K. 7
3/11/05

QUARTERLY MONITORING REPORT
ACTIVE TREATMENT SYSTEMS
SECOND QUARTER 2004

AMERICAN CHEMICAL SERVICE NPL SITE
GRIFFITH, INDIANA

MWH File No. 2090601

Prepared For:

American Chemical Service NPL Site RD/RA Executive Committee
Griffith, Indiana

Prepared By:

MWH Americas, Inc.
175 West Jackson Boulevard, Suite 1900
Chicago, Illinois 60604

March 2005

EPA Region 5 Records Ctr.
268185

MWH

QUARTERLY MONITORING REPORT FOR ACTIVE TREATMENT SYSTEMS SECOND QUARTER 2004

AMERICAN CHEMICAL SERVICE NPL SITE GRIFFITH, INDIANA

Prepared For:

American Chemical Service NPL Site RD/RA Executive Committee
Griffith, Indiana

Prepared by: _____ March 11, 2005
Jonathan Pohl, P.E. — Date
Project Engineer

Approved by: _____ MARCH 11, 2005
FOR Peter Vagt, Ph.D., CPG — Date
Project Manager

TABLE OF CONTENTS

SECTION	PAGE
ACRONYMS AND ABBREVIATIONS	iii
1.0 INTRODUCTION	1
2.0 GWTP COMPLIANCE MONITORING	3
2.1 Introduction	3
2.2 Effluent Sampling and Analyses	3
2.3 Effluent Analytical Results	4
2.4 Catalytic Oxidizer/Scrubber Sampling and Analysis	4
3.0 ISVE SYSTEM MONITORING	6
3.1 Thermal Oxidizer Off-Gas Sampling	6
3.2 Sampling Results	7
3.3 ISVE System Monitoring	7
4.0 GWTP TREATMENT SYSTEM PROCESS MODIFICATIONS	8
5.0 ISVE PROCESS MODIFICATIONS	9
6.0 PGCS AND BWES GAUGING ACTIVITIES	10
7.0 SYSTEM OPERATION	12
8.0 REFERENCE	13

TABLES

Table 2.1 Groundwater Treatment System Effluent Discharge Limits
Table 2.2 Summary of Effluent Analytical Results – Second Quarter 2004; Groundwater Treatment System
Table 3.1 Summary of Thermal Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) – Second Quarter 2004
Table 3.2 Summary of Thermal Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) – Second Quarter 2004
Table 3.3 Summary of In-Situ Vapor Extraction (ISVE) System Influent Monitoring Data for VOCs (Method TO-14) – Second Quarter 2004
Table 3.4 Summary of In-Situ Vapor Extraction (ISVE) System Influent Monitoring Data for SVOCs (Method TO-13) – Second Quarter 2004
Table 3.5 Off-Site In-Situ Vapor Extraction (ISVE) System Well Monitoring Data – Second Quarter 2004
Table 3.6 Off-Site In-Situ Vapor Extraction (ISVE) System Header Monitoring Data – Second Quarter 2004
Table 3.7 SBPA In-Situ Vapor Extraction (ISVE) System Well Monitoring Data – Second Quarter 2004
Table 3.8 SBPA In-Situ Vapor Extraction (ISVE) System Header Monitoring Data – Second Quarter 2004
Table 6.1 Water Table Elevations Across the Barrier Wall and Near the PGCS – Second Quarter 2004
Table 6.2 Water Levels Inside Barrier Wall – Second Quarter 2004

FIGURES

Figure 6.1 Water Table Elevations Near the PGCS – June 2004
Figure 6.2 Water Table Elevations Across the Barrier Wall – June 2004
Figure 6.3 Water Level Trends Inside Barrier Wall (Still Bottoms Pond Area)
Figure 6.4 Water Level Trends Inside Barrier Wall (Off-Site Area)

APPENDICES

Appendix A Effluent Analytical Data
- April 1, 2004 Compliance Sample – Laboratory Results
- May 16, 2004 Compliance Sample – Laboratory Results
- June 17, 2004 Compliance Sample – Laboratory Results

Appendix B Thermal Oxidizer Off-Gas Analytical Data
- April 8, 2004 Off-Gas Sample Laboratory Results
- May 18, 2004 Off-Gas Sample Laboratory Results
- June 17, 2004 Off-Gas Sample Laboratory Results

ACRONYMS AND ABBREVIATIONS

AS	Air Sparge
AMSL	Above Mean Sea Level
BOD	Biological Oxygen Demand
BW	Barrier Wall
BWES	Barrier Wall Extraction System
cfm	cubic feet per minute
DL	Detection Limit
DPE	Dual Phase Extraction
EF1	Effluent sample
GAC	Granular Activated Carbon
Global	Global Engineering
GWTP	Groundwater Treatment Plant
IDEM	Indiana Department of Environmental Management
IN1	Influent sample
IN2	Duplicate influent sample
K-P	Kapica Pazmey
lb/hr	Pounds per hour
LDC	Laboratory Data Consultants
mg/kg	Milligrams per kiligram
mg/L	Milligrams per liter
NC	Not Calculated
ND	Not Detected
NE	No Effluent Limit Established
NS	Not Sampled
OFCA	Off-Site Containment Area
PCBs	Polychlorinated Biphenyls
ppm	Parts per million
PGCS	Perimeter Groundwater Containment System
PSVP	Performance Standard Verification Plan
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
SBPA	Still Bottoms Pond Area
SVOC	Semi-Volatile Organic Compounds
T-102	Aeration Equalization Tank
TOC	Top of Casing
TOIC	Top of Inner Casing
TOSG	Top of Staff Gauge
TSS	Total Suspended Solids
µg	Micrograms
µg/L	Micrograms per liter
U.S. EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
"Hg	Inches of mercury
"H_2O	Inches of water

1.0 INTRODUCTION

MWH, on behalf of the ACS RD/RA Executive Committee, started up the on-site groundwater treatment system at the American Chemical Service NPL Site (ACS Site) in Griffith, Indiana on March 13, 1997. The groundwater treatment plant (GWTP) system was designed to treat groundwater from the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall Extraction System (BWES). The original treatment consisted of a phase-separator for oil and free product removal, equalization tanks, a UV oxidation unit for destruction of organic constituents, and an air stripper to remove methylene chloride and other organics. The treatment also included a chemical precipitation and clarification unit to remove metals, a sand filter to remove suspended solids, and activated carbon vessels for final polishing of the treated groundwater before it was released to the west of the site.

In 2001, an activated sludge treatment unit was added to the process to reduce the volatile and semivolatile organic compounds (VOCs and SVOCs) in the collected groundwater. The activated sludge treatment process also reduces the amount of activated carbon required to treat the water. An aerated equalization tank was also added to the GWTP in 2001 to remove VOCs from the collected groundwater, oxidize metals to increase metals removal efficiency in the chemical precipitation unit, and equalize groundwater flow through the GWTP. The activated sludge system and aeration tank have been fully integrated into the process along with the other upgrade components. Startup and optimization of the catalytic oxidizer/scrubber air treatment unit was also conducted during 2001.

The treated effluent from the treatment system is discharged to the nearby wetlands, west of the treatment system, in accordance with Agency approvals.

In the fall of 2001, MWH began construction of an In-Situ Vapor Extraction (ISVE) system for the Off-Site Containment Area (OFCA) and the Kapica-Pazmey (K-P) Area, both within the area known as the Off-Site Area. The Off-Site Area ISVE system consists of 42 ISVE wells, a blower system, a thermal oxidizer/scrubber unit, and the associated mechanical and electrical components. The construction of the system was completed in March 2002 and the system was started on May 1, 2002 after the startup of the thermal oxidizer and scrubber system was completed. Protocols and goals for the phased startup of the Off-Site System as defined in the Final Remedy (Montgomery Watson, 1999) were followed.

In the beginning of 2003, MWH began construction of an ISVE system for the Still Bottoms Pond Area (SBPA). The SBPA ISVE system consists of twenty-five ISVE wells, twenty-one dual phase extraction (DPE) wells, six air sparge wells, ISVE and air sparge blower systems, and the associated mechanical and electrical components. The construction of the system was completed and the system was started in July of 2003. A new thermal oxidizer/scrubber unit was installed in the GWTP in the spring of 2003. The new unit was installed to treat vapors from both ISVE systems.

This Active Treatment Systems report summarizes effluent analytical data, catalytic oxidizer/scrubber (annually) and thermal oxidizer off-gas analytical data, ISVE process monitoring data, and water level gauging data collected from April 2004 through June 2004. The report also details modifications and upgrades that were made to the active treatment systems during the reporting period.

2.0 GWTP COMPLIANCE MONITORING

2.1 INTRODUCTION

Effluent samples are collected on a regular schedule from the treatment system to demonstrate compliance with the discharge limits (Table 2.1) established by Indiana Department of Environmental Management (IDEM) and United States Environmental Protection Agency (U.S. EPA). The approved Performance Standard Verification Plan (PSVP) (Montgomery Watson, July 1997) requires quarterly effluent sampling for biological oxygen demand (BOD), total suspended solids (TSS), SVOCs, metals, and polychlorinated biphenyls (PCBs) in the system, and monthly effluent sampling for pH and VOCs, as tabulated below. In accordance with the PSVP, a full analysis effluent compliance sample was collected during April and analyzed for all of the analytes listed above. During May and June, the monthly effluent compliance sample was analyzed for VOCs and pH only.

Sampling and analyses were performed in accordance with the approved Quality Assurance Project Plan (QAPP) (Montgomery Watson Harza, November 2001). Quality control measures were also instituted in accordance with the PSVP. The following table and paragraphs present details on sampling and analyses and also summarize the analytical data for the treatment system effluent.

Sampling Frequency Schedule – Groundwater Treatment System

Analytes	Cumulative Time From Startup*	Frequency
Flowrate	–	Continuous
BOD, TSS, SVOCs and Metals	181 days onward	Once per quarter
VOCs and pH	31 days onward	Once per month
PCBs	181 days onward	Once per quarter
PCBs in Sediment (one location)	–	Once per year

*Note: System was started up on March 13, 1997

2.2 EFFLUENT SAMPLING AND ANALYSES

Effluent samples were collected each month during the second quarter of 2004. Samples were collected on the following dates and analyzed for the listed analytes for this reporting period:

April 1, 2004	full analysis (pH, TSS, BOD, Metals, VOCs, SVOCs, pentachlorophenol, and PCBs)
May 16, 2004	pH and VOCs
June 17, 2004	pH and VOCs

The above samples were collected directly from a sampling tap on the effluent line of the treatment system. The samples were placed in contaminant-free containers, in accordance with the U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers (U.S. EPA, 1992). Appropriate sample containers and preservatives, as specified in the QAPP, were used to collect and preserve the samples. Following sample collection, the temperature of the sample containers was maintained at or below 4° C in coolers. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment system to the laboratories. In accordance with the approved QAPP, the effluent water samples were analyzed for the following parameters by the following analytical methods:

Parameter	Analytical Method
VOCs	SW-846 8260B
SVOCs	SW-846 8270C
Pentachlorophenol	SW-846 8270C and SIM
Pesticides/PCBs	EPA 608/SW-846 8081/8082
Metals (Excluding Mercury)	SW-846 6010
General Water Quality Parameters (TSS and BOD-5)	EPA 160.2 and 405.1
Mercury	SW-846 7470
pH	EPA 150.1

2.3 EFFLUENT ANALYTICAL RESULTS

The GWTP effluent monitoring data, summarized in Table 2.2, verify that the system effluent was compliant with the discharge limits summarized in Table 2.1. No permit exceedences were reported in the April, May, or June samples.

Compuchem Laboratory of Cary, North Carolina performed the analysis of the samples. Laboratory Data Consultants (LDC) of Carlsbad, California performed third party data validation in accordance with the U.S. EPA National Functional Guidelines for Organic/Inorganic Data Review. Validation qualifiers are listed in Table 2.2 and are written in the margin of the analytical data sheets provided in Appendix A.

2.4 CATALYTIC OXIDIZER/SCRUBBER SAMPLING AND ANALYSIS

MWH began eight initial rounds of off-gas sampling of the catalytic oxidizer/scrubber described in the PSVP (Montgomery Watson, April 1997) during April 2002. The eight rounds of sampling were completed during the third quarter of 2002. One sample was collected in October 2002 to verify the continued performance of the system. The off-gas was also sampled in December 2002 after repairs were made to the catalytic oxidizer/scrubber unit to ensure the unit was working properly. As discussed in the *Progress Report - November 2002 Activities* dated December 9, 2002, the off-gas sample from the catalytic oxidizer/scrubber will be sampled annually, in accordance with IDEM regulations

and the PSVP. However, since the vapors generated by the GWTP are being treated by Therm Ox 2 and the catalytic oxidizer is not being operated, annual samples of the catalytic oxidizer will only be collected if the unit operates within that year.

3.0 ISVE SYSTEM MONITORING

3.1 THERMAL OXIDIZER OFF-GAS SAMPLING

Beginning in October 2003, Ryan Construction, Inc. began reconfiguring the scrubber component of the thermal oxidizer/scrubber unit manufactured by Durr Engineering, designated as Therm Ox 1, in order to improve the performance of the unit. The reconfiguration of the unit was completed on December 26th and the unit was brought online on December 29th to treat vapors from the SBPA ISVE system. Monitoring of the unit indicated that there were minor leaks in the scrubber. Therefore, Therm Ox 1 was taken offline on January 5, 2004, and vapors from both systems were directed to Therm Ox 2. Repairs to Therm Ox 1 are anticipated to be completed in August of 2004.

In May 2003, a second thermal oxidizer/scrubber (therm ox) unit was installed at the Site. The unit was manufactured by Global Engineering (Global) and is designated as Therm Ox 2. Therm Ox 2 was installed at the GWTP to treat the vapor collected by the SBPA and Off-Site Area ISVE system. Beginning in the third quarter of 2003, vapors from the SBPA ISVE system were treated by the new unit. Monthly compliance sampling of Therm Ox 2 began in July 2003 when the system was fully operational. In September 2003, the vapors from both the Off-Site Area ISVE and the SBPA ISVE systems were treated by Therm Ox 2. During the second quarter of 2004, compliance samples were collected on April 8th, May 18th, and June 17th from Therm Ox 2. Therm Ox 1 was not operating during this reporting period; therefore, no samples were collected from this unit.

Influent and effluent off-gas samples were collected directly from sampling taps on the influent pipe to the thermal oxidizer and the discharge stack of the scrubber. One influent sample (labeled IN1) and one effluent sample (EF1) were collected. A duplicate influent sample (IN2) was also collected. The samples were collected to comply with the PSVP and QAPP and in accordance with laboratory guidelines. The VOC samples were collected using a summa canister and the SVOC samples were collected in sorbent tubes.

Sampling Frequency Schedule – ISVE System

Startup	Weekly for a four week period
Post-Startup	Monthly in accordance with the IDEM Air Permit Equivalency

Following sample collection, the SVOC, sample containers were maintained at or below 4°C in coolers. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment system to the laboratories for extraction and analysis. In accordance with the approved QAPP, the off-gas samples were analyzed by the following analytical methods:

Parameter	Analytical Method
VOCs	TO-14
SVOCs	TO-13

3.2 SAMPLING RESULTS

The influent and effluent off-gas data are summarized in Tables 3.1 and 3.2 and verify that the off-gas from the thermal oxidizer was less than the IDEM discharge limit of three pounds of VOCs per hour for April, May, and June. For example, the VOC discharge reported from the May 18, 2004 sample was 0.58 pounds per hour, approximately two percent of the discharge limit. The results for April and June were within the same order of magnitude. The analytical data sheets for the compliance samples are provided in Appendix B.

In addition to the off-gas data collected during the second quarter, MWH also collected off-gas samples from the Off-Site ISVE system and the SBPA ISVE system influent lines. This data was collected in order to monitor the performance of these systems and are not needed to conform with compliance requirements. The data from this monitoring is summarized in Tables 3.3 and 3.4.

