	Nov. 1998 ³	8.0	46	0.42	0.82	10 (c)	9.0
	Apr. 1999 ³	1.9	9.53	--	--	1.85 (c)	0.87
	Nov. 1999 ³	2.13	9.5	--	0.18	7.15 (c)	7.7
	May 2000 ³	2.88	8	0.11	0.21	0.49 (t) 4.3 (c)	1.67
	Nov. 2000 ³	1.14	15.2	1.49	0.29	11.18 (c)	15.25
	May 2001 ³	3.35	34	--	0.36	0.38 (t) 3.19 (c)	1.3
	Nov. 2001 ³	0.88	5.7	0.43 J	0.12 J	5.27 (c)	7.18
	May 2002 ³	2.54	21.63	--	0.34 J	2.07 (c)	0.79 J
	May 2003 ³	3.05 J	9.09 J	--	--	3.36 J (c)	1.44 J
	Nov. 2003 ³	2.03	4.63	--	--	1.93 (c)	0.93
	Jun. 2004 ³	2.8	41	--	0.57 J	0.11 (t) 3.3 (c)	1.3
	Nov. 2004 ³	3.1	56	--	0.88 J	0.19 J (t) 4.1 (c)	1.4
	Oct. 2005 ³	2.2	43	--	1	6.3 (c)	1.7



Table 3.1-5
Trend Analysis of VOCs in Groundwater (Continued)

Well ID	Date Sampled	Concentration of Analyte in Groundwater (µg/L)					
		TCA	TCE	VC	1,1-DCE	1,2-DCE	1,1-DCA
SW7	Jan. 1992 ²	0.2	0.4	--	--	--	--
	Dec. 1994 ³	4.6	15	6.2	1	0.3(t) 150(c)	33
	Dec. 1995 ³	2.2	7.9	6.8	0.80	130 (c)	20
	July 1997 ⁴	--	4	--	--	2 (c)	--
	Nov. 1998 ³	2.5	11	3.4	0.65	0.28 (t) 82 (c)	12
	Apr. 1999 ³	1.23	3.95	--	--	5.25 (c)	1.46
	Nov. 1999 ³	1.01	5.7	--	0.19	18.8•(c)	3.38
	May 2000 ³	0.67	1.5	--	--	0.12 (t) 2.43 (c)	0.71
	Nov. 2000 ³	0.91	3.8	0.52	0.15	16.06 (c)	3.48
	May 2001 ³	1.18	1.9	--	--	1.46 (c)	0.47
	Nov. 2001 ³	0.8 J	4.7	0.85 J	0.19 J	0.13 J (t) 25.89 (c)	3.02
	May 2002 ³	0.87 J	1.65	--	--	2.79 (c)	0.47 J
	May 2003 ³	1.5 J	1.44 J	--	--	1.43 J (c)	0.409 J
	Nov. 2003 ³	0.674 J	1.64	--	--	2.76 (c)	0.509
	Jun. 2004 ³	1	1	--	--	1.1 (c)	0.3 J
	Nov. 2004 ³	1.5	2.1	0.47 J	0.25 J	10 J (c)	1.5 J
	Oct. 2005 ³	0.73 J	3.1	--	--	12 (c)	1.4

Key:	µg/L	=	Micrograms per liter	VC	=	Vinyl chloride
	(c)	=	cis-1,2-Dichloroethene	1,1-DCE	=	1,1-Dichloroethene
	(t)	=	trans-1,2-Dichloroethene	1,2-DCE	=	1,2-Dichloroethene
	TCA	=	1,1,1-Trichloroethane	1,1-DCA	=	1,1-Dichloroethane
	TCE	=	Trichloroethene	DPW	=	Deep production well
	(1)	=	Fred C. Hart Associates	(3)	=	Earth Tech
	(2)	=	Argonne National Laboratories	(4)	=	United States Geological Services

- Notes:**
1. At monitoring well locations where a duplicate groundwater sample was collected, the higher analytical value between the normal and duplicate samples is reported in this table.
 2. For 1992 data, the maximum value of either round A or B of sampling was used.
 3. Concentrations in bold font exceed the New York State Drinking Water Standard for the associated compound.



4.0 Conclusions

This section provides conclusions from analytical data generated as a result of the October 2005 sampling event. As defined in Section 1.0, the objective of this groundwater sampling event was to monitor the effects of the TCE contaminated soil removal on the groundwater at Air Force Plant 59.

The VOCs detected in groundwater samples collected from monitoring wells screened in the shallow and deep zones of the aquifer during the October 2005 sampling event are similar to the VOCs that had been detected during previous investigations. TCE, 1,1,1-TCA, 1,1-DCA, 1,1-DCE, PCE, cis-1,2-DCE, and trans-1,2-DCE were the most commonly detected contaminants during this sampling event. No VOCs were detected in background monitoring wells SW1 and DW1.

Historically, the highest concentrations of VOCs in the shallow zone of the aquifer at AFP 59 have been detected in groundwater samples collected from monitoring wells SW4 and SW7, which are located immediately downgradient of the Plating Room (the suspected source of VOCs in groundwater). In October 2005, the highest concentrations of VOCs were again detected in SW4 and SW7. The concentration of TCE detected at monitoring well SW4 was slightly less relative to the November 2004 event. The concentrations of cis-1,2-DCE detected at SW7 and SW4 and TCE at SW7 were slightly increased relative to the November 2004 sampling event. The concentrations of TCE in SW4 (43 µg/L) and cis-1,2-DCE in SW7 (12 J µg/L) and SW4 (6.3 µg/L) were the only VOC detections that exceeded New York State drinking water standards in any of the wells monitored during the October 2005 sampling event.

Three VOCs were detected in the groundwater sample collected from monitoring well SW3, which was the only shallow monitoring well sampled along the western (downgradient) boundary of the site during this event. None of these detections exceeded New York State drinking water standards. Therefore, groundwater in the shallow zone of the aquifer that migrates off site toward the Camden Street Well Field complies with New York State drinking water standards.

Three VOCs were detected in the groundwater samples collected from the deep monitoring wells. Cis-1,2-DCE, naphthalene and p-isopropyltoluene were detected at DW3 below the New York drinking water standards. Therefore, groundwater in the deep zone of the aquifer that migrates off site toward the Camden Street Well Field complies with New York State drinking water standards.

A trend analysis of chlorinated hydrocarbon levels over time at AFP 59 is presented in Section 3.1.4. The October 2005 sampling event was consistent with previous events and indicates that levels of chlorinated hydrocarbons have remained relatively constant or decreased through time (see Table 3.1-5).



The analytical data generated during the October 2005 sampling event indicate that the July 2005 soil removal action has not impacted groundwater quality at AFP 59. The October 2006 groundwater sampling event will be conducted to validate this conclusion.

APPENDIX A

References

APPENDIX A

REFERENCES

- Earth Tech, 1994. *Installation Restoration Program Investigation – Final Sampling and Analysis Plan.*
- Earth Tech, 1996. *Installation Restoration Program Remedial Investigation – Final Remedial Investigation Report.*
- Earth Tech, 1998. *Final Work Plan for Groundwater Monitoring at Air Force Plant 59.*
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APPENDIX B

Field Data

AFP 59

$$\begin{array}{r} 9246 \\ 56-91- \\ \hline 13483 \end{array}$$
$$\begin{array}{r} 06808 \\ 47260 \\ \hline 25630 \end{array}$$

Pump Rate: <= 3 GPM **Drawdown:** < 0.33 ft **Measurements:** 3-5 min **Stabilization:** +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
	3 - 40 mL glass vials	HCl	N	Bailer	Volatiles (SW8260)

AFP 59
MONITORING WELL SAMPLE COLLECTION FORM

[illegible]