Air Toxics Laboratories of Folsom, California analyzed the samples. The analytical results are summarized in Tables 3.1 and 3.2. MWH performed data validation in accordance with the QAPP and the National Functional Guidelines for Organic/Inorganic Data Review. Validation qualifiers are listed in Tables 3.1 and 3.2 and are written in the margin of the analytical data sheets provided in Appendix B.

3.3 ISVE SYSTEM MONITORING

Performance monitoring of the ISVE system was conducted in accordance with the PSVP (Montgomery Watson, June 1999). Extracted vapor flow rates and vacuums at individual ISVE wells and headers were collected on a routine basis. Additionally, VOC concentrations were measured at individual wells and headers using a flame/photo ionization detector (FID/PID).

The information collected during performance monitoring is used to evaluate and optimize the ISVE system. Data collected from the Off-Site ISVE system during the second quarter of 2004 is presented in Tables 3.5 and 3.6. Data that was collected from the SBPA ISVE system during the second quarter of 2004 is presented in Tables 3.7 and 3.8.

4.0 GWTP TREATMENT SYSTEM PROCESS MODIFICATIONS

There were no process modifications to the GWTP during the second quarter of 2004.

5.0 ISVE PROCESS MODIFICATIONS

During inspection of Therm Ox 1, a problem was found with the heat exchanger for the unit. On March 1st, Therm Ox 1 was disassembled with a crane in order to further inspect the unit. It was determined that a new heat exchanger was required for the unit. Procurement of the new heat exchanger for Therm Ox 1 began in early June 2004. It is expected to arrive in early August 2004. During the week of June 14th, an epoxy coating was applied to the internal components of the scrubber system. The epoxy will provide a chemical resistant coating for the protection of the scrubber surfaces.

A scope of work for the expansion of the Off-Site Area ISVE system including a new blower package and knockout tank was submitted to the Agencies during the week of May 24th. The order for a new blower for the Off-Site ISVE system expansion was placed on June 4th. The blower unit is expected to arrive at the beginning of August 2004. Construction of the base for the equipment containment structure will be completed in July 2004.

On February 10th and 11th 2004, the SBPA ISVE wells were tested to measure the amount of vapor that could be extracted from each well. The test indicated that several wells had a high resistance to vapor extraction. Therefore, the ISVE wells, the DPE wells, and the air sparge points were jetted and vacuumed on April 1st and 2nd.

During the week of April 26th, the SBPA ISVE system wells began to be proven out for subsurface vapor extraction. The prove-out procedure consisted of applying a vacuum to each well and then recording the vacuum and measuring the differential pressure in each ISVE well. A well was considered proven out if vapor flow occurred in that well for three consecutive readings. Twenty-one wells were successfully proven out using this method.

Five wells could not be proven due to the presence of free product restricting vapor extraction. Free product was pumped from the wells from May 12-24, 2004. Further investigation of the wells indicated that the product was recharging in the wells, indicating that the well screen and filter pack were not permanently damaged or plugged. It is anticipated that these wells may be refitted for routine product removal as part of the SBPA ISVE modifications and that as the product recovery decreases, the wells will be re-evaluated and returned to service as vapor extraction wells as appropriate.

Twenty wells were not proven out. Additional tests, including a compressed air test, applied vacuum test, and an analysis of liquid level response to vacuum, are being performed to evaluate the wells effectiveness for vapor extraction. The test results will be included in a future summary report. Activities are continuing to bring these wells into service.

6.0 PGCS AND BWES GAUGING ACTIVITIES

The PGCS groundwater extraction trenches were operated in "auto" mode during the second quarter of 2004 during operational periods of the GWTP. In "auto" mode, the PGCS extraction wells pump continuously unless there is a low water level in individual extraction wells or a high water level in Aeration Equalization Tank (T-102). This mode is used to control the flowrate through the treatment system while at the same time creating an inward gradient along the PGCS trench. The GWTP also received influent from the On-Site and Off-Site components of the BWES and the SBPA DPE wells as well as MW-10C and 56 during the second quarter of 2004.

In accordance with the PSVP for the Site, a discussion on the effect of the PGCS and BWES on the water table near the Site is presented in each quarterly monitoring report. This section summarizes the groundwater elevations at the site during April, May, and June 2004. Groundwater elevation measurements were collected throughout the Site on June 30, 2004 as part of the groundwater monitoring program. The groundwater elevations and resulting contours outside the barrier wall are listed in Table 6.1 and shown on Figure 6.1.

The barrier wall was constructed to contain a contaminated zone under the Site, and the BWES was installed to extract groundwater from within the barrier wall and dewater the Site for the ISVE system. Eight pairs of piezometers were installed, with one piezometer of each pair on either side of the barrier wall, spaced along the barrier wall alignment. This allows measurement and tracking of water levels in order to document that the barrier wall is serving its designed function.

Table 6.1, BWES Water Level and Piezometer Pairs, presents the groundwater elevations inside and outside the barrier wall on June 30, 2004. They are illustrated on Figure 6.2. The groundwater elevation measurements were generally 3 to 7 feet higher outside the barrier wall. The data demonstrate that the barrier wall is successfully performing the intended function of isolating and protecting the groundwater outside the barrier wall from the source areas of the Site inside the barrier wall. MWH will continue to collect regular water level measurements across the Site as required in the PSVP.

As part of the optimization of the GWTP and BWES upgrades, MWH began active dewatering of the Off-Site Area through increased groundwater pumping rates on September 25, 2001. Active dewatering of the SBPA began on February 11, 2003 with the addition of the DPE wells. To keep track of the dewatering progress inside the barrier wall, water levels were collected from the various piezometers and air sparge (AS) wells on a regular basis, as shown in Table 6.2. Water levels were regularly measured throughout the quarter at seven piezometers in the On-Site Area (P29, P31, P32, P36, P49, P-106, and P-108) and at seven piezometers and three air sparge wells in the Off-Site Area (P96, P110, P112, P113, P114, P116, P118, AS-7, AS-8, and AS-9). The water level data from these piezometers and AS wells are depicted graphically on Figures 6.3 and 6.4, which also reference the target water elevations for each area.

The water levels in both areas are on average with previous quarters. Although there is some variance between water levels at individual points and the target level, the overall result of the dewatering activities is that the ISVE areas are adequately dewatered for the effective implementation of remedial systems.

7.0 SYSTEM OPERATION

The GWTP operated as designed for approximately 90 percent of the second quarter of 2004 (based on days of operation). The system was shutdown when a malfunction in the treatment plant caused the activated sludge unit (ME-101) to overflow (the overflow was entirely contained within the treatment plant secondary containment structure). After shutdown the excess water in ME-101 was pumped into T-102. The GWTP was also shutdown on April 10th due to plugging in the lead granular activated carbon vessel. The vessel was backwashed and the system was brought back online the following day. The system drew influent from the On-Site Area BWES, the Off-Site Area BWES, the PGCS, MW-10C and 56.

On June 7th a leak of acid was observed from the acid polytank inside the GWTP. The leak was contained within the tank's secondary containment structure. Approximately 4,000 gallons of liquid were pumped from the sulfuric acid tank and the secondary containment structure into three temporary storage tanks. Each of the temporary storage tanks also was located inside secondary containment. Approximately 2,500 gallons of the liquid was the acid that had leaked from the tank and the remaining 1,500 gallons was water that was used to clean the effected area. An incident form, supplied by the MWH corporate Health and Safety Officer, was completed by the plant operator. This incident form summarized what had occurred, detailed the corrective actions, and identified the health and safety procedures that would be followed. Proper personal protective equipment (PPE) was worn by the personnel working to cleanup of the sulfuric acid.

The Off-Site Area ISVE system continued to operate as designed for approximately 100 percent of the second quarter of 2004 (based on days of operation). The SBPA ISVE system continued to operate as designed for approximately 55 percent of the second quarter of 2004 (based on days of operation). The system was shut down on April 1st and 2nd while the wells were jetted and vacuumed to remove sediment accumulation in the wells. The system was also down various times throughout the month of May for evaluation of different wells.

8.0 REFERENCE

1. *Performance Standard Verification Plan, ACS NPL Site*, Montgomery Watson, July 1997.

2. *Performance Standard Verification Plan, ACS NPL Site*, Montgomery Watson, June 1999.

3. *Phase I Technical Memorandum Wetland Investigation, ACS NPL Site*, Montgomery Watson, July 1996.

4. *Phase II Technical Memorandum Wetland Investigation, ACS NPL Site*, Montgomery Watson, February 1997.

5. *Quality Assurance Project Plan, ACS NPL Site*, Montgomery Watson Harza, March 2001.

6. *U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers*, United States Environmental Protection Agency, 1992.

ALC/JDP/jmf/PJV/jmf
J:\209\0603 ACS\0301 GWTP\6030301a111.doc
2090603.030101

Tables

MWH

Table 2.1
Groundwater Treatment System Effluent Discharge Limits
American Chemical Service NPL Site
Griffith, Indiana

Groundwater Quality Parameter	Effluent Standard (Limit)
General Water Quality Parameters	
PH	6 - 9 S.U.
BOD-5	30 mg/L
TSS	30 mg/L
Inorganics	
Arsenic	50 µg/L
Beryllium	NE
Cadmium	4.1 µg/L
Manganese	NE
Mercury	0.02 µg/L (w/DL = 0.64)
Selenium	8.2 µg/L
Thallium	NE
Zinc	411 µg/L
Volatile Organics	
Acetone	6,800 µg/L
Benzene	5 µg/L
2-Butanone	210 µg/L
Chloromethane	NE
1,4 – Dichlorobenzene	NE
1,1 – Dichloroethane	NE
1,2 – Dichloroethene – cis	70 µg/L
Ethylbenzene	34 µg/L
Methylene chloride	5 µg/L
Tetrachloroethene	5 µg/L
Trichloroethene	5 µg/L
Vinyl chloride	2 µg/L
4 – Methyl - 2 – pentanone	15 µg/L
Semi-Volatile Organics	
bis(2 – Chloroethyl) ether	9.6 µg/L
bis(2 – Ethylhexyl) phthalate	6 µg/L
Isophorone	50 µg/L
4 – Methylphenol	34 µg/L
Pentachlorophenol	1 µg/L
PCBs	
PCBs	0.00056 µg/L (w/DL = 0.1 to 0.9)

Notes:
NE = No effluent limit established.
DL = Detection limit
S.U. = Standard pH units
µg/L = micrograms per Liter

Table 2.2
Summary of Effluent Analytical Results - Second Quarter 2004
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event Date	Month 83 4/1/2004	Month 84 5/16/2004	Month 85 6/17/2004	Effluent Limits	Lab Reporting Limits
pH	6.99/J	7.08	7.01	6-9	none
TSS	1.10	NS	NS	30	10
BOD	3	NS	NS	30	2
Arsenic	3.5 B	NS	NS	50	3.4
Beryllium	ND	NS	NS	NE	0.2
Cadmium	ND	NS	NS	4.1	0.3
Manganese	38.3 /B	NS	NS	NE	10
Mercury	ND	NS	NS	0.02 (w/DL = 0.64)	0.64
Selenium	ND	NS	NS	8.2	4.3
Thallium	ND	NS	NS	NE	5.7
Zinc	8.1 B/UB	NS	NS	411	1.2
Benzene	ND	ND	ND	5	0.5
Acetone	1.7 JB/ 2.5 UB	ND/UJ	2.8 B/ 3 UBJ	6,800	3
2-Butanone	ND	ND	1.4 J/J	210	3
Chloromethane	ND	0.33 J/	0.16 J/J	NE	0.5
1,4-Dichlorobenzene	ND	ND	ND	NE	0.5
1,1-Dichloroethane	ND	ND	ND	NE	0.5
cis-1,2-Dichloroethene	ND	ND	ND	70	0.5
Ethylbenzene	ND	ND	ND	34	0.5
Methylene chloride	0.15 J/	0.13 J/	0.78 B/UBJ	5	0.6
Tetrachloroethene	ND	ND	ND	5	0.5
Trichloroethene	ND	0.17 JB/ 0.5 UB	ND	5	0.5
Vinyl chloride	ND	ND	ND	2	0.5
4-Methyl-2-pentanone	ND	ND	ND	15	3
bis (2-Chloroethyl) ether	ND	NS	NS	9.6	9.6
bis(2-Ethylhexyl) - phthalate	1.1 J/	NS	NS	6	6
4 - Methylphenol	ND	NS	NS	34	10
Isophorone	ND	NS	NS	50	10
Pentachlorophenol	ND	NS	NS	1	1
PCB/Aroclor-1016	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1221	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.92*
PCB/Aroclor-1232	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1242	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1248	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1254	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1260	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5

Notes:
Bolded result indicates a exceedence of the discharge limit
pH data is expressed in S.U.
Metals, VOC, SVOC and PCB data is expressed in ug/L
DL = Detection limit
ND = Not detected
NS = This analyte was not sampled or analyzed for
NE = No effluent limit established.
* = Approved SW-846 method is incapable of achieving effluent limit.

Suffix Definitions:
_/ = Data qualifier added by laboratory.
/_ = Data qualifier added by data validator.
B = Compound is also detected in the blank.
J = Result is detected below the reporting limit and is an estimated concentration.
UB = Analyte is not detected at or above the indicated concentration due to blank contamination.
UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
UBJ = Analyte is not detected at or above the indicated concentration due to blank contamination, however the calibration was out of range. Therefore the concentration is estimated.

Table 3.1
Summary of Thermal Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Second Quarter 2004
American Chemical Service NPL Site
Griffith, Indiana

		Sampled 4/08/2004											
		Therm-Ox 2		Therm-Ox 2		ThermOx 2		Destruction Efficiency					
Compounds	**Units**	**Influent IN1**		**Influent IN2**		**Effluent EF1**		**High**		**Low**		**Average**	
Method TO-14													
1,1,1-Trichloroethane	ppbv	89,000		78,000		920		98.82%		98.97%		98.89%	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
1,1,2-Trichloroethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
1,1-Dichloroethane	ppbv	6,700		5,900		85		98.56%		98.73%		98.65%	
1,1-Dichloroethene	ppbv	1,300	J/J	1,000	J/J	480		NC		NC		NC	
1,2-Dichloroethane	ppbv	1,200	J/J	1,100	J/J	18		NC		NC		NC	
1,2-Dichloropropane	ppbv	930	J/J	840	J/J	11	J/J	NC		NC		NC	
2-Butanone (Methyl Ethyl Ketone)	ppbv	9,300		8,100		130		98.40%		98.60%		98.50%	
2-Hexanone	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
4-Methyl-2-pentanone	ppbv	4,500	J/J	3,800	J/J	42	J/J	NC		NC		NC	
Acetone	ppbv	12,000		10,000		240		97.60%		98.00%		97.80%	
Benzene	ppbv	50,000		44,000		1,100		97.50%		97.80%		97.65%	
Bromodichloromethane	ppbv	ND	U	ND	U	5.3	J/J	NC		NC		NC	
Bromoform	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Carbon Disulfide	ppbv	1,300	J/J	1,200	J/J	ND	U	NC		NC		NC	
Carbon Tetrachloride	ppbv	ND	U	ND	U	5.1	J/J	NC		NC		NC	
Chlorobenzene	ppbv	ND	U	ND	U	10	J/J	NC		NC		NC	
Chloroethane	ppbv	ND	U	ND	U	11	J/J	NC		NC		NC	
Chloroform	ppbv	3,400		3,100		83		97.32%		97.56%		97.44%	
Chloromethane	ppbv	ND	U	ND	U	78		NC		NC		NC	
cis-1,2-Dichloroethene	ppbv	87,000		76,000		1,200		98.42%		98.62%		98.52%	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	2.4	J/J	NC		NC		NC	
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Ethyl Benzene	ppbv	37,000		34,000		400		98.82%		98.92%		98.87%	
m,p-Xylene	ppbv	140,000		130,000		1,400		98.92%		99.00%		98.96%	
Methylene Chloride	ppbv	20,000		17,000		320		98.12%		98.40%		98.26%	
o-Xylene	ppbv	41,000		38,000		420		98.89%		98.98%		98.94%	
Styrene	ppbv	ND	U	ND	U	140		NC		NC		NC	
Tetrachloroethene	ppbv	60,000		56,000		1,100		98.04%		98.17%		98.10%	
Toluene	ppbv	340,000		310,000		4,400		98.58%		98.71%		98.64%	
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	170		NC		NC		NC	
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Trichloroethene	ppbv	48,000		42,000		780		98.14%		98.38%		98.26%	
Vinyl Chloride	ppbv	1,700		1,300	J/J	67		NC		NC		NC	
Total	**ppbv**	**954,330**		**861,340**		**13,618**		**98.42%**		**98.57%**		**98.50%**	
Total	**lb/hr**	**37.03**		**33.47**		**0.52**		**98.43%**		**98.58%**		**98.51%**	