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AFP 59		LocID: SW-1		Date: 10/25/05	
	Project Name: AFP 59 GW Sampling		Project No.: 88987.07		Recorded By: <i>RE</i>	
EQUIPMENT	Water Quality Meter Type/ID #: <i>Heidi's U-22</i>		Water Level Indicator Type/ID #: <i>Solinst</i>		PID Type/ID #: <i>—</i>	
	Explosimeter Type/ID #: <i>—</i>		Sampling Equipment: <i>Bailer</i>		Equipment Decon.: <i>Ligand + DT</i>	
WELL INFO	Borehole I.D. (in) [a]: <i>2 in</i>		Unit Borehole Volume (gall/lin ft) [b]: <i>2.6</i>		Initial Depth to Water (ft) [c]: <i>16.90</i>	
	Total Well Depth (ft) [d]: <i>28.57</i>		Water Column Thickness (ft) [d-c]: <i>11.67</i>		Borehole Volume (gal) [d-c] x b): <i>30.37 x 3 = 91</i>	
	Pump Depth (ft btoc):		Ground Condition of Well:			
	Remarks:					
CASING INFO	Borehole I.D. (in) [a]:		1.5		2.0	
	Unit Borehole Volume (gall/lin ft) [b]:		0.09		0.16	
			3.0		4.0	
			0.37		0.65	
			0.75		1.0	
			1.5		2.6	

7.57
16.90
11.67

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gal)	Pumping Rate (gpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
10/25	1355	16.90	0	3	13.5	6.71	2.0	0.0	18	113	
	1400	18.06	15	3	13.5	6.95	2.0	0.0	1	96	
	1405	18.06	30	3	13.5	6.95	2.0	0.0	0	91	
	1410	18.06	45	3	13.5	6.96	2.0	0.0	0	88	
	1415	18.06	60	3	13.5	6.96	2.0	0.0	0	86	
	1420	18.06	75	3	13.5	6.95	2.0	0.0	0	85	
	1425	18.06	90	3	13.5	6.94	2.0	0.0	0	85	
	1435	Sampled	5952	5952	1461						

Pump Rate: <= 3 GPM Drawdown: < 0.33 ft • Measurements: 3-5 min • Stabilization: +/- 0.5°C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID # (s)/Time(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
	3 - 40 mL glass vials	HCl	N	Bailer	Volatiles (SW8260)

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AFP 59	LocID: SW-3	Date: 10/25/05
	Project Name: AFP 59 GW Sampling	Project No.: 88987.07	Recorded By: <i>PC</i> Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: <i>Horiba U22</i>	Water Level Indicator Type/ID #: <i>Solinst</i>	PID Type/ID #: —
	Explosimeter Type/ID #: —	Sampling Equipment: <i>Bailer</i>	Equipment Decon: <i>Lig. clean + DI</i>
WELL INFO	Borehole I.D. (in) [a]: <i>8.0</i>	Unit Borehole Volume (gall/lin ft) [b]: <i>2.6</i>	Initial Depth to Water (ft) [c]: <i>16.38</i>
	Total Well Depth (ft) [d]: <i>29.58</i>	Water Column Thickness (ft) [d-c]: <i>13.20</i>	Borehole Volume (gal) [(d-c) x b]: <i>34.32 x 3 = 103</i>
	Pump Depth (ft btoc):	Ground Condition of Well:	
	Remarks:		
CASING INFO	Borehole I.D. (in) [a]:	1.5	2.0
	Unit Borehole Volume (gall/lin ft) [b]:	0.09	0.16
		2.2	3.0
		4.0	4.3
		0.65	0.75
			1.0
			1.5
			2.6

29.58
16.38
13.20

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gal)	Pumping Rate (gpm)	Temp. (C)	pH	Conduc-tivity (mS/cm)	DO (mg/L)	Turb. (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
10/25/05	1620	16.49	0	3	18.6	7.01	1.4	3.53	17	128	
	1625	16.53	15	3	18.6	7.05	1.4	3.32	0	123	
	1630	16.45	30	3	18.6	7.03	1.4	3.26	0	122	
	1635	16.45	45	3	18.6	7.03	1.4	3.21	0	123	
	1640	16.45	60	3	18.6	7.02	1.4	3.13	0	124	
	1645	16.45	75	3	18.6	7.02	1.4	3.09	0	125	
	1650	16.45	90	3	18.6	7.01	1.4	3.05	0	126	
	1655	16.45	105	3	18.6	7.01	1.4	3.02	0	127	
	1710	Sampled	59 SW3W61 NSD								

Pump Rate: <= 3 GPM Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU Ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
1710 59 SW3W61 NSD	3 - 40 mL glass vials	HCl	N	Bailer	Volatiles (SW8260)

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AFP 59	LocID: DW3	Date: 10/27/05
	Project Name: AFP 59 GW Sampling	Project No.: 88987.07	Recorded By: [Signature]
EQUIPMENT	Water Quality Meter Type/ID #: 422	Water Level Indicator Type/ID #: Solinst	PID Type/ID #: -
	Explosimeter Type/ID #: -	Sampling Equipment: Bailer	Equipment Decon.: Ligand + DI
WELL INFO	Borehole I.D. (in) [a]: 2 1/2"	Unit Borehole Volume (gal/in ft) [b]: 1.5	Initial Depth to Water (ft) [c]: 11.94
	Total Well Depth (ft) [d]: 86.78	Water Column Thickness (ft) [d-c]: 74.76	Borehole Volume (gal) [d-c] x b: 112.143 = 336.12
	Pump Depth (ft btoc):	Ground Condition of Well:	
	Remarks:		
CASING INFO	Borehole I.D. (in) [a]:	1.5	2.0
	Unit Borehole Volume (gal/in ft) [b]:	0.09	0.16
		2.2	3.0
		0.20	0.37
		4.0	0.65
		4.3	0.75
		5.0	1.0
		6.0	1.5
		8.0	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gal)	Pumping Rate (gpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
	1045	11.96	0	3	13.80	7.02	1.5	0.0	19	-41	
	1050	11.96	15	3	13.8	7.10	1.5	0.0	15	-43	
	1055	11.96	30	3	13.8	7.11	1.5	0.0	3	-60	
	1100	11.97	45	3	13.8	7.11	1.5	0.0	1	-63	
	1105	11.97	60	3	13.8	7.11	1.5	0.0	0	-68	
	1110	11.96	75	3	13.8	7.12	1.5	0.0	0	-72	
	1115	11.96	90	3	13.8	7.12	1.5	0.0	0	-73	
	1120	11.96	105	3	13.8	7.12	1.5	0.0	0	-76	
	1125	11.96	120	3	13.8	7.13	1.5	0.0	0	-78	
	1130	11.96	135	3	13.8	7.12	1.5	0.0	0	-80	
	1135	11.96	150	3	13.8	7.13	1.5	0.0	0	-81	
	1140	11.96	165	3	13.8	7.13	1.5	0.0	0	-83	

Pump Rate: <= 3 GPM Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
	3 - 40 mL glass vials	HCl	N	Bailer	Volatiles (SW8260)

MONITORING WELL SAMPLE COLLECTION FORM

[illegible]

Pump Rate: <= 3 GPM **Drawdown:** < 0.33 ft **Measurements:** 3-5 min **Stabilization:** +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AFP 59		LocID: SW4	Date: 10/27/03						
	Project Name: AFP 59 GW Sampling		Project No.: 88987.07	Recorded By: <i>PM</i>						
EQUIPMENT	Water Quality Meter Type/ID #:	Heads 00-22								
	Explosimeter Type/ID #:	-								
	Water Level Indicator Type/ID #:	Solinst								
	Sampling Equipment:	Boiler								
	Equipment Decon.:	Lig-iron + DI								
WELL INFO	Borehole I.D. (in) [a]:	4 in. 8"								
	Total Well Depth (ft) [d]:	27.52								
	Pump Depth (ft btoc):	-								
	Unit Borehole Volume (gall/lin ft) [b]:	2.6								
	Water Column Thickness (ft) [d-c]:	16.41								
	Ground Condition of Well:									
CASING INFO	Borehole I.D. (in) [a]:	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	8.0
	Unit Borehole Volume (gall/lin ft) [b]:	0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gal)	Pumping Rate (gpm)	Temp. (C)	pH	Conduc-tivity (mS/cm)	DO (mg/L)	Turb. (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
10/27/03	1315	13.97	0	3	17.6	6.96	1.6	0.0	-5	100	water seems fairly turbid
	1320	15.62	15	3	17.5	6.95	1.7	0.0	330	98	
	1325	18.04	30	3	17.5	6.93	1.7	0.0	150	99	
	1330	16.88	45	3	17.6	6.87	1.8	0.0	64	103	
	1335	16.78	60	3	17.6	6.87	1.8	0.0	48	108	
	1340	16.78	75	3	17.6	6.87	1.8	0.0	46	116	
	1345	16.78	90	3	17.6	6.87	1.8	0.0	46	113	
	1350	16.78	105	3	17.6	6.86	1.8	0.0	45	115	
	1355	16.78	120	3	17.6	6.85	1.8	0.0	46	116	
	1400	16.78	135	3	17.6	6.85	1.8	0.0	45	118	
	1410		Sampled		59 SW 4 W 61						