Table 3.1
Summary of Thermal Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Second Quarter 2004
American Chemical Service NPL Site
Griffith, Indiana

		Sample 5/18/04											
		Therm-Ox 2		Therm-Ox 2		ThermOx 2		Destruction Efficiency					
Compounds	Units	Influent IN1		Influent IN2		Effluent EF1		High		Low		Average	
Method TO-14													
1,1,1-Trichloroethane	ppbv	79,000		74,000		1,100		98.51%		98.61%		98.56%	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
1,1,2-Trichloroethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
1,1-Dichloroethane	ppbv	7300		6,800		120		98.24%		98.36%		98.30%	
1,1-Dichloroethene	ppbv	4,600		1,300	J/J	720		NC		NC		NC	
1,2-Dichloroethane	ppbv	1,100	J/J	1,000	J/J	ND	U	NC		NC		NC	
1,2-Dichloropropane	ppbv	1,200	J/J	980	J/J	20	J/J	NC		NC		NC	
2-Butanone (Methyl Ethyl Ketone)	ppbv	11,000		10,000		220		97.80%		98.00%		97.90%	
2-Hexanone	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
4-Methyl-2-pentanone	ppbv	5,200	J/J	4,600	J/J	78	J/J	NC		NC		NC	
Acetone	ppbv	20,000		18,000		420		97.67%		97.90%		97.78%	
Benzene	ppbv	53,000		48,000		1,500		96.88%		97.17%		97.02%	
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Bromoform	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Carbon Disulfide	ppbv	2,500	J/J	3,000	J/J	ND	U	NC		NC		NC	
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Chlorobenzene	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Chloroethane	ppbv	1,000	J/J	990	J/J	ND	U	NC		NC		NC	
Chloroform	ppbv	3,300		3,200		100		96.88%		96.97%		96.92%	
Chloromethane	ppbv	ND	U	ND	U	100	J/J	NC		NC		NC	
cis-1,2-Dichloroethene	ppbv	46,000		43,000		1,000		97.67%		97.83%		97.75%	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Ethyl Benzene	ppbv	40,000		35,000		700		98.00%		98.25%		98.13%	
m,p-Xylene	ppbv	150,000		130,000		2,400		98.15%		98.40%		98.28%	
Methylene Chloride	ppbv	29,000		27,000		660		97.56%		97.72%		97.64%	
o-Xylene	ppbv	49,000		41,000		820		98.00%		98.33%		98.16%	
Styrene	ppbv	2,000		ND	U	230		NC		NC		NC	
Tetrachloroethene	ppbv	83,000		77,000		2,000		97.40%		97.59%		97.50%	
Toluene	ppbv	340,000		310,000		6,800		97.81%		98.00%		97.90%	
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	160		NC		NC		NC	
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC		NC		NC	
Trichloroethene	ppbv	50,000		46,000		1,200		97.39%		97.60%		97.50%	
Vinyl Chloride	ppbv	1,200	J/J	ND	U	89		NC		NC		NC	
Total	**ppbv**	**979,400**		**880,870**		**20,437**		**97.68%**		**97.91%**		**97.80%**	
Total	**lb/hr**	**28.06**		**25.29**		**0.58**		**97.70%**		**97.93%**		**97.82%**	

Table 3.1
Summary of Thermal Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Second Quarter 2004
American Chemical Service NPL Site
Griffith, Indiana

		Sampled 6/17/2004								
		Therm-Ox 2		Therm-Ox 2		ThermOx 2		Destruction Efficiency		
Compounds	Units	Influent IN1		Influent IN2		Effluent EF1		High	Low	Average
Method TO-14										
1,1,1-Trichloroethane	ppbv	100,000		120,000		1,200		98.80%	99.00%	98.90%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
1,1,2-Trichloroethane	ppbv	ND	U	560	J/J	ND	U	NC	NC	NC
1,1-Dichloroethane	ppbv	8,400		10,000		130		98.45%	98.70%	98.58%
1,1-Dichloroethene	ppbv	660	J/J	700	J/J	570		NC	NC	NC
1,2-Dichloroethane	ppbv	1,800	J/J	1,900	J/J	29	J/J	NC	NC	NC
1,2-Dichloropropane	ppbv	1,700	J/J	1,900	J/J	23	J/J	NC	NC	NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	15,000		17,000		310		97.93%	98.18%	98.05%
2-Hexanone	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
4-Methyl-2-pentanone	ppbv	6,900	J/J	8,700	J/J	95	J/J	NC	NC	NC
Acetone	ppbv	21,000		22,000		550		97.38%	97.50%	97.44%
Benzene	ppbv	57,000		67,000		1,400		97.54%	97.91%	97.73%
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Carbon Disulfide	ppbv	1,400	J/J	1,300	J/J	ND	U	NC	NC	NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	3.7	J	NC	NC	NC
Chlorobenzene	ppbv	ND	U	ND	U	19	J	NC	NC	NC
Chloroethane	ppbv	1,400	J/J	2,000	J/J	37	_/J	NC	NC	NC
Chloroform	ppbv	4,600		5,200		100		97.83%	98.08%	97.95%
Chloromethane	ppbv	ND	U	ND	U	130	J/J	NC	NC	NC
cis-1,2-Dichloroethene	ppbv	62,000		73,000		1,100		98.23%	98.49%	98.36%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Ethyl Benzene	ppbv	65,000		81,000		1,100		98.31%	98.64%	98.47%
m,p-Xylene	ppbv	250,000		320,000		4,000		98.40%	98.75%	98.58%
Methylene Chloride	ppbv	30,000		34,000		560		98.13%	98.35%	98.24%
o-Xylene	ppbv	77,000		99,000		1,300		98.31%	98.69%	98.50%
Styrene	ppbv	ND	U	ND	U	330		NC	NC	NC
Tetrachloroethene	ppbv	130,000		160,000		2,800		97.85%	98.25%	98.05%
Toluene	ppbv	520,000		630,000		8,700		98.33%	98.62%	98.47%
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	120	J/J	NC	NC	NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Trichloroethene	ppbv	79,000		94,000		1,500		98.10%	98.40%	98.25%
Vinyl Chloride	ppbv	1,800	J/J	2,500	J/J	91		NC	NC	NC
Total	**ppbv**	**1,434,660**		**1,751,760**		**26,198**		**98.17%**	**98.50%**	**98.34%**
Total	**lb/hr**	**45.54**		**55.72**		**0.83**		**98.18%**	**98.52%**	**98.35%**

Notes:
_/ = Laboratory data qualifier
/_ = Data validation qualifier
ND = Non-detect
NC = Not calculated
ppbv = parts per billion volume
lb/hr = pounds per hour
Destruction efficiencies were not calculated if the either influent samples or the effluent sample was estimated.
Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.
The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).
4/8/04 VOCs in lb/hr calculated based on Offsite: 1008 scfm 104 °F, Onsite: 1239 scfm 90 °F(3/18/04).
5/18/04 VOCs in lb/hr calcuated based on Offsite: 962 scfm 125 °F; Onsite: 685 scfm 189 °F (5/19/04).
6/17/04 VOCs in lb/hr calculated based on Offsite: 937scfm 135 °F; Onsite: 871 scfm 198 °F (6/15/04).

Qualifiers:
J = Result is estimated
U = below reported quantitation limit

Table 3.2
Summary of Thermal Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Second Quarter 2004
American Chemical Service NPL Site, Griffith, Indiana

		Sampled 4/08/2004								
		Therm-Ox 2		Therm-Ox 2		ThermOx 2		Destruction Efficiency		
Compounds	Units	Influent IN1		Influent IN2		Effluent EF1		Low	High	Average
Method TO-13										
1,2,4-Trichlorobenzene	µg	0.48	J/J	0.75	J/J	ND	U	NC	NC	NC
1,2-Dichlorobenzene	µg	43		49		0.61	J/J	NC	NC	NC
1,3-Dichlorobenzene	µg	1.9		2.1		ND	U	100.00%	100.00%	100.00%
1,4-Dichlorobenzene	µg	6.6		7.7		ND	U	100.00%	100.00%	100.00%
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Methylnaphthalene	µg	9.5		16		ND	U	100.00%	100.00%	100.00%
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Methylphenol	µg	1.2	J/J	1.6	J/J	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	2.8		3.3		ND	U	100.00%	100.00%	100.00%
bis(2-Ethylhexyl)phthalate	µg	0.79	J/J	3.3	J/J	0.66	J/J	NC	NC	NC
Butylbenzylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC	NC	NC
Diethylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dimethylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
di-n-Butylphthalate	µg	1	J/R	0.79	J/R	1.4	J/R	NC	NC	NC
Di-n-Octylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	2.1		2.6		ND	U	100.00%	100.00%	100.00%
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	6.9		8.6		ND	U	100.00%	100.00%	100.00%
Naphthalene	µg	46		64		0.52	J/J	NC	NC	NC
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	3	J/J	3.7	J/J	ND	U	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	**125.3**		**114.44**		**3.19**		**97.21%**	**97.45%**	**97.33%**

Table 3.2
Summary of Thermal Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Second Quarter 2004
American Chemical Service NPL Site, Griffith, Indiana

		Sampled 5/18/2004								
		Therm-Ox 2		Therm-Ox 2		ThermOx 2		Destruction Efficiency		
Compounds	Units	Influent IN1		Influent IN2		Effluent EF1		Low	High	Average
Method TO-13										
1,2,4-Trichlorobenzene	µg	0.46	J/J	0.75	J/J	ND	U	NC	NC	NC
1,2-Dichlorobenzene	µg	41	_/J	58	_/J	ND	U	NC	NC	NC
1,3-Dichlorobenzene	µg	2.7	_/J	4.1	_/J	ND	U	NC	NC	NC
1,4-Dichlorobenzene	µg	8.4	_/J	13	_/J	ND	U	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2-Methylnaphthalene	µg	9.5	_/J	16	_/J	ND	U	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Methylphenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Anthracene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Benzo(a)anthracene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Benzo(a)pyrene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	1.9	_/J	3.1	_/J	ND	U	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	0.82	J/J	0.98	J/J	6.7		NC	NC	NC
Butylbenzylphthalate	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Chrysene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Diethylphthalate	µg	ND	U/R	0.62	J/J	0.58	J	NC	NC	NC
Dimethylphthalate	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
di-n-Butylphthalate	µg	1.1	J/JB	2	J/JB	1.8	J/B	NC	NC	NC
Di-n-Octylphthalate	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Fluorene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	1.8	_/J	3.2	_/J	ND	U	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Isophorone	µg	4.3	_/J	5.5	_/J	ND	U	NC	NC	NC
Naphthalene	µg	34	_/J	52	_/J	ND	U	NC	NC	NC
Nitrobenzene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Phenol	µg	1.7	J/J	3	J/J	ND	U	NC	NC	NC
Pyrene	µg	ND	U/R	ND	U/R	ND	U	NC	NC	NC
Total	µg	**107.7**		**162.25**		**9.08**		**91.57%**	**94.40%**	**92.99%**

Table 3.2
Summary of Thermal Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Second Quarter 2004
American Chemical Service NPL Site, Griffith, Indiana

		Sampled 6/17/2004								
		Therm-Ox 2		Therm-Ox 2		ThermOx 2		Destruction Efficiency		
Compounds	Units	Influent IN1		Influent IN2		Effluent EF1		Low	High	Average
Method TO-13										
1,2,4-Trichlorobenzene	µg	0.46	J/J	1.7	J/J		U	NC	NC	NC
1,2-Dichlorobenzene	µg	36		120		0.53	J/J	NC	NC	NC
1,3-Dichlorobenzene	µg	2.1		6.9		ND	U	100.00%	100.00%	100.00%
1,4-Dichlorobenzene	µg	6.4		22		ND	U	100.00%	100.00%	100.00%
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Methylnaphthalene	µg	6.1		25		ND	U	100.00%	100.00%	100.00%
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Methylphenol	µg	2	J/J	7.2	J/J	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	2.3	J/J	8.6	J/J	1.7	J/J	NC	NC	NC
Butylbenzylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC	NC	NC
Diethylphthalate	µg	ND	U	ND	U	0.62	J/J	NC	NC	NC
Dimethylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
di-n-Butylphthalate	µg	1	J/B	0.89	J/B	1.1	J/B	NC	NC	NC
Di-n-Octylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	1.3		4.5		ND	U	100.00%	100.00%	100.00%
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	5.4		16		ND	U	100.00%	100.00%	100.00%
Naphthalene	µg	26		94		0.27	J/J	NC	NC	NC
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	**89.06**		**306.79**		**4.22**		**95.26%**	**98.62%**	**96.94%**

Table 3.2
Summary of Thermal Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - First Quarter 2004
American Chemical Service NPL Site, Griffith, Indiana

Notes:
_/ = Laboratory data qualifier
/_ = Data validation qualifier
ND = Non-detect
NC = Not calculated
µg = micrograms
The total concentration was calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).
Destruction efficiencies were not calculated if the either influent samples or the effluent sample was estimated.
Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Qualifiers:
J = Result is estimated
U = Below reported quantitation limit
B = The compound was detected in an associated blank
R = Quality control indicates the data is not usable
JB = Analyte is detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

Table 3.3
Summary of In-Situ Vapor Extraction (ISVE) System Influent Monitoring Data for VOCs (Method TO-14) – Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

		Sampled 4/08/2004				Sampled 5/18/2004				Sampled 6/17/2004			
		Off-Site ISVE System		On-Site ISVE System		Off-Site ISVE System		On-Site ISVE System		Off-Site ISVE System		On-Site ISVE System	
Compounds	**Units**	**Influent IN1**		**Influent IN1**		**Influent IN1**		**Influent IN1**		**Influent IN1**		**Influent IN1**	
Method TO-14													
1,1,1-Trichloroethane	ppbv	58,000		130,000		52,000		82,000		73,000		180,000	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	210	J/J	ND	U	ND	U	ND	U	390	J/J	ND	U
1,1-Dichloroethane	ppbv	6,300		7,800		6,500		6,700		9,000		12,000	
1,1-Dichloroethene	ppbv	410	J/J	2,000		4,300		5,100		360	J/J	2,200	J/J
1,2-Dichloroethane	ppbv	1,900		730	J/J	1,700		ND	U	2,500		1,600	J/J
1,2-Dichloropropane	ppbv	650	J/J	1,200	J/J	650	J/J	ND	U	900	J/J	3,600	J/J
2-Butanone (Methyl Ethyl Ketone)	ppbv	20,000		3,100	J/J	22,000		ND	U	33,000		3,900	J/J
2-Hexanone	ppbv	ND	U	ND	U	ND	U	ND	U	670	J/J	ND	U
4-Methyl-2-pentanone	ppbv	9,800		1,400	J/J	9,900		1,100	J/J	15,000		3,000	J/J
Acetone	ppbv	26,000		2,000	J/J	36,000		8,500		42,000		6,200	J/J
Benzene	ppbv	36,000		59,000		37,000		62,000		48,000		95,000	
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Bromoform	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Carbon Disulfide	ppbv	880	J/J	1,200	J/J	3,100	J/J	2,600	J/J	2,600	J/J	1,900	J/J
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Chlorobenzene	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	1,000	J/J
Chloroethane	ppbv	ND	U	ND	U	ND	U	940	J/J	ND	U	ND	U
Chloroform	ppbv	3,200		4,000		3,000		3,000		4,200		7,200	
Chloromethane	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
cis-1,2-Dichloroethene	ppbv	8,800		150,000		6,000		63,000		9,500		140,000	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Ethyl Benzene	ppbv	22,000		42,000		20,000		37,000		30,000		160,000	
m,p-Xylene	ppbv	94,000		150,000		83,000		130,000		130,000		630,000	
Methylene Chloride	ppbv	38,000		8,300		47,000		14,000		48,000		24,000	
o-Xylene	ppbv	31,000		40,000		29,000		42,000		43,000		190,000	
Styrene	ppbv	ND	U	ND	U	1,700		ND	U	ND	U	ND	U
Tetrachloroethene	ppbv	43,000		66,000		37,000		88,000		55,000		310,000	
Toluene	ppbv	200,000		440,000		180,000		350,000		280,000		1,200,000	
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Trichloroethene	ppbv	33,000		59,000		29,000		50,000		45,000		170,000	
Vinyl Chloride	ppbv	ND	U	2,600		ND	U	1,700		ND	U	2,800	J/J
Total	**ppbv**	**633,150**		**1,170,330**		**608,850**		**947,640**		**872,120**		**3,144,400**	
Total	**lb/hr**	**13.36**		**23.23**		**9.77**		**12.27**		**15.97**		**37.18**	

Notes:

_/ = Laboratory data qualifier
/_ = Data validation qualifier
ND = Non-detect
ppbv = parts per billion volume
lb/hr = pounds per hour
J = Result is estimated
U = below reported quantitation limit

4/8/04 VOCs in lb/hr calculated based on Offsite: 1008 scfm 104 °F, Onsite: 1239 scfm 90 °F(3/18/04).
5/18/04 VOCs in lb/hr calcuated based on Offsite: 962 scfm 125 °F; Onsite: 685 scfm 189 °F (5/19/04).
6/17/04 VOCs in lb/hr calculated based on Offsite: 937 scfm 135 °F; Onsite: 871 scfm 198 °F (6/15/04).