Pump Rate: <= 3 GPM Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
	3 - 40 mL glass vials	HCl	N	Bailer	Volatiles (SW8260)

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AFP 59	LocID: 56-7	Date: 10/27/03							
	Project Name: AFP 59 GW Sampling		Recorded By: <i>Be</i> Checked By:							
EQUIPMENT	Water Quality Meter Type/ID #: <i>Perkins U-22</i>	Water Level Indicator Type/ID #: <i>Sols-st</i>	PID Type/ID #: —							
	Explosimeter Type/ID #: —	Sampling Equipment: <i>Bailer</i>	Equipment Decon.: <i>Lig. inox + DI</i>							
WELL INFO	Borehole I.D. (in) [a]: <i>2 in 8"</i>	Unit Borehole Volume (gal/in ft) [b]: <i>2.6</i>	Initial Depth to Water (ft) [c]: <i>14.41</i>							
	Total Well Depth (ft) [d]: <i>28.85</i>	Water Column Thickness (ft) [d-c]: <i>14.44</i>	Borehole Volume (gal) [(d-c) x b]: <i>37.51 x 3 = 113</i>							
	Pump Depth (ft bloc):	Ground Condition of Well:								
	Remarks:									
CASING INFO	Borehole I.D. (in) [a]:	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	8.0
	Unit Borehole Volume (gal/in ft) [b]:	0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gal)	Pumping Rate (gpm)	Temp. (C)	pH	Conduc-tivity (mS/cm)	DO (mg/L)	Turb. (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
10/27	1420	14.41	0	3	16.7	6.71	1.5	3.70	140	158	
	1425	14.46	15	3	16.8	6.99	1.5	3.65	140	140	
	1430	14.46	30	3	16.8	7.01	1.5	3.68	25	137	
	1435	14.46	45	3	16.8	7.03	1.5	3.73	9	135	
	1440	14.46	60	3	16.8	7.04	1.5	3.72	2	136	
	1445	14.46	75	3	16.8	7.03	1.5	3.72	0	138	
	1450	14.46	90	3	16.8	7.03	1.5	3.70	0	139	
	1455	14.46	105	3	16.9	7.03	1.5	3.66	0	141	
	1500	14.46	120	3	16.9	7.03	1.5	3.65	0	141	
	1510	<i>Sampled</i>	<i>59</i>	<i>59</i>	<i>57.56</i>	<i>7.06</i>	<i>9</i>				

Pump Rate: <= 3 GPM Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10mv ORP, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
	3 - 40 mL glass vials	HCl	N	Bailer	Volatiles (SW8260)

APPENDIX C

Chain-of-Custody Forms

Chain of Custody

Laboratory			Project Name			Chain of Custody No.					
Address			Point of Contact / Phone No.			No. 0225					
City			Site Contact / Phone No.			Page 1 of 1					
State			Zip Code			Comment					
CITY			STATE			ZIP CODE					
LOCID			SAMPNO			COOLER NO.					
SBD			SACODE			MATRIX					
SED			DATE			NO. OF CONTAIN					
SBD			TIME			NO. OF CONTAIN					
Dw I			59DW1WG I			10/25 1340 Wk 3			X		
SW I			59SW1WG I			10/25 1435 Wk 3			X		
SW 3			59SW3WG I			10/25 1410 Wk 9			X		
DW 3			59DW3WG I			10/27 1245 Wk 3			X		
SW 4			59SW4WG I			10/27 1410 Wk 3			X		
SW 7			59SW7WG I			10/27 1510 Wk 3			X		
SW 7			59SW7WG 9			10/27 1510 Wk 3			X		
TRIP BLANK			7B1027COS			10/27 1540 Wk 3			X		
						10/27/2005					
1. Relinquished By / Company			Date			Time			Date		
MATT SCHAFER/EARTH TECH			10/27/05			1900			FED EX		
2. Relinquished By / Company			Date			Time			Date		
3. Relinquished By / Company			Date			Time			Date		
4. Relinquished By / Company			Date			Time			Date		
Comments			Shipment Method/Airbill No.								

APPENDIX D

Data Validation Review Summary and Groundwater Analytical Data

Data Validation Review
October 2005 Sampling Event
SDG D5J280407
Air Force Plant 59 (AFP-59), New York

Prepared by:

Earth Tech, Inc.
675 N. Washington Street, Suite 600
Alexandria, Virginia 22314

November 2005

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- 3 Duplicate Comparison
- 4 Summary of Detected VOCs in Monitoring Well Samples

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1.0 INTRODUCTION

This data validation review pertains to groundwater samples collected in October 2005 at Air Force Plant 59 (AFP 59). Parameters evaluated in groundwater samples included the total concentration of volatile organic constituent (VOC). The samples were analyzed by Severn Trent Laboratories (STL) in Arvada, Colorado.

Data validation review is an after-the-fact technical review of analytical data whereby the quality and usability of the data are determined based on a set of predefined criteria. These criteria depend upon the type of data involved and the purpose for which those data were collected. Data validation review assesses whether and to what extent specified criteria were met, and places restrictions on data use based on quality parameters. The data validation review process can range from a cursory review used to detect out-of-control situations to a detailed evaluation, depending on the analytical protocol, the associated quality control samples collected, and the intended data use.

Specific criteria for data quality review may include, but are not limited to: technical holding times, analysis of blanks, surrogate spike recovery, analysis of duplicates, and reported practical quantitation limits (PQLs). Where applicable, the recommendations of USEPA SW-846 Test Methods for Evaluating Solid Waste (Third Edition, December 1996) or USEPA Methods for Chemical Analysis of Water and Wastes (Revised March 1983) analytical method requirements, USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review (February 1994, Functional Guidelines) data review guidance, and professional judgment.

Table 1 presents the data qualifiers applied during this review effort and their meanings.

Table 1
Data Qualifiers

Qualifier	Description
J	This is an estimated value.
U	The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

Table 2 provides a cross-reference list for field sample IDs and lab sample IDs from STL.

Table 2
Field Sample ID/Lab Sample ID Cross Reference
Lot D5J280407

Field Sample ID	Lab Sample ID	Field Sample ID	Lab Sample ID
59DW1WG1	D5J280407-001	59SW4WG1	D5J280407-005
59SW1WG1	D5J280407-002	59SW7WG1	D5J280407-006
59SW3WG1	D5J280407-003	59SW7WG9	D5J280407-007
59SW3WG1-MS	D5J280407-003	TB102705	D5J280407-008
59SW3WG1-MSD	D5J280407-003		
59DW3WG1	D5J280407-004		

During the data validation review process, laboratory qualified and unqualified data are verified against all available supporting documentation. Based on this review, qualifier codes may be added, deleted, or modified by the validator. Final results are therefore either qualified or unqualified. (Note: In those cases where the laboratory added a "U" flag indicated a non-detect result, and the validator agrees with this flag, then it remains intact, as noted on the corresponding Form I.) Changes to the data are reflected on the Form I's in Appendix A.

2.0 VOLATILE ORGANIC CONSTITUENTS

Volatile organic constituents were analyzed using EPA Test Method for Evaluating Solid Waste (SW-846) Method 8260B.

2.1 Holding Times

All samples were extracted and analyzed within prescribed hold times. No qualification is needed.

2.2 Calibration

Initial calibration standards were analyzed at 0.3, 1, 2, 5, 10, 30, 60, and 120 µg/L. For the Initial Calibration run, target constituent RRF values were all greater than 0.05 and the %RSD values were less than 30% for all target constituents. No qualification is needed based on this information.

Continuing calibration verifications were performed at the required frequency. The %D results were within 20% for all target constituents. Likewise, recoveries were within control limits in the Second Source Calibration Standard and no qualification is needed.