ALC/jm/JDP
J:\209\0603 ACS\0301 GWTP\6030301a123 xls\TO-14 b

Table 3.4
Summary of In-Situ Vapor Extraction (ISVE) System Influent Monitoring Data
for SVOCs (Method TO-13) – Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

		4/8/2004				Sampled 5/18/2004			
		Off-Site ISVE System		On-Site ISVE System		Off-Site ISVE System		On-Site ISVE System	
Compounds	Units	Influent IN1		Influent IN1		Influent IN1		Influent IN1	
Method TO-13									
1,2,4-Trichlorobenzene	µg	0.95	J/J	ND	U	1.2	_/J	ND	U/R
1,2-Dichlorobenzene	µg	55		15		47	_/J	66	_/J
1,3-Dichlorobenzene	µg	2.4		0.99	J/J	2.6	_/J	6.3	_/J
1,4-Dichlorobenzene	µg	7.7		2.8		8.0	_/J	17	_/J
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U/R	ND	U/R
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U/R	ND	U/R
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U/R	ND	U/R
2-Chlorophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
2-Methylnaphthalene	µg	6.1		2.8		7.2	_/J	11	_/J
2-Methylphenol (o-Cresol)	µg	1.2	J/J	ND	U	ND	U/R	ND	U/R
2-Nitroaniline	µg	ND	U	ND	U	ND	U/R	ND	U/R
2-Nitrophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U/R	ND	U/R
3-Nitroaniline	µg	ND	U	ND	U	ND	U/R	ND	U/R
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U/R	ND	U/R
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
4-Chloroaniline	µg	ND	U	ND	U	ND	U/R	ND	U/R
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U/R	ND	U/R
4-Methylphenol	µg	2.8	J/J	ND	U	1.7	J/J	ND	U/R
4-Nitroaniline	µg	ND	U	ND	U	ND	U/R	ND	U/R
4-Nitrophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
Acenaphthene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Acenaphthylene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Anthracene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Benzo(a)anthracene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Benzo(a)pyrene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Benzo(b)fluoranthene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Benzo(g,h,i)perylene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Benzo(k)fluoranthene	µg	ND	U	ND	U	ND	U/R	ND	U/R
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U	ND	U/R	ND	U/R
bis(2-Chloroethyl) Ether	µg	3.2		ND	U	3.1	_/J	ND	U/R
bis(2-Ethylhexyl)phthalate	µg	1.4	J/J	0.96	J/J	1.4	J/J	ND	U/R
Butylbenzylphthalate	µg	ND	U	ND	U	ND	U/R	ND	U/R
Chrysene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Dibenz(a,h)anthracene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Dibenzofuran	µg	ND	U	ND	U	ND	U/R	ND	U/R
Diethylphthalate	µg	ND	U	ND	U	ND	U/R	ND	U/R
Dimethylphthalate	µg	ND	U	ND	U	ND	U/R	ND	U/R
di-n-Butylphthalate	µg	0.58	J/R	0.67	J/R	1.4	J/JB	1.1	J/B
Di-n-Octylphthalate	µg	ND	U	ND	U	ND	U/R	ND	U/R
Fluoranthene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Fluorene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Hexachlorobenzene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Hexachlorobutadiene	µg	2.2		0.63	J/J	2.6	_/J	1.5	_/J
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Hexachloroethane	µg	ND	U	ND	U	ND	U/R	ND	U/R
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Isophorone	µg	12		0.96	J/J	9.3	_/J	ND	U/R
Naphthalene	µg	33		12		38	_/J	29	_/J
Nitrobenzene	µg	ND	U	ND	U	ND	U/R	ND	U/R
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U	ND	U/R	ND	U/R
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U/R	ND	U/R
Pentachlorophenol	µg	ND	U	ND	U	ND	U/R	ND	U/R
Phenanthrene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Phenol	µg	5		0.9	J/J	4	J/J	2.9	J/J
Pyrene	µg	ND	U	ND	U	ND	U/R	ND	U/R
Total	µg	**133.5**		**37.7**		**127.5**		**134.8**	

Table 3.4
Summary of In-Situ Vapor Extraction (ISVE) System Influent Monitoring Data
for SVOCs (Method TO-13) – Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

		Sampled 6/17/2004			
		Off-Site ISVE System		On-Site ISVE System	
Compounds	**Units**	**Influent IN1**		**Influent IN1**	
Method TO-13					
1,2,4-Trichlorobenzene	µg	2.6		ND	U/R
1,2-Dichlorobenzene	µg	89		66	_/J
1,3-Dichlorobenzene	µg	3.8		6.6	_/J
1,4-Dichlorobenzene	µg	14		17	_/J
2,4,5-Trichlorophenol	µg	ND	U	ND	U/R
2,4,6-Trichlorophenol	µg	ND	U	ND	U/R
2,4-Dichlorophenol	µg	ND	U	ND	U/R
2,4-Dimethylphenol	µg	3.6	J/J	ND	U/R
2,4-Dinitrophenol	µg	ND	U	ND	U/R
2,4-Dinitrotoluene	µg	ND	U	ND	U/R
2,6-Dinitrotoluene	µg	ND	U	ND	U/R
2-Chloronaphthalene	µg	ND	U	ND	U/R
2-Chlorophenol	µg	ND	U	ND	U/R
2-Methylnaphthalene	µg	15		11	_/J
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U/R
2-Nitroaniline	µg	ND	U	ND	U/R
2-Nitrophenol	µg	ND	U	ND	U/R
3,3'-Dichlorobenzidine	µg	ND	U	ND	U/R
3-Nitroaniline	µg	ND	U	ND	U/R
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U/R
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U/R
4-Chloro-3-methylphenol	µg	ND	U	ND	U/R
4-Chloroaniline	µg	ND	U	ND	U/R
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U/R
4-Methylphenol	µg	8.8		ND	U/R
4-Nitroaniline	µg	ND	U	ND	U/R
4-Nitrophenol	µg	ND	U	ND	U/R
Acenaphthene	µg	ND	U	ND	U/R
Acenaphthylene	µg	ND	U	ND	U/R
Anthracene	µg	ND	U	ND	U/R
Benzo(a)anthracene	µg	ND	U	ND	U/R
Benzo(a)pyrene	µg	ND	U	ND	U/R
Benzo(b)fluoranthene	µg	ND	U	ND	U/R
Benzo(g,h,i)perylene	µg	ND	U	ND	U/R
Benzo(k)fluoranthene	µg	ND	U	ND	U/R
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U/R
bis(2-Chloroethyl) Ether	µg	ND	U	ND	U/R
bis(2-Ethylhexyl)phthalate	µg	2	J/J	ND	U/R
Butylbenzylphthalate	µg	ND	U	ND	U/R
Chrysene	µg	ND	U	ND	U/R
Dibenz(a,h)anthracene	µg	ND	U	ND	U/R
Dibenzofuran	µg	ND	U	ND	U/R
Diethylphthalate	µg	ND	U	0.7	_/J
Dimethylphthalate	µg	ND	U	ND	U/R
di-n-Butylphthalate	µg	0.89	J/B	1.1	J/JB
Di-n-Octylphthalate	µg	ND	U	ND	U/R
Fluoranthene	µg	ND	U	ND	U/R
Fluorene	µg	ND	U	ND	U/R
Hexachlorobenzene	µg	ND	U	ND	U/R
Hexachlorobutadiene	µg	5.1		1.6	_/J
Hexachlorocyclopentadiene	µg	ND	U	ND	U/R
Hexachloroethane	µg	ND	U	ND	U/R
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U/R
Isophorone	µg	21		ND	U/R
Naphthalene	µg	75		31	_/J
Nitrobenzene	µg	ND	U	ND	U/R
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U/R
N-Nitrosodiphenylamine	µg	ND	U	ND	U/R
Pentachlorophenol	µg	ND	U	ND	U/R
Phenanthrene	µg	ND	U	ND	U/R
Phenol	µg	ND	U	ND	U/R
Pyrene	µg	ND	U	ND	U/R
Total	µg	**240.8**		**135.0**	

Notes:
_/ = Laboratory data qualifier
/_ = Data validation qualifier
ND = Non-detect
µg = micrograms

Qualifiers:
J = Result is estimated
U = below reported quantitation limit
R = Quality control indicates the data is not usable
JB = Analyte is detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

Table 3.5
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac (" H_2O)	VOCs (ppm)	Comments
SVE-03	5/19/2004	0	56	-	Liquid in pipe.
	6/15/2004	0	50	180	
SVE-04	5/19/2004	104	64	-	Liquid in pipe.
	6/15/2004	0	46	120	
SVE-05	5/19/2004	0	54	-	Liquid in pipe.
	6/15/2004	39	48	150	
SVE-11	5/19/2004	-	-	-	
	6/15/2004	-	42	85	
SVE-13	5/19/2004	0	40	-	
	6/15/2004	68	40	62	
SVE-16	5/19/2004	92	42	-	
	6/15/2004	83	40	800	
SVE-20	5/19/2004	27	58	-	
	6/15/2004	66	58	95	
SVE-23	5/19/2004	124	40	-	
	6/15/2004	78	40	1800	
SVE-25	5/19/2004	122	52	-	
	6/15/2004	138	45	1180	
SVE-26	5/19/2004	-	48	-	Liquid in pipe.
	6/15/2004	-	46	200	
SVE-29	5/19/2004	-	48	-	Liquid in pipe.
	6/15/2004	-	42	480	
SVE-38	5/19/2004	0	54	-	
	6/15/2004	61	46	2035	
SVE-39	5/19/2004	110	44	-	
	6/15/2004	92	40	370	
SVE-41	5/19/2004	0	54	-	
	6/15/2004	0	42	891	

Notes:
"-" = data not collected
cfm = cubic feet per minute
" H_2O = inches of water
ppm = parts per million
VOCs = volatile organic compounds
There was a photoionization detector (PID) malfunction on 5/19/04. Therefore no VOC readings were collected on this date.

Table 3.6
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Date	KP1 Line Pressure (psia)	KP1 Flow (cfm)	KP1 Vacuum ("H_2O)	KP2 Line Pressure (psia)	KP2 Flow (cfm)	KP2 Vacuum ("H_2O)	OFCA1 Vacuum ("H_2O)	OFCA2 Vacuum ("H_2O)	OFCA3 Vacuum ("H_2O)	Dilution Flow (cfm)	Blower Influent Line Pressure (psia)	Blower Influent Flow (cfm)	Blower Influent Vacuum ("H2O)
5/19/2004	13.0	-	51	13.0	-	49	49	39	47	0	12.8	515	55
6/15/2004	13.0	-	50	13.2	0	44	46	38	45	0	13.1	1086	46

Table 3.6
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Date	Blower Influent VOC (ppm)	Blower Influent Temperature (°F)	Blower Effluent Line Pressure (psia)	Blower Effluent Flow (cfm)	Blower Effluent Pressure ("H_2O)	Blower Effluent VOC (ppm)	Blower Effluent Temperature (°F)	Filter Differential Pressure ("H_2O)	Ambient Temperature (°F)	Barometric Pressure ("Hg)	Humidity (%)
5/19/2004	-	63	15.6	962	23.0	-	125	23.0	70	30.11	73%
6/15/2004	-	70	16.1	937	36.0	-	135	6.0	70	30.08	78%

Notes:

"-" = data not collected
cfm = cubic feet per minute
"H_2O = inches of water
ppm = parts per million
VOCs = volatile organic compounds
psia = pounds per square inch, atmosphere
" Hg = inches of Mercury
° F = Degrees Fahrenheit

Table 3.7
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vacuum ("H_2O)	VOCs (ppm)	Comments
SVE-43	4/6/2004	13	12	-	
	4/7/2004	65	76	-	
	4/13/2004	18	52	-	
	4/14/2004	18	52	265	
	4/15/2004	18	48	57	
	4/21/2004	0	58	204	
	4/22/2004	23	84	-	
	4/23/2004	13	80	-	
	4/26/2004	35	90	-	
	4/27/2004	41	92	-	
	4/28/2004	45	100	-	Vacuum reading actually >100".
	4/29/2004	41	100	-	Vacuum reading actually >100".
SVE-44	4/6/2004	0	12	-	
	4/7/2004	0	48	-	No reaction when valve closed.
	5/11/2004	16	100	-	Vacuum reading actually >100".
	5/12/2004	16	100	-	Vacuum reading actually >100".
	5/13/2004	16	100	-	Vacuum reading actually >100".
	5/19/2004	16	100	-	Vacuum reading actually >100".
	6/15/2004	16	100	175	Vacuum reading actually >100".
SVE-45	4/6/2004	18	12	-	
	4/7/2004	81	60	-	
	4/13/2004	55	52	-	
	4/14/2004	55	52	727	
	4/15/2004	55	48	568	
	4/21/2004	50	58	498	
	4/23/2004	66	80	-	
	4/26/2004	-	-	-	Liquid in pipe
	5/11/2004	44	18	-	
	5/12/2004	52	32	-	
	5/13/2004	52	34	-	
SVE-46	4/6/2004	13	12	-	
	4/7/2004	83	80	-	
	4/13/2004	21	52	-	
	4/14/2004	21	52	2860	
	4/15/2004	17	48	1354	
	4/21/2004	0	58	2645	
	4/22/2004	20	84	-	
	4/23/2004	26	80	-	
	4/26/2004	-	-	-	Liquid in pipe.
	4/28/2004	-	-	-	Liquid in pipe.
	5/11/2004	25	100	-	Vacuum reading actually >100".
	5/12/2004	16	100	-	Vacuum reading actually >100".
	5/13/2004	36	100	-	Vacuum reading actually >100".
	5/19/2004	16	100	-	Vacuum reading actually >100".
	6/15/2004	30	100	875	Vacuum reading actually >100".
SVE-47	4/6/2004	13	12	-	
	4/7/2004	45	80	-	
	4/13/2004	35	52	-	
	4/14/2004	36	52	2301	
	4/15/2004	35	48	1531	
	4/21/2004	30	58	1243	
	4/29/2004	39	58	-	
SVE-48	4/6/2004	13	12	-	
	4/7/2004	42	78	-	
	4/13/2004	22	52	-	
	4/14/2004	18	52	3800	
	4/15/2004	17	48	3419	
	4/21/2004	21	58	2150	
	4/22/2004	28	84	-	
	4/23/2004	29	80	-	
	4/26/2004	-	-	-	Liquid in pipe.
	4/28/2004	-	-	-	Liquid in pipe.
	5/11/2004	43	40	-	
	5/12/2004	57	32	-	
	5/13/2004	54	54	-	

Table 3.7
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vacuum ("H_2O)	VOCs (ppm)	Comments
SVE-49	4/6/2004	13	12	-	
	4/7/2004	16	88	-	
	4/29/2004	16	100	-	Vacuum reading actually >100".
	5/11/2004	16	100	-	Vacuum reading actually >100".
	5/12/2004	20	100	-	Vacuum reading actually >100".
	5/13/2004	20	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100".
	6/15/2004	11	100	1070	Vacuum reading actually >100".
SVE-50	4/6/2004	0	12	-	
	4/7/2004	29	80	-	
	4/13/2004	17	52	-	
	4/14/2004	17	52	842	
	4/15/2004	17	48	368	
	4/21/2004	0	58	647	
	4/22/2004	16	84	-	
	4/23/2004	17	80	-	
	4/26/2004	20	90	-	
	4/27/2004	23	92	-	
	4/28/2004	20	100	-	Vacuum reading actually >100".
	4/29/2004	20	100	-	Vacuum reading actually >100".
SVE-51	4/7/2004	12	60	-	Vacuum reading actually >100".
	5/11/2004	0	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100"
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100"
	6/15/2004	11	100	575	Vacuum reading actually >100".
SVE-52	4/7/2004	13	25	-	No reaction when valve closed.
SVE-53	4/7/2004	12	35	-	No reaction when valve closed.
SVE-54	4/7/2004	12	55	-	No reaction when valve closed.
SVE-55	4/6/2004	44	14	-	Liquid at 30", but not at 14".
	4/7/2004	53	14	-	
	4/29/2004	40	22	-	
	5/11/2004	48	16	-	
	5/12/2004	71	22	-	
	5/13/2004	70	22	-	
SVE-56	4/6/2004	31	14	-	
	4/7/2004	121	60	-	
	4/21/2004	100	58	2882	Observed liquid
	4/22/2004	40	24	-	
	4/23/2004	158	78	-	
	4/26/2004	171	88	-	
	4/27/2004	163	88	-	
	4/28/2004	63	28	-	
	4/29/2004	44	23	-	
SVE-57	4/6/2004	44	15	-	Water at 15" - closed
	4/7/2004	44	15	-	Liquid observed
	4/29/2004	40	20	-	
	5/11/2004	50	12	-	
	5/12/2004	74	22	-	
	5/13/2004	71	22	-	
SVE-58	4/6/2004	0	15	-	
	4/7/2004	31	82	-	
	4/13/2004	12	54	-	
	4/14/2004	12	54	680	
	4/15/2004	12	48	468	
	4/21/2004	12	66	628	
	4/22/2004	11	92	-	
	4/23/2004	28	86	-	
	4/26/2004	26	96	-	
	4/27/2004	25	98	-	
	4/28/2004	30	100	-	Vacuum reading actually >100".
	4/29/2004	30	100	-	Vacuum reading actually >100".

Table 3.7
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vacuum ("H_2O)	VOCs (ppm)	Comments
SVE-59	4/7/2004	12	60	-	No reaction when valve closed.
SVE-60	4/6/2004	13	15	-	
	4/7/2004	17	80	-	No reaction when valve closed.
	4/13/2004	17	54	-	
	4/14/2004	17	54	1037	
	4/15/2004	17	48	799	
	4/21/2004	0	66	929	
	4/22/2004	16	92	-	
	4/23/2004	0	86	-	
	4/26/2004	0	96	-	
	4/27/2004	11	98	-	
	4/28/2004	0	100	-	Vacuum reading actually >100".
	4/29/2004	0	100	-	Vacuum reading actually >100".
	5/11/2004	0	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100".
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100".
SVE-61	4/7/2004	161	63	-	
	4/13/2004	12	52	-	
	4/14/2004	12	52	1548	
	4/15/2004	12	48	2117	
	4/21/2004	0	58	1376	
	4/22/2004	23	87	-	
	4/23/2004	8	80	-	
	4/26/2004	0	90	-	
	4/27/2004	16	98	-	
	4/28/2004	11	100	-	Vacuum reading actually >100".
	4/29/2004	0	100	-	Vacuum reading actually >100".
	5/11/2004	0	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100"
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	-	-	-	Vacuum reading actually >100".
SVE-62	4/7/2004	18	40	-	No reaction when valve closed.
SVE-63	4/7/2004	32	62	-	
	4/13/2004	27	52	-	
	4/14/2004	27	52	3138	
	4/15/2004	27	48	1803	
	4/21/2004	21	58	2021	
	4/22/2004	26	88	-	
	4/23/2004	33	80	-	
	4/26/2004	40	90	-	
	4/27/2004	39	98	-	
	4/28/2004	47	100	-	Vacuum reading actually >100".
	4/29/2004	40	90	-	
SVE-64	4/7/2004	34	60	-	
	4/13/2004	24	52	-	
	4/14/2004	24	52	2944	
	4/15/2004	25	48	2644	
	4/21/2004	27	58	1981	
	4/22/2004	33	90	-	
	4/23/2004	31	80	-	
	4/26/2004	35	90	-	
	4/27/2004	30	96	-	
	4/28/2004	38	100	-	Vacuum reading actually >100".
	4/29/2004	39	100	-	Vacuum reading actually >100".
	6/15/2004	56	100	1240	Vacuum reading actually >100".
SVE-65	4/7/2004	17	60	-	No reaction when valve closed.
SVE-66	4/7/2004	22	30	-	
	4/29/2004	23	100	-	Vacuum reading actually >100".
	5/11/2004	25	100	-	Vacuum reading actually >100".
	5/12/2004	23	100	-	Vacuum reading actually >100".
	5/13/2004	20	100	-	Vacuum reading actually >100".
	5/19/2004	16	100	-	Vacuum reading actually >100". Leak in header here.
	6/15/2004	23	100	2540	Vacuum reading actually >100".

Table 3.7
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vacuum ("H_2O)	VOCs (ppm)	Comments
SVE-67	4/6/2004	13	13	-	
	4/7/2004	32	60	-	
	4/13/2004	39	52	-	
	4/14/2004	39	52	5038	
	4/15/2004	39	48	5371	
	4/21/2004	36	58	3324	
	4/29/2004	40	60	-	
SVE-68	4/7/2004	112	56	-	
	4/13/2004	122	50	-	
	4/14/2004	122	50	4366	
	4/15/2004	123	48	5554	
	4/21/2004	132	58	3334	
	4/28/2004	44	28	-	
	4/29/2004	40	18	-	
SVE-69	4/6/2004	18	13	-	
	4/7/2004	70	60	-	
	4/13/2004	113	50	-	
	4/14/2004	109	50	3795	
	4/15/2004	110	48	2769	
	4/21/2004	121	58	1985	
	4/29/2004	43	44	-	
SVE-70	4/7/2004	30	59	-	
	4/21/2004	27	66	260	
	4/22/2004	32	92	-	
	4/23/2004	28	86	-	
	4/26/2004	26	96	-	
	4/27/2004	25	98	-	
	4/28/2004	-	-	-	Active but no reading taken.
	4/29/2004	25	100	-	Vacuum reading actually >100".
SVE-71	4/6/2004	0	15	-	
	4/7/2004	17	80	-	No reaction when valve closed.
	4/13/2004	12	54	-	
	4/14/2004	12	54	2625	
	4/15/2004	12	48	2438	
	4/21/2004	0	66	1748	
	4/22/2004	8	92	-	
	4/23/2004	8	86	-	
	4/26/2004	0	96	-	
	4/27/2004	0	98	-	
	4/28/2004	-	100	-	Vacuum reading actually >100".
	4/29/2004	0	100	-	Vacuum reading actually >100".
	5/11/2004	0	100	-	Vacuum reading actually >100"
	5/12/2004	0	100	-	Vacuum reading actually >100".
	5/13/2004	16	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100".
SVE-72	4/7/2004	18	25	-	No reaction when valve closed.
	6/15/2004	11	100	1850	Vacuum reading actually >100".
SVE-73	4/7/2004	24	63	-	
	4/21/2004	12	66	2056	
	4/22/2004	11	92	-	
	4/23/2004	8	86	-	
	4/26/2004	0	98	-	
	4/27/2004	11	98	-	
	4/28/2004	-	-	-	No vacuum reading.
	4/29/2004	0	100	-	Vacuum reading actually >100".
	5/11/2004	25	100	-	Vacuum reading actually >100".
	5/12/2004	20	100	-	Vacuum reading actually >100".
	5/13/2004	16	100	-	Vacuum reading actually >100". Moisture.
	5/19/2004	-	100	-	Vacuum reading actually >100". Moisture.

Table 3.7
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vacuum ("H_2O)	VOCs (ppm)	Comments
SVE-74	4/7/2004	42	63	-	
	4/13/2004	21	54	-	
	4/14/2004	21	54	4295	
	4/15/2004	17	48	4045	
	4/21/2004	17	65	2676	
	4/22/2004	24	92	-	
	4/23/2004	23	85	-	
	4/26/2004	23	96	-	
	4/27/2004	25	98	-	
	4/28/2004	-	100	-	Vacuum reading actually >100".
	4/29/2004	25	100	-	Vacuum reading actually >100".
SVE-75	4/6/2004	51	14	-	
	4/7/2004	166	80	-	
	4/21/2004	111	42	3134	Observed liquid
	4/22/2004	-	-	-	Active but no reading taken.
	4/23/2004	139	52	-	
	4/26/2004	148	58	-	
	4/27/2004	143	56	-	
	4/28/2004	69	23	-	
	4/29/2004	40	18	-	
SVE-76	4/6/2004	50	13	-	
	4/7/2004	188	70	-	
	4/21/2004	153	58	3285	Observed liquid
	4/22/2004	208	84	-	
	4/23/2004	213	78	-	
	4/26/2004	231	88	-	
	4/27/2004	237	88	-	
	4/28/2004	70	20	-	
	4/29/2004	75	22	-	
SVE-77	4/6/2004	46	13	-	Liquid at 22"
	4/7/2004	157	14	-	Liquid at 60"
SVE-78	4/6/2004	29	13	-	
	4/7/2004	111	40	-	Liquid observed
	5/11/2004	48	20	-	
	5/12/2004	48	20	-	
	5/13/2004	48	18	-	
SVE-79	4/7/2004	17	58	-	No reaction when valve closed.
SVE-80	4/6/2004	0	15	-	
	4/7/2004	20	80	-	Little reaction when valve closed.
	5/11/2004	16	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100".
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100".
	6/15/2004	16	100	1390	Vacuum reading actually >100".
SVE-81	4/6/2004	0	15	-	
	4/7/2004	17	80	-	No reaction when valve closed.
	5/11/2004	0	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100".
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	11	100	-	Vacuum reading actually >100".
SVE-82	4/6/2004	0	15	-	
	4/7/2004	20	80	-	Little reaction when valve closed.
	5/11/2004	0	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100".
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100".
	6/15/2004	11	100	1900	Vacuum reading actually >100".
SVE-83	4/7/2004	27	59	-	
	4/13/2004	17	54	-	
	4/14/2004	17	54	4335	
	4/15/2004	17	48	4305	
	4/21/2004	12	66	2828	
	4/22/2004	11	92	-	
	4/23/2004	8	86	-	
	4/26/2004	0	96	-	
	4/27/2004	16	98	-	
	4/28/2004	11	100	-	Vacuum reading actually >100".

Table 3.7
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vacuum ("H_2O)	VOCs (ppm)	Comments
SVE-83 (Continued)	4/29/2004	0	100	-	Vacuum reading actually >100".
	5/11/2004	25	100	-	Vacuum reading actually >100".
	5/12/2004	16	100	-	Vacuum reading actually >100". Moisture.
	5/13/2004	16	100	-	Vacuum reading actually >100". Moisture.
	5/19/2004	-	100	-	Vacuum reading actually >100". Moisture.
	6/15/2004	25	100	2300	Vacuum reading actually >100".
SVE-84	4/7/2004	32	50	-	
	4/13/2004	17	53	-	
	4/14/2004	12	53	2115	
	4/15/2004	12	48	2601	
	4/21/2004	12	66	1641	
	4/22/2004	11	92	-	
	4/23/2004	20	86	-	
	4/26/2004	23	96	-	
	4/27/2004	25	98	-	
	4/28/2004	16	100	-	Vacuum reading actually >100".
	4/29/2004	11	100	-	Vacuum reading actually >100".
	5/11/2004	20	100	-	Vacuum reading actually >100".
	5/12/2004	28	100	-	Vacuum reading actually >100".
	5/13/2004	28	100	-	Vacuum reading actually >100".
	5/19/2004	11	100	-	Vacuum reading actually >100".
SVE-85	4/7/2004	42	60	-	
	4/13/2004	24	53	-	
	4/14/2004	24	53	5195	
	4/15/2004	25	48	5123	
	4/21/2004	24	66	3200	
	4/22/2004	30	92	-	
	4/23/2004	28	86	-	
	4/26/2004	30	96	-	
	4/27/2004	30	98	-	
	4/28/2004	36	100	-	Vacuum reading actually >100".
	4/29/2004	36	100	-	Vacuum reading actually >100".
SVE-86	4/7/2004	32	52	-	
	4/21/2004	24	66	2786	
	4/22/2004	24	92	-	
	4/23/2004	26	85	-	
	4/26/2004	16	96	-	
	4/27/2004	20	98	-	
	4/28/2004	20	100	-	Vacuum reading actually >100".
	4/29/2004	20	100	-	Vacuum reading actually >100".
SVE-87	4/6/2004	31	14	-	
	4/7/2004	121	60	-	Observed liquid
	5/11/2004	57	24	-	
	5/12/2004	81	34	-	
	5/13/2004	80	36	-	
SVE-88	4/7/2004	55	40	-	
	5/11/2004	0	100	-	Vacuum reading actually >100".
	5/12/2004	0	100	-	Vacuum reading actually >100".
	5/13/2004	0	100	-	Vacuum reading actually >100".
	5/19/2004	0	100	-	Vacuum reading actually >100".
	6/15/2004	11	100	55000	Vacuum reading actually >100".

Notes:
"-" = data not collected
cfm = cubic feet per minute
" H20 = inches of water
ppm = parts per million
VOCs = Volatile Organic Compounds
There was a photoionization detector (PID) malfunction on 5/29/04.
Therefore no VOC readings were collected on this date.