One sample, 59SW4WG1, required a 5-fold dilution in order to bring on-column concentrations within the calibration range of the instrument. Reporting limits were adjusted accordingly.

The hand-annotated data summary sheets (referred to as Form I's) are provided as Appendix A.

It is noted that for those results which were less than the RL but greater than the MDL, the laboratory assigned an "F" flag, indicating an estimated value. Unless qualified otherwise, the validator removes the F flag and replaces it with the "J" qualifier, indicating an estimated value.

2.3 Laboratory Control Samples

The corresponding laboratory control sample exhibited constituent recoveries within the appropriate control range for all target volatile constituents. No qualification is needed.

2.4 Blanks

Methylene chloride was detected in the method blank at 0.35 ug/L. The validator qualifies U any positive methylene chloride result less than or equal to 3.5 ug/L.

Methylene chloride was detected in the trip blank TB102705 at 0.43 ug/L. Since the methylene chloride result was qualified by the validator as noted above, no additional qualification is needed for this constituent.

2.5 Matrix Spike/Matrix Spike Duplicate

Sample 59SW3WG1 served as the MS/MSD sample. Recoveries were within control limits for both the MS and MSD. RPD values also were within control limits. No qualification is needed.

2.6 Surrogate Recovery

Surrogate recoveries were within control limits for all samples. No qualification is needed.

2.7 Internal Standards

All internal standards area counts and retention times were within control limits for all samples. No qualification is needed based on the internal standard information provided.

2.8 Duplicates

A field duplicate was collected for sample SW7. One of two criteria was followed when evaluating field duplicates, depending on the amount detected. If the amount detected was greater than five times the reporting limit (RL), then the relative percent difference (RPD) should have been less than 25 percent. If the amount was less than five times the RL, then the difference between the duplicate and the sample concentrations should have been less than the RL. No qualification is needed based on the criteria. A comparison of field sample and duplicate is presented in Table 3.

Table 3: Duplicate Comparison (µg/L)

Analyte	Reporting Limit (RL)	59SW7WG1	59SW7WG9	Relative Percent Difference (RPD)
1,1,1-Trichloroethane	1.0	0.73	0.69	6%
1,1-Dichloroethane	1.0	1.4	1.4	0%
Cis-1, 2-Dichloroethene	1.0	12	12	0%
Tetrachloroethene	1.0	0.24	0.23	4%
Trichloroethene	1.0	3.1	3.0	33%

2.8 Summary

The data completeness is 100%. All of the data points for the volatile analysis of groundwater samples are useable with the appropriate qualifiers.

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW1WG1 Lab Sample ID: D5J280407-001 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.i-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:18

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.15	1:1	N/A	U
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	0.16	1:1	N/A	U
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	93	72 - 119	
4-Bromofluorobenzene	86	76 - 119	
Dibromofluoromethane	105	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXC01AA

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11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW1WG1 Lab Sample ID: D5J280407-001 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:18

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	104	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXC01AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW1WG1 Lab Sample ID: D5J280407-001 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:18

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	0.20	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

Comments:
HNXC01AA

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11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW1WG1 Lab Sample ID: D5J280407-001 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:18

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.34	1:1	N/A	U
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC01AA

DC
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW1WG1 Lab Sample ID: D5J280407-001 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:18

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.17	1:1	N/A	U
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	0.16	1:1	N/A	U
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC01AA

DC
11/15/05

Concentration Units (ug/L or mg/kg dry weight): ug/L

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW1WG1 Lab Sample ID: D5J280407-002 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:39

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.15	1:1	N/A	U
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	0.16	1:1	N/A	U
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	93	72 - 119	
4-Bromofluorobenzene	84	76 - 119	
Dibromofluoromethane	106	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXC61AA

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW1WG1 Lab Sample ID: D5J280407-002 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:39

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	104	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXC61AA

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW1WG1 Lab Sample ID: D5J280407-002 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:39

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	0.20	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

Comments:
HNXC61AA

DC
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW1WG1 Lab Sample ID: D5J280407-002 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:39

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.35	1:1	N/A	PU
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC61AA

DC
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AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW1WG1 Lab Sample ID: D5J280407-002 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 11:39

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.17	1:1	N/A	U
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	0.16	1:1	N/A	U
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

DC
11/15/05

Comments:
HNXC61AA

Concentration Units (ug/L or mg/kg dry weight): ug/L

Internal Std	Qualifier

DC
11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW3WG1 Lab Sample ID: D5J280407-003 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:00

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.47	1:1	N/A	F J
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	0.16	1:1	N/A	U
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	93	72 - 119	
4-Bromofluorobenzene	90	76 - 119	
Dibromofluoromethane	106	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXCB1AA

DL
11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW3WG1 Lab Sample ID: D51280407-003 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:00

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	105	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXC81AA

DL
11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW3WG1 Lab Sample ID: D5J280407-003 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:00

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	0.55	1:1	N/A	F J

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

Comments:
HNXC81AA

DC
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW3WG1 Lab Sample ID: D5J280407-003 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:00

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.35	1:1	N/A	U
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC81AA

DL
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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW3WG1 Lab Sample ID: D5J280407-003 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:00

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.17	1:1	N/A	U
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	0.86	1:1	N/A	PJ
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC81AA

Concentration Units (ug/L or mg/kg dry weight): ug/L

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW3WG1 Lab Sample ID: D5J280407-004 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:21

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.15	1:1	N/A	U
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	0.16	1:1	N/A	U
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	101	72 - 119	
4-Bromofluorobenzene	92	76 - 119	
Dibromofluoromethane	111	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXC91AA

DC
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW3WG1 Lab Sample ID: D5J280407-004 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.i-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:21

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	110	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

DC
11/15/05

Comments:
HNXC91AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW3WG1 Lab Sample ID: D5J280407-004 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:21

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	14	1:1	N/A	
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	3.0	1:1	N/A	

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

Comments:
HNXC91AA

dc
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW3WG1 Lab Sample ID: D5J280407-004 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:21

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.57	1:1	N/A	P U
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC91AA

DC
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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59DW3WG1 Lab Sample ID: D5J280407-004 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 12:21

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.27	1:1	N/A	PJ
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	20	1:1	N/A	
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.17	1:1	N/A	U
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	0.16	1:1	N/A	U
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXC91AA

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Concentration Units (ug/L or mg/kg dry weight): ug/L

Internal Std	Qualifier

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:33

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	2.2	1:1	N/A	
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	1.7	1:1	N/A	
1,1-Dichloroethene	0.17	1.0	1.0	1:1	N/A	
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	95	72 - 119	
4-Bromofluorobenzene	88	76 - 119	
Dibromofluoromethane	106	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXDC1AA

DC
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:33

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	106	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXDC1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:33

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	6.3	1:1	N/A	

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

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Comments:
HNXDC1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:33

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.30	1:1	N/A	PU
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDC1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:33

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.28	1:1	N/A	U J
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.43	1:1	N/A	U J
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.80 0.16	5 10	43	1:1	N/A	U J
Trichlorofluoromethane	0.13	1.0	1.3	1:1	N/A	
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDC1AA

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Concentration Units (ug/L or mg/kg dry weight): ug/L

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL-Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:12

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.85	2.5	0.85	1:5	N/A	U
1,1,1-Trichloroethane	0.75	5.0	1.5	1:5	N/A	F
1,1,2,2-Tetrachloroethane	0.90	2.5	0.90	1:5	N/A	U
1,1,2-Trichloroethane	1.5	5.0	1.5	1:5	N/A	U
1,1-Dichloroethane	0.80	5.0	1.5	1:5	N/A	F
1,1-Dichloroethene	0.85	5.0	0.85	1:5	N/A	U
1,1-Dichloropropene	0.85	5.0	0.85	1:5	N/A	U
1,2,3-Trichlorobenzene	1.2	5.0	1.2	1:5	N/A	U
1,2,3-Trichloropropane	0.90	5.0	0.90	1:5	N/A	U
1,2,4-Trichlorobenzene	1.3	5.0	1.3	1:5	N/A	U
1,2,4-Trimethylbenzene	0.90	5.0	0.90	1:5	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	1.4	10	1.4	1:5	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	98	72 - 119	
4-Bromofluorobenzene	89	76 - 119	
Dibromofluoromethane	108	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXDC2AA