Table 3.8
SBPA In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Date	North Header			South Header			Dilution Flow (cfm)	Blower Influent Line Pressure (psia)	Blower Influent Flow (cfm)	Blower Influent Vacuum ("H2O)	Blower Influent VOC (ppm)
	Line Pressure (psia)	Flow (cfm)	Vacuum ("H_2O)	Line Pressure (psia)	Flow (cfm)	Vacuum ("H_2O)					
5/19/2004	11.2	513	100	11.2	162	100	0	11.2	585	100	-
6/15/2004	11.2	585	100	11.2	162	100	0	11.2	649	100	-

Table 3.8
SBPA In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data - Second Quarter 2004
American Chemical Services NPL Site
Griffith, Indiana

Date	Blower Influent Temperature (°F)	Blower Effluent Line Pressure (psia)	Blower Effluent Flow (cfm)	Blower Effluent Pressure ("H_2O)	Blower Effluent VOC (ppm)	Blower Effluent Temperature (°F)	Filter Differential Pressure ("H_2O)	Ambient Temperature (°F)	Barometric Pressure ("Hg)	Humidity (%)
5/19/2004	62	14.8	685	0.0	-	189	20.0	70	30.11	73%
6/15/2004	68	15.4	871	16.0	-	198	13.0	70	30.08	78%

Notes:

"-" = data not collected
cfm = cubic feet per minute
"H_2O = inches of water
ppm = parts per million
VOCs = volatile organic compounds
psia = pounds per square inch, atmosphere
" Hg = inches of mercury
° F = degrees Fahrenheit

Table 6.1
Water Table Elevations Across the Barrier Wall and Near the PGCS - Second Quarter 2004
American Chemical Service NPL Site
Griffith, Indiana

Upper Aquifer Wells

Well Designation	Reference Points			6/30/2004		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOIC	level	Elevation		
MW11	6377	7329	640.47	6.54	633.93		n/a
MW13	5050	7814	634.08	4.17	629.91		n/a
MW37	5395	7976	636.78	6.01	630.77		n/a
MW46	4526	7424	633.32	3.01	630.31	wasps (sprayed)	n/a
MW48	5669	7814	636.36	5.53	630.83		n/a
MW49	5551	7650	637.00	5.98	631.02		n/a

Staff Gauges & Piezometers

Well Designation	Reference Points			6/30/2004		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOSG	level	Elevation		
P23	4689	7018	636.18	6.79	629.39		n/a
P25	5131	7510	635.01	6.25	628.76	broken riser	n/a
P26	4764	7309	634.23	4.53	629.70		n/a
P27	4904	7020	639.70	9.87	629.83		n/a
P28	5883	7486	644.53	11.39	633.14		n/a
P32	5746	7026	642.32	12.20	630.12		n/a
P40	5931	7241	638.77	5.02	633.75		n/a
P41	5663	7377	637.23	4.41	632.82		n/a
P49	5145	6949	638.98	9.15	629.83		n/a
SG13	4819	7209	631.53	4.7	630.2	TOSG = 6.0' mark	n/a

PGCS Piezometer Sets

Well Designation	Reference Points			6/30/2004		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOC	level	Elevation		
P81	5577	7581	636.19	5.09	631.10		n/a
P82	5577	7572	635.77	4.80	630.97	wasps (sprayed)	n/a
P83	5577	7561.6	635.95	5.02	630.93		n/a
P84	5322	7603	634.35	4.98	629.37		n/a
P85	5326	7594	634.08	4.64	629.44		n/a
P86	5329	7585	634.41	4.89	629.52		n/a
P87	5121	7466	633.88	5.17	628.71	wasps (sprayed)	n/a
P88	5130	7460	633.90	5.18	628.72		n/a
P89	5137	7454	634.02	5.06	628.96		n/a
P90	4881	7152	634.45	5.13	629.32	wasps (sprayed)	n/a
P91	4889	7145	634.59	5.30	629.29	wasps (sprayed)	n/a
P92	4896	7138.1	633.87	4.57	629.30		n/a

Table 6.1
Water Table Elevations Across the Barrier Wall and Near the PGCS - Second Quarter 2004
American Chemical Service NPL Site
Griffith, Indiana

BWES Water Level and Piezometer Pairs

Well Designation	Reference Points			6/30/2004		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOC	level	Elevation		
P93 - Outside BW	5136	7067	638.79	CNM	CNM	Does not exist - to be replaced	n/a
P94 - Inside BW	5146	7061	638.98	CNM	CNM	Does not exist - to be replaced	
P95 - Outside BW	5146	6532	638.58	7.66	630.92		-3.46
P96 - Inside BW	5156	6537	641.26	13.80	627.46		
P105 - Outside BW	5885	6678	638.86	4.30	634.56	cover doesn't secure	-5.91
P106 - Inside BW	5871	6685	638.10	9.45	628.65	cover doesn't secure	
P107 - Outside BW	5766	7339	637.42	4.42	633.00	wasps (sprayed)	-2.36
P108 - Inside BW	5757	7324	638.13	7.49	630.64		
P109 - Outside BW	5740	6387	644.30	9.72	634.58		-6.67
P110 - Inside BW	5705	6382	647.68	19.77	627.91		
P111 - Outside BW	5551	5950	650.03	15.86	634.17		-7.05
P112 - Inside BW	5525	5960	653.36	26.24	627.12		
P113 - Inside BW	5309	5693	657.53	30.61	626.92		-6.72
ORCPZ102 - Outside BW	5331	5612	652.47	18.83	633.64		
P114 - Inside BW	5035	5729	653.69	26.49	627.20		-6.54
P115 - Outside BW	4970	5708	652.50	18.76	633.74		
P116 - Inside BW	5031	6087	646.26	19.39	626.87		-6.15
P117 - Outside BW	5014	6087	643.93	10.91	633.02	no well cap	
P118 - Inside BW	5402	6539	645.52	18.06	627.46		n/a

Notes:

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOIC = top of inner casing

TOC = top of casing

TOSG = top of staff gauge

CNM = could not measure (reason given under "Notes" column)

n/a = not applicable

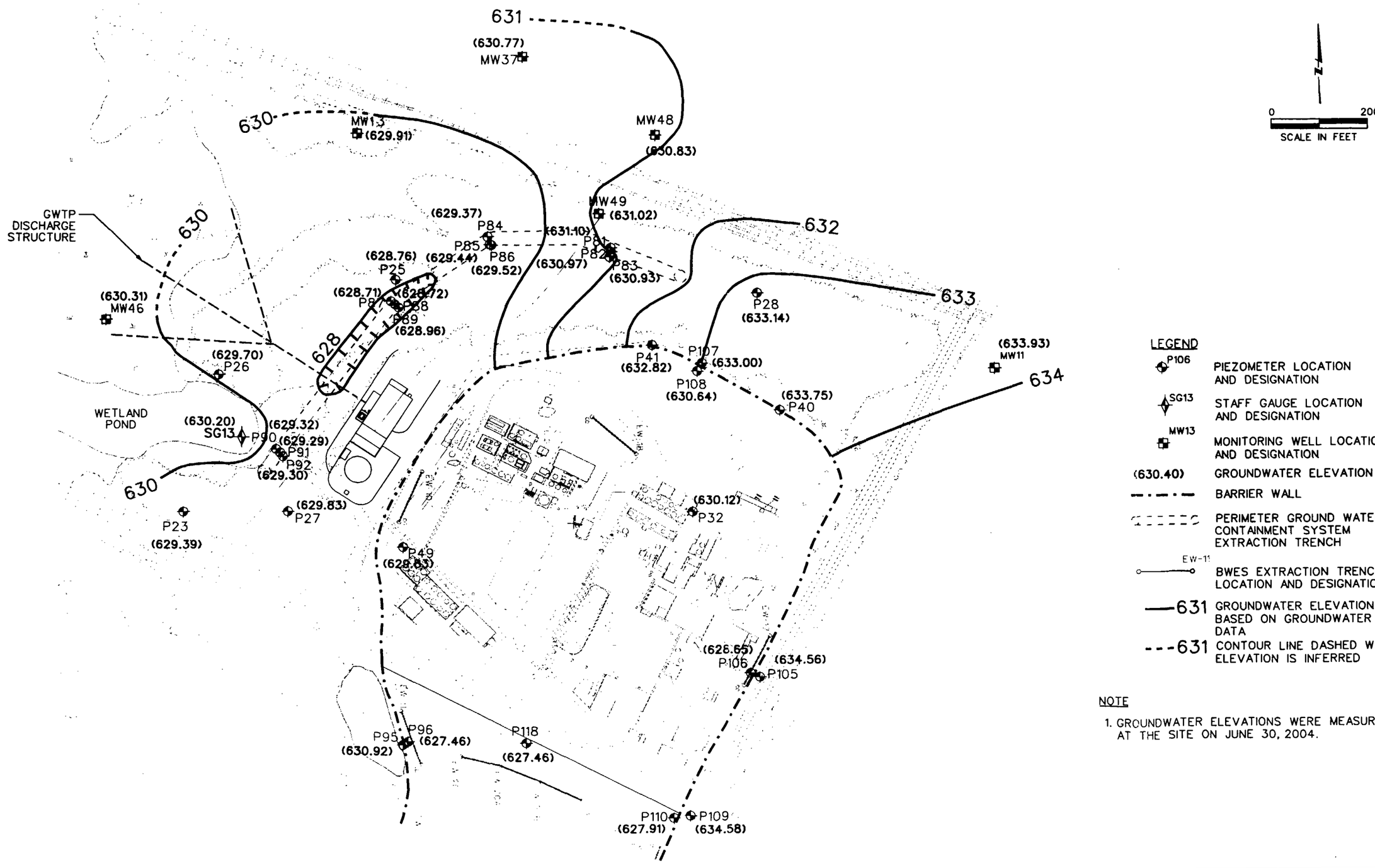
1 = A positive value indicates that the water level is higher inside the barrier wall. A negative value indicates that the water

Table 6.2
Water Levels Inside Barrier Wall - Second Quarter 2004
American Chemical Service NPL Site
Griffith, Indiana

Date	On-Site Area					
	Target Level	P-29	P-31	P-32	P-36	P-49
2-Apr-04	629.0	630.4	630.9	630.5	624.9	629.5
16-Apr-04	629.0	630.4	630.9	630.3	624.9	629.3
30-Apr-04	629.0	630.4	630.9	630.0	624.9	628.4
14-May-04	629.0	630.4	630.9	630.3	624.9	628.7
4-Jun-04	629.0	630.4	630.9	630.7	624.9	630.2
18-Jun-04	629.0	630.4	630.9	630.8	624.9	630.3

Date	Off-Site Area										
	Target Level	P-96	P-110	P-112	P-113	P-114	P-116	P-118	AS-7[1]	AS-8[1]	AS-9[1]
2-Apr-04	626.0	624.2	627.7	626.9	626.6	627.0	626.5	627.1	-	-	-
16-Apr-04	626.0	624.4	627.8	627.0	626.8	627.2	626.7	627.3	-	-	-
30-Apr-04	626.0	624.4	627.7	627.1	627.0	627.2	627.1	627.2	-	-	-
14-May-04	626.0	624.3	627.3	626.5	626.3	626.7	626.0	626.8	-	-	-
4-Jun-04	626.0	624.4	627.9	627.0	626.8	627.2	627.1	627.2	627.61	628.95	627.20
18-Jun-04	626.0	624.6	627.9	627.1	626.8	627.2	627.0	627.4	627.80	629.10	627.20

Notes:
All water level elevations are in feet AMSL
AMSL = Above Mean Sea Level
"–" = Indicates no water level was recorded on this date
1. The water elevations for AS-7, AS-8, and AS-9 were collected on May 28, 2004 and June 15, 2004.
The air sparge water levels were entered on this table on the closet date of piezometer water level readings for graphing purposes.



LEGEND

P106	PIEZOMETER LOCATION AND DESIGNATION
SG13	STAFF GAUGE LOCATION AND DESIGNATION
MW13	MONITORING WELL LOCATION AND DESIGNATION
(630.40)	GROUNDWATER ELEVATION
	BARRIER WALL
	PERIMETER GROUND WATER CONTAINMENT SYSTEM EXTRACTION TRENCH
EW-11	BWES EXTRACTION TRENCH LOCATION AND DESIGNATION
631	GROUNDWATER ELEVATION CONTOUR BASED ON GROUNDWATER ELEVATION DATA
631	CONTOUR LINE DASHED WHERE ELEVATION IS INFERRED

NOTE

1. GROUNDWATER ELEVATIONS WERE MEASURED AT THE SITE ON JUNE 30, 2004.

SCALE				FIGURE
1" = 200'	MWH	AMERICAN CHEMICAL SERVICE, INC. GRIFFITH, INDIANA	WATER TABLE ELEVATIONS NEAR THE PGCS JUNE 2004	6.1

JOB No. MW Job No. FILE: J:\209\0603 ACS\0301 GWTP\Drawings\Water Table 1 June 04.dgn Plot Date: 15-SEP-2004 11:18 QC : ADP/CAS

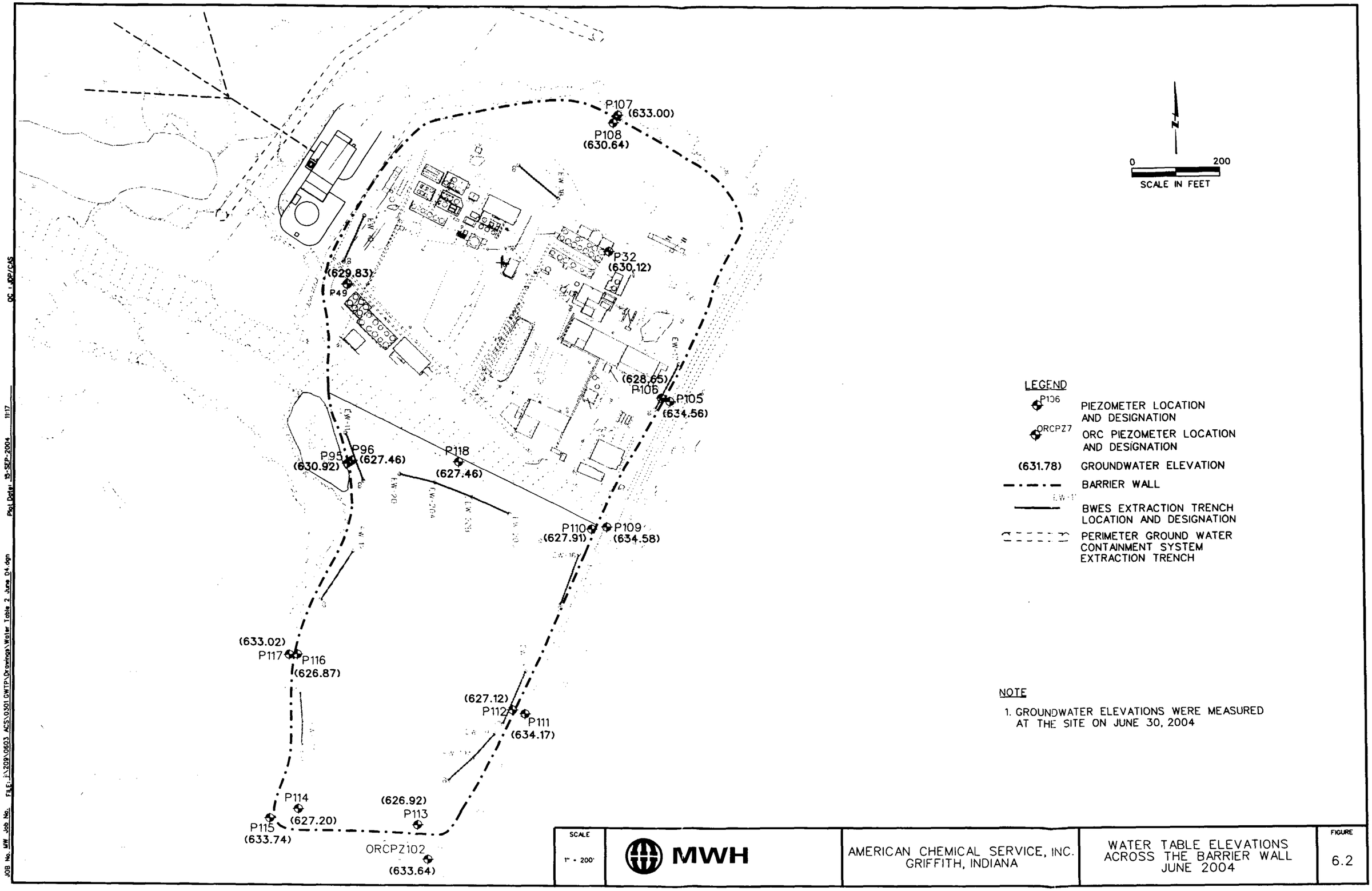
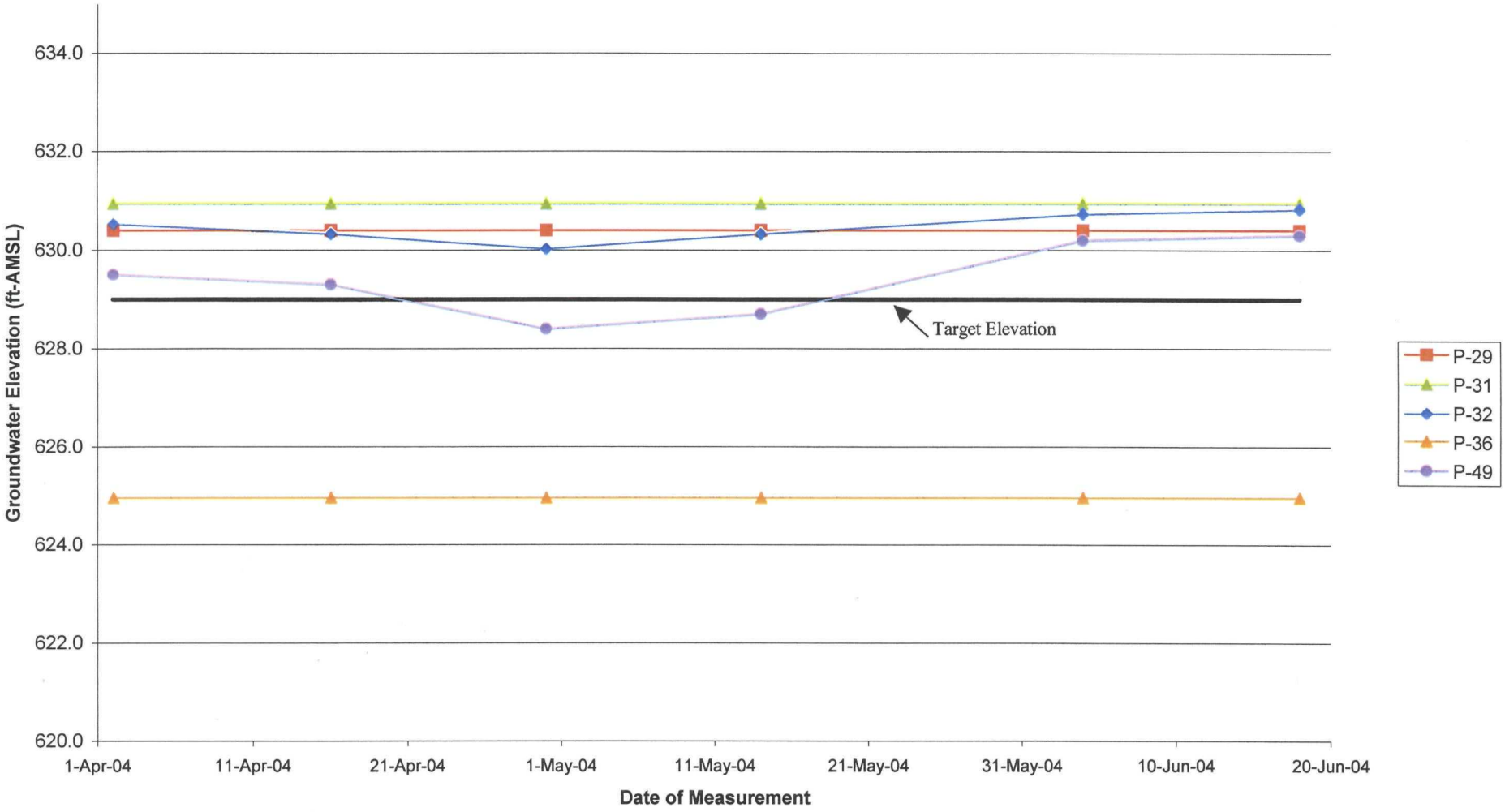

P107
(633.00)
P108
(630.64)
P32
(630.12)
(629.83)
P49
(628.65)
P106
P105
(634.56)
P95
(630.92)
P96
(627.46)
P118
(627.46)
P110
(627.91)
P109
(634.58)
(633.02)
P117
P116
(626.87)
(627.12)
P112
P111
(634.17)
P114
(627.20)
(626.92)
P113
P115
(633.74)
ORCPZ102
(633.64)
0
200
SCALE IN FEET
LEGEND
P106 PIEZOMETER LOCATION AND DESIGNATION
ORCPZ7 ORC PIEZOMETER LOCATION AND DESIGNATION
(631.78) GROUNDWATER ELEVATION
BARRIER WALL
BWES EXTRACTION TRENCH LOCATION AND DESIGNATION
PERIMETER GROUND WATER CONTAINMENT SYSTEM EXTRACTION TRENCH
NOTE
1. GROUNDWATER ELEVATIONS WERE MEASURED AT THE SITE ON JUNE 30, 2004
SCALE
1" = 200'
MWH
AMERICAN CHEMICAL SERVICE, INC.
GRIFFITH, INDIANA
WATER TABLE ELEVATIONS ACROSS THE BARRIER WALL
JUNE 2004
FIGURE
6.2

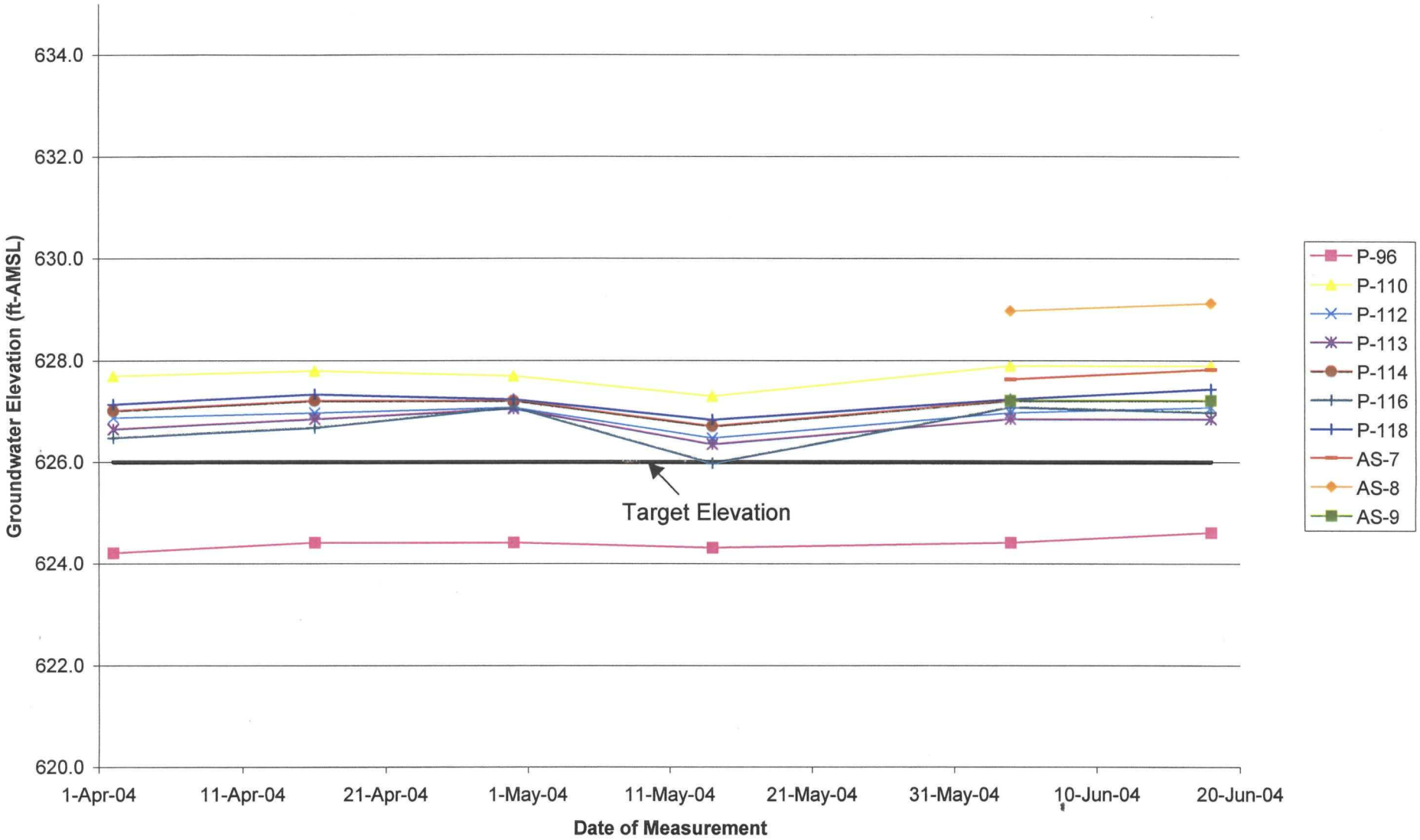
Figure 6.3
Water Level Trends Inside the Barrier Wall (Still Bottoms Pond Area)
ACS NPL Site
Griffith, Indiana



Note:
Hollow Points represent dry piezometers (data used for graphing purposes only).
The bottom elevation of the piezometers may vary due to silting or removal of silt.

ALC/jdp
J:\209\0603 ACS\0301 GWTP\6030301a120.xls\SBPA GW Trends

Figure 6.4
Water Level Trends Inside the Barrier Wall (Off-Site Area)
ACS NPL Site
Griffith, Indiana



Note: The air sparge water levels were collected on May 28th and June 15th.

ALC/jdp
J:\209\0603 ACS\0301GWTP\6030301a120.xls\Off-Site GW Trends

APPENDIX A

EFFLUENT ANALYTICAL DATA

April 1, 2004 Compliance Sample
Laboratory Results

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8260B

ab Code: LIBRTY Case No.: SAS No.: SDG No.: 2575

Matrix: (soil/water) WATER Lab Sample ID: 257501

ample wt/vol: 25 (g/ml) ML Lab File ID: 257501A73

Level: (low/med) LOW Date Received: 04/02/04

Moisture: not dec. _____ Date Analyzed: 04/09/04

GC Column: ZB-624 ID: 0.32 (mm) Dilution Factor: 1.0

oil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-35-4	1,1-Dichloroethene	0.19	J
75-15-0	Carbon disulfide	0.50	U
67-64-1	Acetone	1.7	JB 2.5UB
75-09-2	Methylene Chloride	0.15	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-butanone	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	2.5	U
108-88-3	Toluene	0.13	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-hexanone	2.5	U
124-48-1	Dibromochloromethane	0.13	J
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
108-38-3	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U

FORM I VOA

5/6 16K

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8260B

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 2575

Matrix: (soil/water) WATER Lab Sample ID: 257501

Sample wt/vol: 25 (g/ml) ML Lab File ID: 257501A73

Level: (low/med) LOW Date Received: 04/02/04

% Moisture: not dec. _____ Date Analyzed: 04/09/04

GC Column: ZB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(u

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-25-2	Bromoform	0.17	J
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.10	JB 0.5uB
540-59-0	1,2-Dichloroethene (total)	0.50	U
1330-20-7	Xylene (total)	0.50	U

FORM I VOA

5/6/04

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 2575

Matrix: (soil/water) WATER Lab Sample ID: 257501

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 257501A66

Level: (low/med) LOW Date Received: 04/02/04

Moisture: _____ decanted: (Y/N)___ Date Extracted: 04/06/04

Concentrated Extract Volume: 1000(uL) Date Analyzed: 04/08/04

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
111-44-4	Bis(2-chloroethyl)ether	9.6	U
106-44-5	4-Methylphenol	10	U
78-59-1	Isophorone	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	1.1	J

5/6/04

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 2575

Matrix: (soil/water) WATER Lab Sample ID: 257501

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 257501A60

Level: (low/med) LOW Date Received: 04/02/04

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/06/04

Concentrated Extract Volume: 1000(uL) Date Analyzed: 04/13/04

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
87-86-5	Pentachlorophenol	1.00	U

FORM I SV

1D
GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract: 8082

ab Code: COMPU Case No.: SAS No.: SDG No.: 2575

Matrix: (soil/water) WATER Lab Sample ID: 257501

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 04/02/04

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted:04/06/04

oncentrated Extract Volume: 2500(uL) Date Analyzed: 04/07/04

Injection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	0.47	U
11104-28-2	Aroclor-1221	0.63	U
11141-16-5	Aroclor-1232	0.47	U
53469-21-9	Aroclor-1242	0.31	U
12672-29-6	Aroclor-1248	0.31	U
11097-69-1	Aroclor-1254	0.31	U
11096-82-5	Aroclor-1260	0.47	U

FORM I PEST

5/6 10d

SW846 METALS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 2575

Matrix (soil/water): WATER Lab Sample ID: 257501

Level (low/med): LOW Date Received: 4/2/04

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	3.5	B		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.20	U		P
7439-96-5	Manganese	38.3		B	P
7439-97-6	Mercury	0.64	U		CV
7782-49-2	Selenium	2.0	U		P
7440-28-0	Thallium	3.2	U		P
7440-66-6	Zinc	8.1	B	UB	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

5/6/04

SW-846

1-CC

CLASSICAL CHEMISTRY ANALYSES DATA SHEET

EPA SAMPLE NO.

EFFLUENT

ıb 'ame: CompuChem Contract:

ıb Code: Case No.: NRAS No.:

ıG 'o.: 2575

ıtrix (soil/water): WATER Lab Sample ID: 257501

ıte Received: 4/2/04 % Solids: 0.00

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

PARAMETER	CONCENTRATION	C	Q	M	DATE ANALYZED
TSS	1.10				4/6/04
pH	6.99				4/5/04 J

J 5/6/04

Comments: PH is reported in pH units.

2

May 16, 2004 Compliance Sample
Laboratory Results

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8260B

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 3002

Matrix: (soil/water) WATER Lab Sample ID: 300201

Sample wt/vol: 25 (g/ml) ML Lab File ID: 300201B61

Level: (low/med) LOW Date Received: 05/17/04

% Moisture: not dec. _____ Date Analyzed: 05/21/04

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (u

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.33	J
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U UJ
75-00-3	Chloroethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-15-0	Carbon disulfide	0.50	U
67-64-1	Acetone	2.5	U UJ
75-09-2	Methylene Chloride	0.13	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-butanone	2.5	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.17	JB 0.5UB
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	2.5	U
108-88-3	Toluene	0.18	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
108-38-3	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U

FORM I VOA

6/14/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE N_.