DC
11/15/05

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:12

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	1.0	5.0	1.0	1:5	N/A	U
1,2-Dichlorobenzene	0.75	5.0	0.75	1:5	N/A	U
1,2-Dichloroethane	0.90	2.5	0.90	1:5	N/A	U
1,2-Dichloropropane	0.85	5.0	0.85	1:5	N/A	U
1,3,5-Trimethylbenzene	0.95	5.0	0.95	1:5	N/A	U
1,3-Dichlorobenzene	1.3	5.0	1.3	1:5	N/A	U
1,3-Dichloropropane	0.90	2.0	0.90	1:5	N/A	U
1,4-Dichlorobenzene	1.2	2.5	1.2	1:5	N/A	U
1-Chlorohexane	1.0	5.0	1.0	1:5	N/A	U
2,2-Dichloropropane	1.0	5.0	1.0	1:5	N/A	U
2-Butanone (MEK)	4.5	50	4.5	1:5	N/A	U
2-Chlorotoluene	0.85	5.0	0.85	1:5	N/A	U
4-Chlorotoluene	1.2	5.0	1.2	1:5	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	107	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXDC2AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320
Lab Name: STL Denver Contract #: F41624-00-D-8023
Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER
% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05
Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:12
Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	3.2	50	5.6	1:5	N/A	F
Benzene	0.75	2.0	0.75	1:5	N/A	U
Bromobenzene	1.0	5.0	1.0	1:5	N/A	U
Bromochloromethane	0.90	5.0	0.90	1:5	N/A	U
Bromodichloromethane	0.95	2.5	0.95	1:5	N/A	U
Bromoform	1.0	5.0	1.0	1:5	N/A	U
Bromomethane	1.2	15	1.2	1:5	N/A	U
Carbon tetrachloride	0.90	5.0	0.90	1:5	N/A	U
Chlorobenzene	0.75	2.5	0.75	1:5	N/A	U
Chloroethane	2.3	5.0	2.3	1:5	N/A	U
Chloroform	0.75	1.5	0.75	1:5	N/A	U
Chloromethane	1.0	5.0	1.0	1:5	N/A	U
cis-1,2-Dichloroethene	1.0	5.0	3.5	1:5	N/A	F

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

Comments:
HNXDC2AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:12

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.90	2.5	0.90	1:5	N/A	U
Dibromochloromethane	0.95	2.5	0.95	1:5	N/A	U
Dibromomethane	0.95	5.0	0.95	1:5	N/A	U
Dichlorodifluoromethane	0.95	5.0	0.95	1:5	N/A	U
Ethylbenzene	0.80	5.0	0.80	1:5	N/A	U
Hexachlorobutadiene	1.3	3.0	1.3	1:5	N/A	U
Isopropylbenzene	1.0	5.0	1.0	1:5	N/A	U
m-Xylene & p-Xylene	1.8	10	1.8	1:5	N/A	U
Methyl isobutyl ketone (MIBK)	2.7	50	2.7	1:5	N/A	U
Methyl tert-butyl ether	2.1	25	2.1	1:5	N/A	U
Methylene chloride	0.85	10	2.7	1:5	N/A	F
n-Butylbenzene	1.1	5.0	1.1	1:5	N/A	U
n-Propylbenzene	1.0	5.0	1.0	1:5	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDC2AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW4WG1 Lab Sample ID: D5J280407-005 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 16:12

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	1.2	5.0	1.2	1:5	N/A	U
o-Xylene	0.70	5.0	0.70	1:5	N/A	U
p-Isopropyltoluene	1.0	5.0	1.0	1:5	N/A	U
sec-Butylbenzene	1.1	5.0	1.1	1:5	N/A	U
Styrene	0.85	5.0	0.85	1:5	N/A	U
tert-Butylbenzene	1.0	5.0	1.0	1:5	N/A	U
Tetrachloroethene	0.85	5.0	0.85	1:5	N/A	U
Toluene	0.85	5.0	0.85	1:5	N/A	U
trans-1,2-Dichloroethene	0.80	5.0	0.80	1:5	N/A	U
trans-1,3-Dichloropropene	1.0	5.0	1.0	1:5	N/A	U
Trichloroethene	0.80	5.0	43	1:5	N/A	
Trichlorofluoromethane	0.65	5.0	0.66	1:5	N/A	F
Vinyl chloride	1.0	5.0	1.0	1:5	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDC2AA

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Concentration Units (ug/L or mg/kg dry weight): ug/L

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG1 Lab Sample ID: D5J280407-006 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:03

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.73	1:1	N/A	FJ
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	1.4	1:1	N/A	
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	96	72 - 119	
4-Bromofluorobenzene	88	76 - 119	
Dibromofluoromethane	107	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXDD1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG1 Lab Sample ID: D5J280407-006 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:03

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	105	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

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Comments:
HNXDD1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG1 Lab Sample ID: D5J280407-006 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:03

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	12	1:1	N/A	

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

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Comments:
HNXDD1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG1 Lab Sample ID: D5J280407-006 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:03

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.34	1:1	N/A	U
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDD1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG1 Lab Sample ID: D5J280407-006 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:03

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.24	1:1	N/A	FJ
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	3.1	1:1	N/A	
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDD1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320
Lab Name: STL Denver Contract #: F41624-00-D-8023
Field Sample ID: 59SW7WG9 Lab Sample ID: D5J280407-007 Matrix: WATER
% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05
Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:24
Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.69	1:1	N/A	PJ
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	1.4	1:1	N/A	
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	95	72 - 119	
4-Bromofluorobenzene	89	76 - 119	
Dibromofluoromethane	107	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXDF1AA

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11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG9 Lab Sample ID: D5J280407-007 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:24

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	106	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXDF1AA

DC
11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG9 Lab Sample ID: D5J280407-007 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:24

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	12	1:1	N/A	

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

DC
11/15/05

Comments:
HNXDF1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG9 Lab Sample ID: D5J280407-007 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:24

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	0.19	1:1	N/A	U
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.34	1:1	N/A	U
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDF1AA

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11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG9 Lab Sample ID: D5J280407-007 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:24

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.23	1:1	N/A	F
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	3.0	1:1	N/A	
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDF1AA

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11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: 59SW7WG9 Lab Sample ID: D5J280407-007 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:24

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dichloroethane-d4	N/A	N/A	9.5	1:1	N/A	
4-Bromofluorobenzene	N/A	N/A	8.9	1:1	N/A	
Dibromofluoromethane	N/A	N/A	11	1:1	N/A	
Toluene-d8	N/A	N/A	11	1:1	N/A	

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDF1AA

DC
11/15/05

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: TB102705 Lab Sample ID: D5J280407-008 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:45

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,1,2-Tetrachloroethane	0.17	0.50	0.17	1:1	N/A	U
1,1,1-Trichloroethane	0.15	1.0	0.15	1:1	N/A	U
1,1,2,2-Tetrachloroethane	0.18	0.50	0.18	1:1	N/A	U
1,1,2-Trichloroethane	0.30	1.0	0.30	1:1	N/A	U
1,1-Dichloroethane	0.16	1.0	0.16	1:1	N/A	U
1,1-Dichloroethene	0.17	1.0	0.17	1:1	N/A	U
1,1-Dichloropropene	0.17	1.0	0.17	1:1	N/A	U
1,2,3-Trichlorobenzene	0.24	1.0	0.24	1:1	N/A	U
1,2,3-Trichloropropane	0.18	1.0	0.18	1:1	N/A	U
1,2,4-Trichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,2,4-Trimethylbenzene	0.18	1.0	0.18	1:1	N/A	U
1,2-Dibromo-3-chloropropane (DBCP)	0.28	2.0	0.28	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
1,2-Dichloroethane-d4	94	72 - 119	
4-Bromofluorobenzene	89	76 - 119	
Dibromofluoromethane	106	85 - 115	

Internal Std	Qualifier
Fluorobenzene	

Comments:
HNXDG1AA

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ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: TB102705 Lab Sample ID: DSJ280407-008 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:45

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,2-Dibromoethane (EDB)	0.20	1.0	0.20	1:1	N/A	U
1,2-Dichlorobenzene	0.15	1.0	0.15	1:1	N/A	U
1,2-Dichloroethane	0.18	0.50	0.18	1:1	N/A	U
1,2-Dichloropropane	0.17	1.0	0.17	1:1	N/A	U
1,3,5-Trimethylbenzene	0.19	1.0	0.19	1:1	N/A	U
1,3-Dichlorobenzene	0.26	1.0	0.26	1:1	N/A	U
1,3-Dichloropropane	0.18	0.40	0.18	1:1	N/A	U
1,4-Dichlorobenzene	0.23	0.50	0.23	1:1	N/A	U
1-Chlorohexane	0.20	1.0	0.20	1:1	N/A	U
2,2-Dichloropropane	0.21	1.0	0.21	1:1	N/A	U
2-Butanone (MEK)	0.90	10	0.90	1:1	N/A	U
2-Chlorotoluene	0.17	1.0	0.17	1:1	N/A	U
4-Chlorotoluene	0.23	1.0	0.23	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier
Toluene-d8	106	81 - 120	

Internal Std	Qualifier
Chlorobenzene-d5	

Comments:
HNXDG1AA

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: TB102705 Lab Sample ID: D5J280407-008 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:45

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Acetone	0.63	10	0.63	1:1	N/A	U
Benzene	0.15	0.40	0.15	1:1	N/A	U
Bromobenzene	0.20	1.0	0.20	1:1	N/A	U
Bromochloromethane	0.18	1.0	0.18	1:1	N/A	U
Bromodichloromethane	0.19	0.50	0.19	1:1	N/A	U
Bromoform	0.20	1.0	0.20	1:1	N/A	U
Bromomethane	0.24	3.0	0.24	1:1	N/A	U
Carbon tetrachloride	0.18	1.0	0.18	1:1	N/A	U
Chlorobenzene	0.15	0.50	0.15	1:1	N/A	U
Chloroethane	0.46	1.0	0.46	1:1	N/A	U
Chloroform	0.15	0.30	0.15	1:1	N/A	U
Chloromethane	0.20	1.0	0.20	1:1	N/A	U
cis-1,2-Dichloroethene	0.20	1.0	0.20	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier
1,4-Dichlorobenzene-d5	

Comments:
HNXDG1AA

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: TB102705 Lab Sample ID: D5J280407-008 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.I-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:45

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
cis-1,3-Dichloropropene	0.18	0.50	0.18	1:1	N/A	U
Dibromochloromethane	0.19	0.50	0.19	1:1	N/A	U
Dibromomethane	0.19	1.0	0.19	1:1	N/A	U
Dichlorodifluoromethane	0.19	1.0	1.9	1:1	N/A	
Ethylbenzene	0.16	1.0	0.16	1:1	N/A	U
Hexachlorobutadiene	0.26	0.60	0.26	1:1	N/A	U
Isopropylbenzene	0.20	1.0	0.20	1:1	N/A	U
m-Xylene & p-Xylene	0.37	2.0	0.37	1:1	N/A	U
Methyl isobutyl ketone (MIBK)	0.54	10	0.54	1:1	N/A	U
Methyl tert-butyl ether	0.42	5.0	0.42	1:1	N/A	U
Methylene chloride	0.17	2.0	0.43	1:1	N/A	✓ U
n-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
n-Propylbenzene	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

Comments:
HNXDG1AA

AFCEE
ORGANIC ANALYSES DATA SHEET 2
RESULTS

Analytical Method: 8260B Preparatory Method: 5030B/8260B AAB #: 5312320

Lab Name: STL Denver Contract #: F41624-00-D-8023

Field Sample ID: TB102705 Lab Sample ID: D5J280407-008 Matrix: WATER

% Solids: _____ Initial Calibration ID: H.i-1-05-NOV-05

Date Received: 28-Oct-05 09:00 Date Prepared: 07-Nov-05 06:32 Date Analyzed: 07-Nov-05 13:45

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.23	1.0	0.23	1:1	N/A	U
o-Xylene	0.14	1.0	0.14	1:1	N/A	U
p-Isopropyltoluene	0.20	1.0	0.20	1:1	N/A	U
sec-Butylbenzene	0.22	1.0	0.22	1:1	N/A	U
Styrene	0.17	1.0	0.17	1:1	N/A	U
tert-Butylbenzene	0.20	1.0	0.20	1:1	N/A	U
Tetrachloroethene	0.17	1.0	0.17	1:1	N/A	U
Toluene	0.17	1.0	0.17	1:1	N/A	U
trans-1,2-Dichloroethene	0.16	1.0	0.16	1:1	N/A	U
trans-1,3-Dichloropropene	0.21	1.0	0.21	1:1	N/A	U
Trichloroethene	0.16	1.0	0.16	1:1	N/A	U
Trichlorofluoromethane	0.13	1.0	0.13	1:1	N/A	U
Vinyl chloride	0.21	1.0	0.21	1:1	N/A	U

Surrogate	Recovery	Control Limits	Qualifier

Internal Std	Qualifier

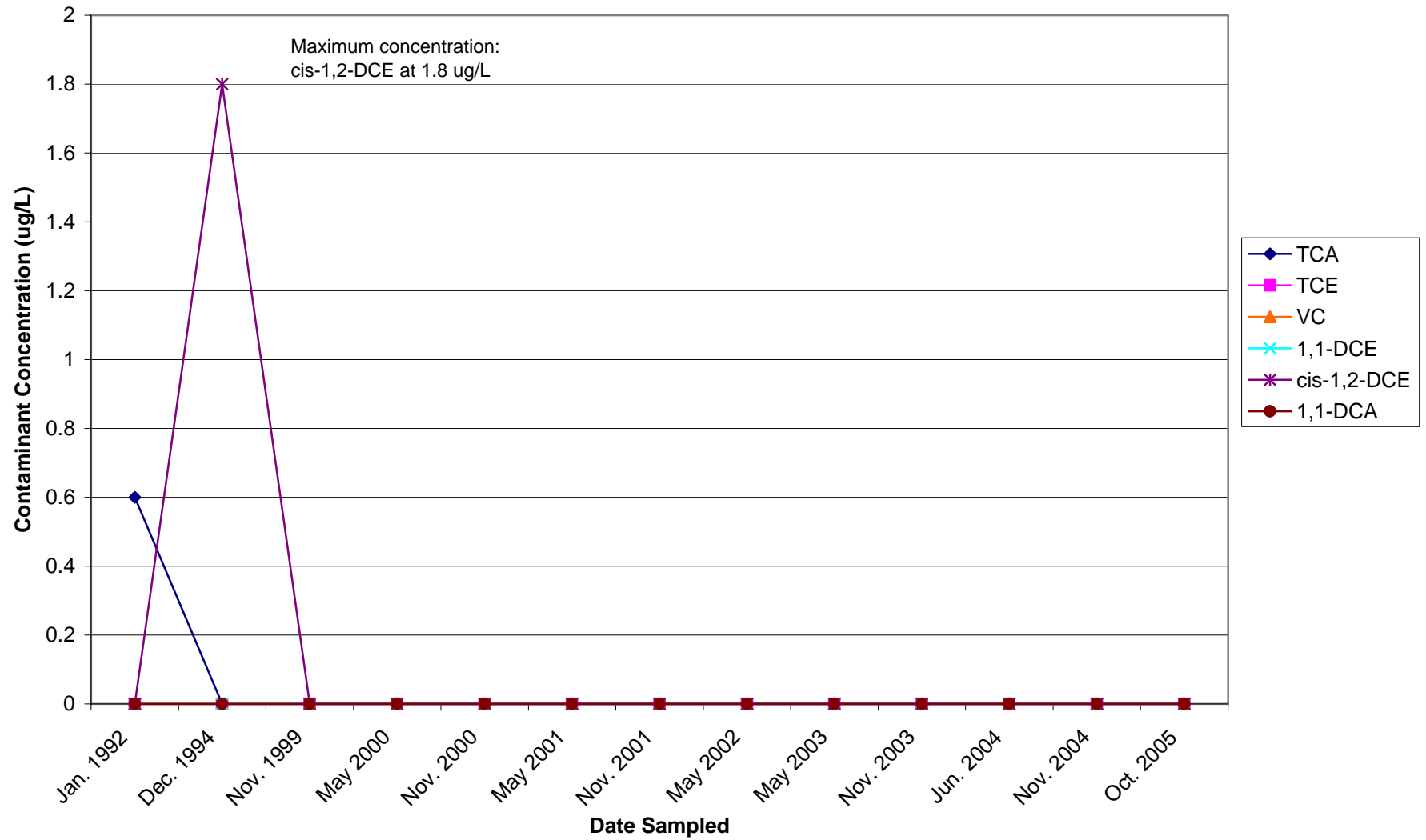
Comments:
HNXDG1AA

Concentration Units (ug/L or mg/kg dry weight): ug/L

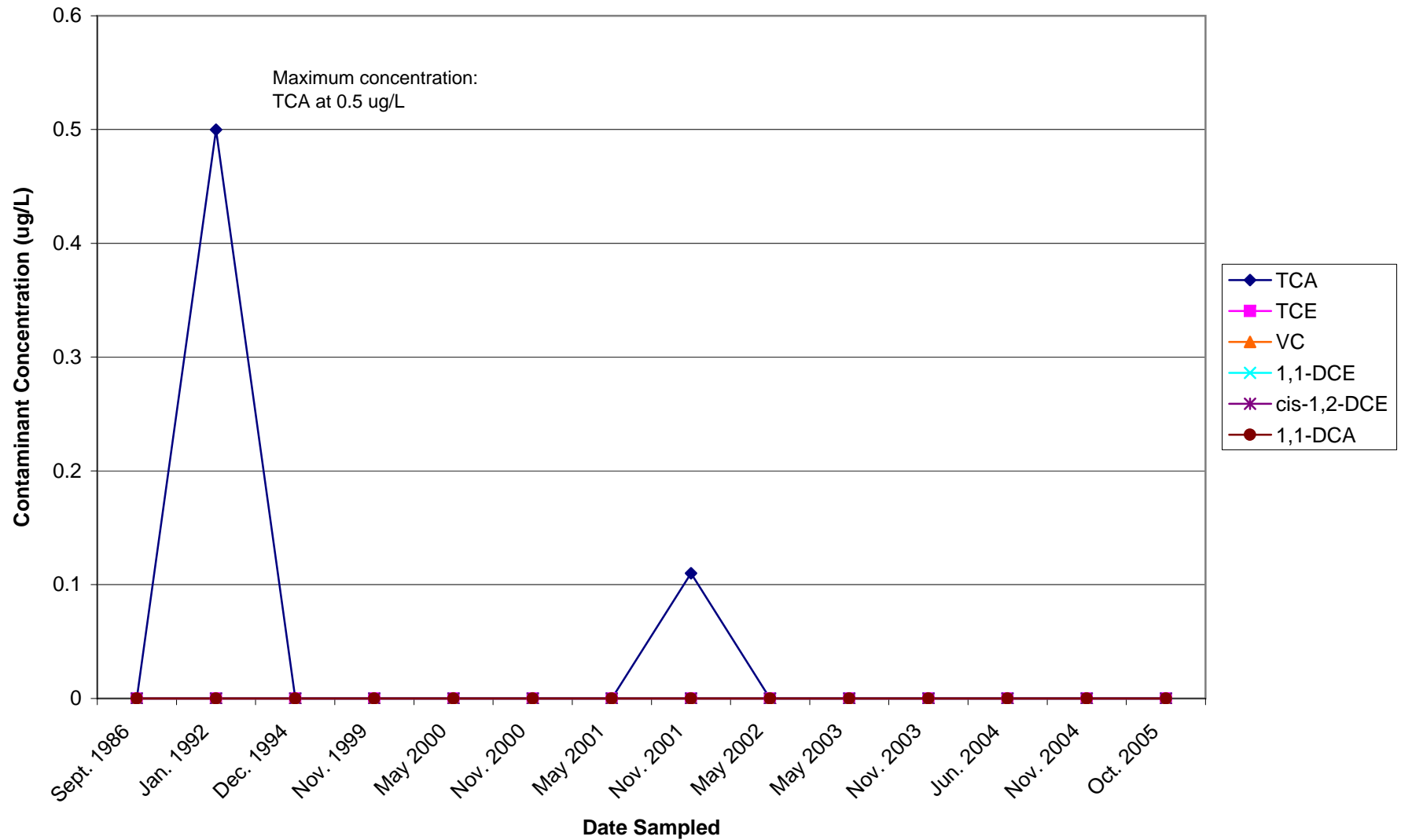
APPENDIX E

Trend Analysis of VOCs in Groundwater

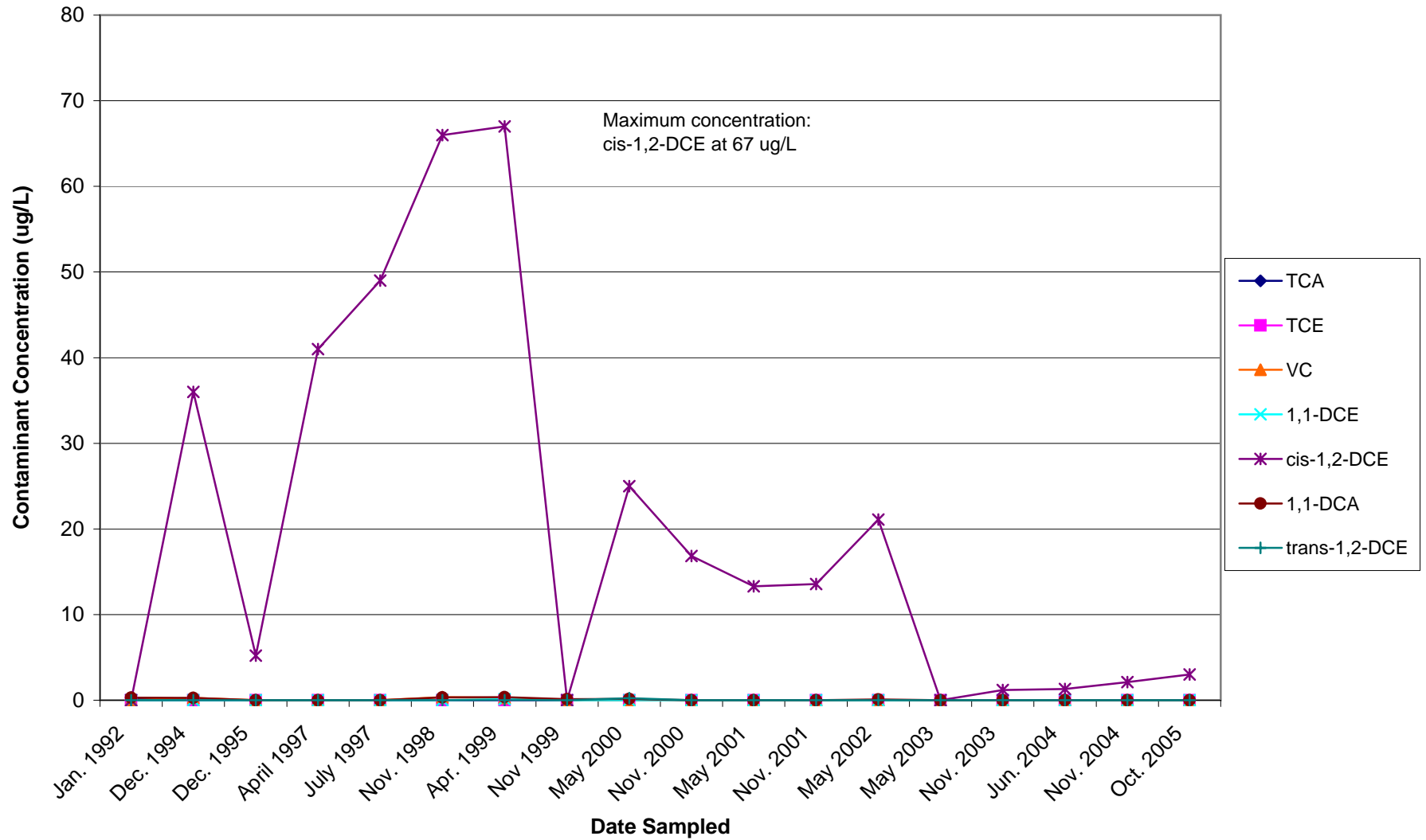
DW1 Trend Analysis of VOCs in Groundwater



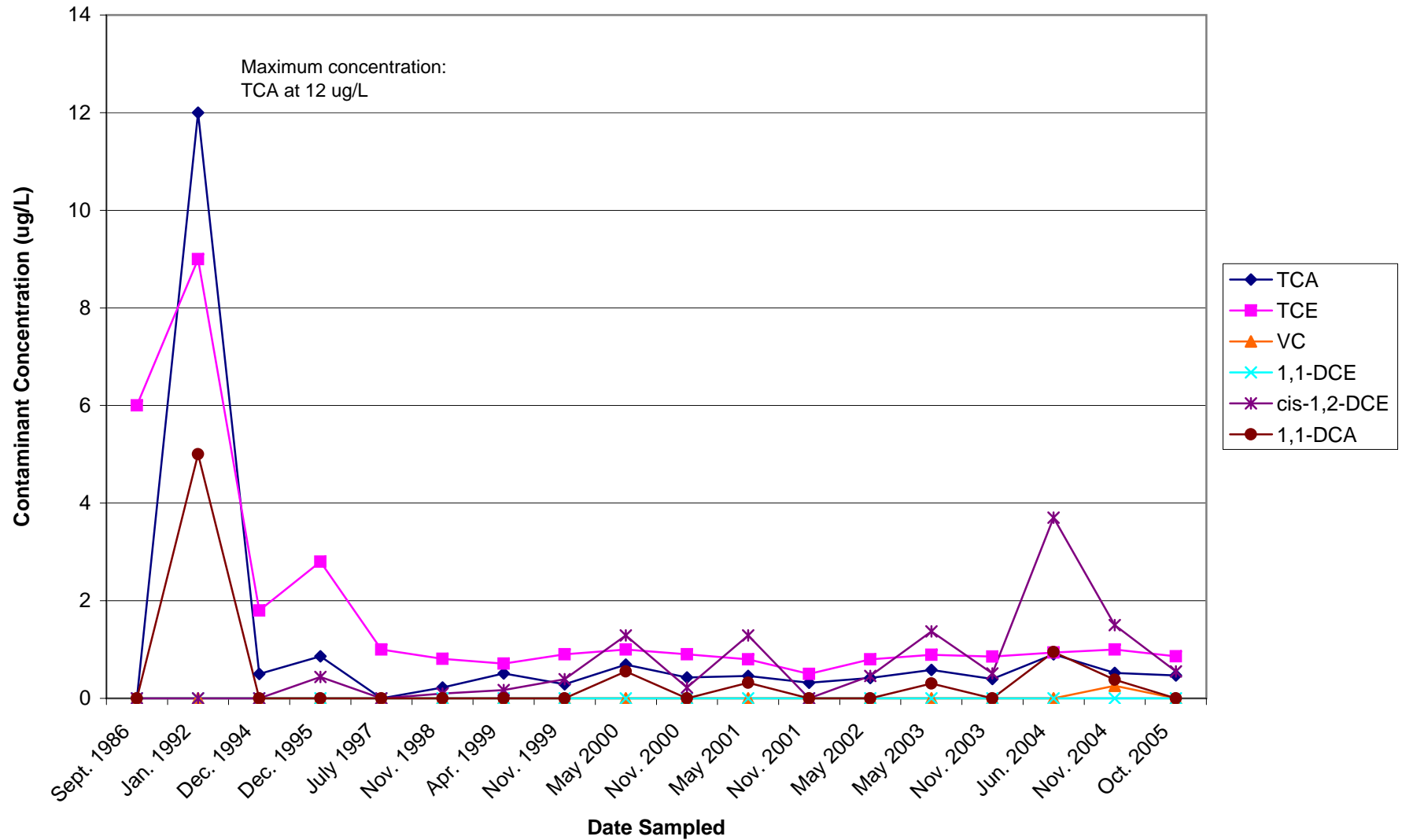
SW1 Trend Analysis of VOCs in Groundwater



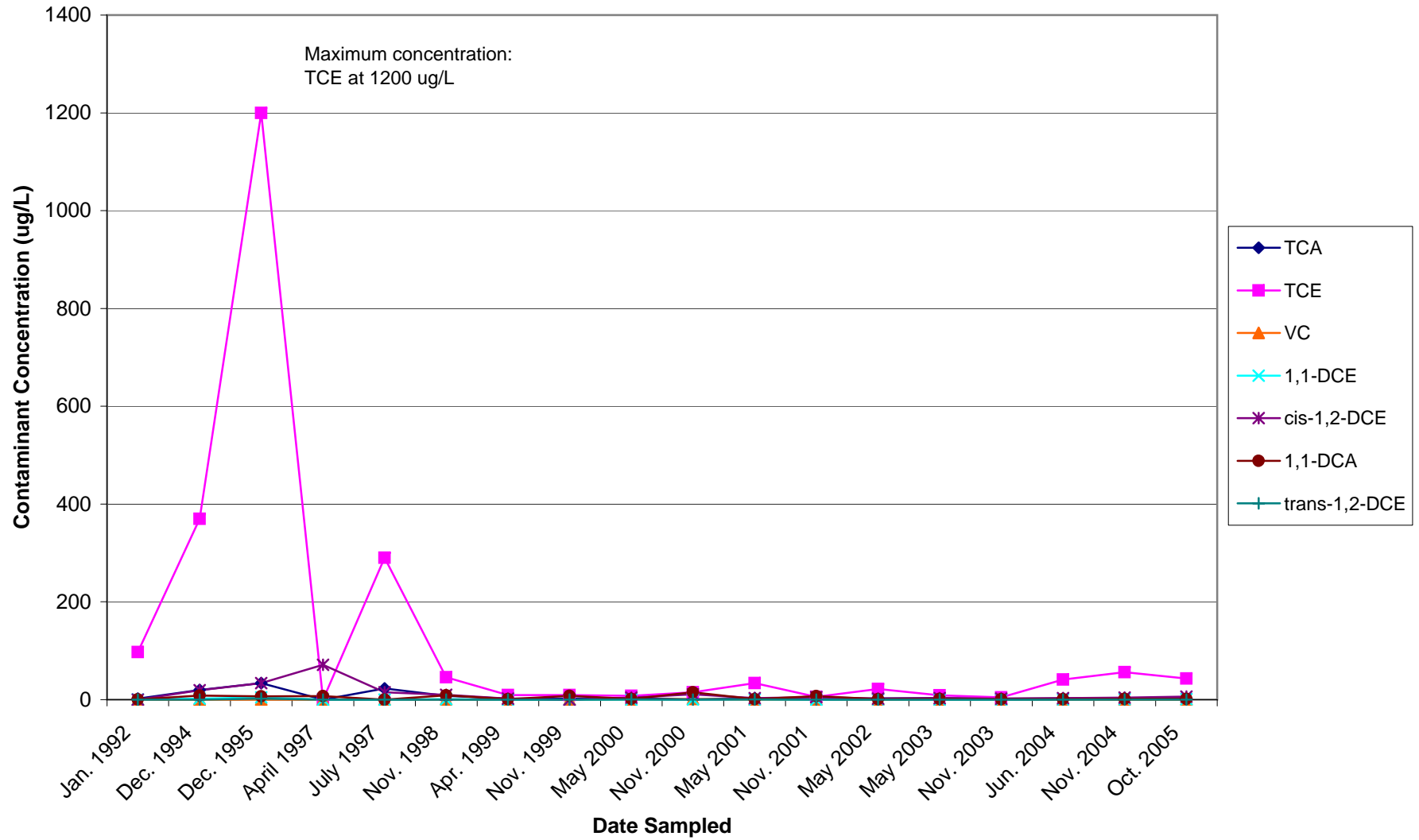
DW3 Trend Analysis of VOCs in Groundwater



SW3 Trend Analysis of VOCs in Groundwater



SW4 Trend Analysis of VOCs in Groundwater



SW7 Trend Analysis of VOCs in Groundwater