EFFLUENT

Lab Name: COMPUCHEM Method: 8260B

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 3002

Matrix: (soil/water) WATER Lab Sample ID: 300201

Sample wt/vol: 25 (g/ml) ML Lab File ID: 300201B61

Level: (low/med) LOW Date Received: 05/17/04

% Moisture: not dec. _____ Date Analyzed: 05/21/04

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-25-2	Bromoform	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
540-59-0	1,2-Dichloroethene (total)	0.50	U
1330-20-7	Xylene (total)	0.50	U

FORM I VOA

6/14/04

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract: ACS 7010311

Lab Code: CompuChe Case No.: 3002 NRAS No.: _____ SDG No.: 3002

Matrix: (soil/water) WATER Lab Sample ID: 300201

Level: (low/med) LOW Date Received: 05/13/2004

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
150.1	pH	7.08			

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

FORM IA-IN 6/14/04 ILM05.2

2

June 17, 2004 Compliance Sample
Laboratory Results

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8260B

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 3416

Matrix: (soil/water) WATER Lab Sample ID: 341601

Sample wt/vol: 25 (g/ml) ML Lab File ID: 341601A71

Level: (low/med) LOW Date Received: 06/18/04

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: ZB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.16	J J
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-15-0	Carbon disulfide	0.50	U
67-64-1	Acetone	2.8	B BuB J
75-09-2	Methylene Chloride	0.78	B BuB J
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-butanone	1.4	J J
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	2.5	U
108-88-3	Toluene	0.17	J J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-hexanone	2.5	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
108-38-3	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U

FORM I VOA

7/16/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Method: 8260B

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 3416

Matrix: (soil/water) WATER Lab Sample ID: 341601

Sample wt/vol: 25 (g/ml) ML Lab File ID: 341601A71

Level: (low/med) LOW Date Received: 06/18/04

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: ZB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-25-2	Bromoform	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U UJ
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
540-59-0	1,2-Dichloroethene (total)	0.50	U
1330-20-7	Xylene (total)	0.50	U

7/16 604

76

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract: ACS 7010311

Lab Code: CompuChe Case No.: ACS 701 NRAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 341601

Level: (low/med) LOW Date Received: 06/18/2004

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
150.1	pH	7.01		J	

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

7/16/04

FORM IA-IN ILM05.2

APPENDIX B

THERMAL OXIDIZER OFF-GAS ANALYTICAL DATA

April 8, 2004 Off-Gas Sample Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 APR8

ID#: 0404170A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1700	2600	4400	6600
Bromomethane	1700	Not Detected	6700	Not Detected
Chloroethane	1700	Not Detected	4600	Not Detected
1,1-Dichloroethene	1700	2000	6800	8300
Methylene Chloride	1700	8300	6000	29000
1,1-Dichloroethane	1700	7800	7000	32000
cis-1,2-Dichloroethene	1700	150000	6800	610000
Chloroform	1700	4000	8400	20000
1,1,1-Trichloroethane	1700	130000	9400	710000
Carbon Tetrachloride	1700	Not Detected	11000	Not Detected
Benzene	1700	59000	5500	190000
1,2-Dichloroethane	1700	730 J 15	7000	3000 J
Trichloroethene	1700	59000	9300	320000
1,2-Dichloropropane	1700	1200 J 15	8000	5600 J
cis-1,3-Dichloropropene	1700	Not Detected	7800	Not Detected
Toluene	1700	440000	6500	1700000
trans-1,3-Dichloropropene	1700	Not Detected	7800	Not Detected
1,1,2-Trichloroethane	1700	Not Detected	9400	Not Detected
Tetrachloroethene	1700	66000	12000	460000
Chlorobenzene	1700	Not Detected	8000	Not Detected
Ethyl Benzene	1700	42000	7500	180000
m,p-Xylene	1700	150000	7500	670000
o-Xylene	1700	40000	7500	180000
Styrene	1700	Not Detected	7400	Not Detected
1,1,2,2-Tetrachloroethane	1700	Not Detected	12000	Not Detected
Bromodichloromethane	1700	Not Detected	12000	Not Detected
Dibromochloromethane	1700	Not Detected	15000	Not Detected
Chloromethane	6800	Not Detected	14000	Not Detected
Acetone	6800	2000 J 15	16000	4900 J
Carbon Disulfide	6800	1200 J 15	22000	3800 J
trans-1,2-Dichloroethene	6800	Not Detected	27000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6800	3100 J 15	20000	9400 J
4-Methyl-2-pentanone	6800	1400 J 15	28000	5800 J
2-Hexanone	6800	Not Detected	28000	Not Detected
Bromoform	6800	Not Detected	71000	Not Detected

J = Estimated value.

CRS
5/24/04

Container Type: 6 Liter Summa Canister

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 APR8

ID#: 0404170A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	94	70-130

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 APR8

ID#: 0404170A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	700	Not Detected	1800	Not Detected
Bromomethane	700	Not Detected	2700	Not Detected
Chloroethane	700	Not Detected	1900	Not Detected
1,1-Dichloroethene	700	410 J 15	2800	1700 J
Methylene Chloride	700	38000	2400	140000
1,1-Dichloroethane	700	6300	2800	26000
cis-1,2-Dichloroethene	700	8800	2800	36000
Chloroform	700	3200	3400	16000
1,1,1-Trichloroethane	700	58000	3800	320000
Carbon Tetrachloride	700	Not Detected	4400	Not Detected
Benzene	700	36000	2200	120000
1,2-Dichloroethane	700	1900	2800	7900
Trichloroethene	700	33000	3800	180000
1,2-Dichloropropane	700	650 J 15	3300	3000 J
cis-1,3-Dichloropropene	700	Not Detected	3200	Not Detected
Toluene	700	200000	2700	760000
trans-1,3-Dichloropropene	700	Not Detected	3200	Not Detected
1,1,2-Trichloroethane	700	210 J 15	3800	1200 J
Tetrachloroethene	700	43000	4800	300000
Chlorobenzene	700	Not Detected	3200	Not Detected
Ethyl Benzene	700	22000	3100	96000
m,p-Xylene	700	94000	3100	420000
o-Xylene	700	31000	3100	140000
Styrene	700	Not Detected	3000	Not Detected
1,1,2,2-Tetrachloroethane	700	Not Detected	4800	Not Detected
Bromodichloromethane	700	Not Detected	4700	Not Detected
Dibromochloromethane	700	Not Detected	6000	Not Detected
Chloromethane	2800	Not Detected	5800	Not Detected
Acetone	2800	26000	6700	63000
Carbon Disulfide	2800	880 J 15	8800	2800 J
trans-1,2-Dichloroethene	2800	Not Detected	11000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2800	20000	8300	60000
4-Methyl-2-pentanone	2800	9800	12000	41000
2-Hexanone	2800	Not Detected	12000	Not Detected
Bromoform	2800	Not Detected	29000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 APR8

ID#: 0404170A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 APR8

ID#: 0404170A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1400	1700	3600	4400
Bromomethane	1400	Not Detected	5500	Not Detected
Chloroethane	1400	Not Detected	3700	Not Detected
1,1-Dichloroethene	1400	1300 J 15	5600	5100 J
Methylene Chloride	1400	20000	4900	71000
1,1-Dichloroethane	1400	6700	5700	28000
cis-1,2-Dichloroethene	1400	87000	5600	350000
Chloroform	1400	3400	6900	17000
1,1,1-Trichloroethane	1400	89000	7700	500000
Carbon Tetrachloride	1400	Not Detected	8900	Not Detected
Benzene	1400	50000	4500	160000
1,2-Dichloroethane	1400	1200 J 15	5700	4900 J
Trichloroethene	1400	48000	7600	260000
1,2-Dichloropropane	1400	930 J 15	6500	4400 J
cis-1,3-Dichloropropene	1400	Not Detected	6400	Not Detected
Toluene	1400	340000	5300	1300000
trans-1,3-Dichloropropene	1400	Not Detected	6400	Not Detected
1,1,2-Trichloroethane	1400	Not Detected	7700	Not Detected
Tetrachloroethene	1400	60000	9600	420000
Chlorobenzene	1400	Not Detected	6500	Not Detected
Ethyl Benzene	1400	37000	6100	160000
m,p-Xylene	1400	140000	6100	610000
o-Xylene	1400	41000	6100	180000
Styrene	1400	Not Detected	6000	Not Detected
1,1,2,2-Tetrachloroethane	1400	Not Detected	9700	Not Detected
Bromodichloromethane	1400	Not Detected	9500	Not Detected
Dibromochloromethane	1400	Not Detected	12000	Not Detected
Chloromethane	5600	Not Detected	12000	Not Detected
Acetone	5600	12000	13000	30000
Carbon Disulfide	5600	1300 J 15	18000	4200 J
trans-1,2-Dichloroethene	5600	Not Detected	22000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5600	9300	17000	28000
4-Methyl-2-pentanone	5600	4500 J 15	23000	18000 J
2-Hexanone	5600	Not Detected	23000	Not Detected
Bromoform	5600	Not Detected	58000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 APR8

ID#: 0404170A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 APR8

ID#: 0404170A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1800	1300 J 15	4700	3400 J
Bromomethane	1800	Not Detected	7100	Not Detected
Chloroethane	1800	Not Detected	4800	Not Detected
1,1-Dichloroethene	1800	1000 J 15	7200	4200 J
Methylene Chloride	1800	17000	6400	62000
1,1-Dichloroethane	1800	5900	7400	24000
cis-1,2-Dichloroethene	1800	76000	7200	300000
Chloroform	1800	3100	8900	15000
1,1,1-Trichloroethane	1800	78000	10000	430000
Carbon Tetrachloride	1800	Not Detected	12000	Not Detected
Benzene	1800	44000	5800	140000
1,2-Dichloroethane	1800	1100 J 15	7400	4700 J
Trichloroethene	1800	42000	9800	230000
1,2-Dichloropropane	1800	840 J 15	8400	3900 J
cis-1,3-Dichloropropene	1800	Not Detected	8300	Not Detected
Toluene	1800	310000	6900	1200000
trans-1,3-Dichloropropene	1800	Not Detected	8300	Not Detected
1,1,2-Trichloroethane	1800	Not Detected	10000	Not Detected
Tetrachloroethene	1800	56000	12000	380000
Chlorobenzene	1800	Not Detected	8400	Not Detected
Ethyl Benzene	1800	34000	7900	150000
m,p-Xylene	1800	130000	7900	580000
o-Xylene	1800	38000	7900	170000
Styrene	1800	Not Detected	7800	Not Detected
1,1,2,2-Tetrachloroethane	1800	Not Detected	12000	Not Detected
Bromodichloromethane	1800	Not Detected	12000	Not Detected
Dibromochloromethane	1800	Not Detected	16000	Not Detected
Chloromethane	7200	Not Detected	15000	Not Detected
Acetone	7200	10000	17000	24000
Carbon Disulfide	7200	1200 J 15	23000	3800 J
trans-1,2-Dichloroethene	7200	Not Detected	29000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	7200	8100	22000	24000
4-Methyl-2-pentanone	7200	3800 J 15	30000	16000 J
2-Hexanone	7200	Not Detected	30000	Not Detected
Bromoform	7200	Not Detected	76000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 APR8

ID#: 0404170A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 APR8 Duplicate

ID#: 0404170A-04AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1800	1600 J 15	4700	4200 J
Bromomethane	1800	Not Detected	7100	Not Detected
Chloroethane	1800	Not Detected	4800	Not Detected
1,1-Dichloroethene	1800	1200 J 15	7200	5000 J
Methylene Chloride	1800	20000	6400	70000
1,1-Dichloroethane	1800	6600	7400	27000
cis-1,2-Dichloroethene	1800	86000	7200	350000
Chloroform	1800	3400	8900	17000
1,1,1-Trichloroethane	1800	89000	10000	490000
Carbon Tetrachloride	1800	Not Detected	12000	Not Detected
Benzene	1800	49000	5800	160000
1,2-Dichloroethane	1800	1300 J 15	7400	5200 J
Trichloroethene	1800	47000	9800	260000
1,2-Dichloropropane	1800	860 J 15	8400	4000 J
cis-1,3-Dichloropropene	1800	Not Detected	8300	Not Detected
Toluene	1800	340000	6900	1300000
trans-1,3-Dichloropropene	1800	Not Detected	8300	Not Detected
1,1,2-Trichloroethane	1800	Not Detected	10000	Not Detected
Tetrachloroethene	1800	62000	12000	430000
Chlorobenzene	1800	Not Detected	8400	Not Detected
Ethyl Benzene	1800	39000	7900	170000
m,p-Xylene	1800	150000	7900	650000
o-Xylene	1800	43000	7900	190000
Styrene	1800	Not Detected	7800	Not Detected
1,1,2,2-Tetrachloroethane	1800	Not Detected	12000	Not Detected
Bromodichloromethane	1800	Not Detected	12000	Not Detected
Dibromochloromethane	1800	Not Detected	16000	Not Detected
Chloromethane	7200	Not Detected	15000	Not Detected
Acetone	7200	11000	17000	27000
Carbon Disulfide	7200	900 J 15	23000	2800 J
trans-1,2-Dichloroethene	7200	Not Detected	29000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	7200	9600	22000	29000
4-Methyl-2-pentanone	7200	4200 J 15	30000	18000 J
2-Hexanone	7200	Not Detected	30000	Not Detected
Bromoform	7200	Not Detected	76000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 APR8 Duplicate

ID#: 0404170A-04AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

CPS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 APR8

ID#: 0404170A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	14	67	36	170
Bromomethane	14	Not Detected	55	Not Detected
Chloroethane	14	11 J 15	37	30 J
1,1-Dichloroethene	14	480	56	1900
Methylene Chloride	14	320	49	1100
1,1-Dichloroethane	14	85	57	350
cis-1,2-Dichloroethene	14	1200	56	5000
Chloroform	14	83	69	410
1,1,1-Trichloroethane	14	920	77	5100
Carbon Tetrachloride	14	5.1 J 15	89	33 J
Benzene	14	1100	45	3700
1,2-Dichloroethane	14	18	57	74
Trichloroethene	14	780	76	4300
1,2-Dichloropropane	14	11 J 15	65	50 J
cis-1,3-Dichloropropene	14	2.4 J 15	64	11 J
Toluene	14	4400	53	17000
trans-1,3-Dichloropropene	14	Not Detected	64	Not Detected
1,1,2-Trichloroethane	14	Not Detected	77	Not Detected
Tetrachloroethene	14	1100	96	7500
Chlorobenzene	14	10 J 15	65	49 J
Ethyl Benzene	14	400	61	1800
m,p-Xylene	14	1400	61	6100
o-Xylene	14	420	61	1800
Styrene	14	140	60	620
1,1,2,2-Tetrachloroethane	14	Not Detected	97	Not Detected
Bromodichloromethane	14	5.3 J 15	95	36 J
Dibromochloromethane	14	Not Detected	120	Not Detected
Chloromethane	56	78	120	160
Acetone	56	240	130	580
Carbon Disulfide	56	Not Detected	180	Not Detected
trans-1,2-Dichloroethene	56	170	220	700
2-Butanone (Methyl Ethyl Ketone)	56	130	170	400
4-Methyl-2-pentanone	56	42 J 15	230	170 J
2-Hexanone	56	Not Detected	230	Not Detected
Bromoform	56	Not Detected	580	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CKS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 APR8

ID#: 0404170A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 APR8

ID#: 0404170B-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	0.90 J 15
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	0.99 J 15
1,4-Dichlorobenzene	1.0	2.8
1,2-Dichlorobenzene	1.0	15
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	0.96 J 15
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	12
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	0.63 J 15
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	2.8
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 APR8

ID#: 0404170B-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.67 J /R
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.96 J /5
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits, possibly due to matrix effects.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	15 Q	50-150
Phenol-d5	87	50-150
Nitrobenzene-d5	86	50-150
2,4,6-Tribromophenol	82	50-150
Fluorene-d10	88	60-120
Pyrene-d10	90	60-120

ORS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 APR8

ID#: 0404170B-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	5.0
bis(2-Chloroethyl) Ether	1.0	3.2
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	2.4
1,4-Dichlorobenzene	1.0	7.7
1,2-Dichlorobenzene	1.0	55
2-Methylphenol (o-Cresol)	5.0	1.2 J 15
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	2.8 J 15
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	12
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.95 J 15
Naphthalene	1.0	33
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.2
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	6.1
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 APR8

ID#: 0404170B-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.58 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.4 J /J
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits, possibly due to matrix effects.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	17 Q	50-150
Phenol-d5	90	50-150
Nitrobenzene-d5	85	50-150
2,4,6-Tribromophenol	78	50-150
Fluorene-d10	85	60-120
Pyrene-d10	87	60-120

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 APR8

ID#: 0404170B-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	3.0 J /5
bis(2-Chloroethyl) Ether	1.0	2.8
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	1.9
1,4-Dichlorobenzene	1.0	6.6
1,2-Dichlorobenzene	1.0	43
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	1.2 J /5
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	6.9
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.48 J /5
Naphthalene	1.0	46
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.1
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	9.5
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CMCS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 APR8

ID#: 0404170B-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	1.0 J /R
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.79 J /J
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits, possibly due to matrix effects.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	14 Q	50-150
Phenol-d5	88	50-150
Nitrobenzene-d5	86	50-150
2,4,6-Tribromophenol	69	50-150
Fluorene-d10	87	60-120
Pyrene-d10	90	60-120

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 APR8

ID#: 0404170B-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	3.7 J 15
bis(2-Chloroethyl) Ether	1.0	3.3
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	2.1
1,4-Dichlorobenzene	1.0	7.7
1,2-Dichlorobenzene	1.0	49
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	1.6 J 15
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	8.6
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.75 J 15
Naphthalene	1.0	64
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.6
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	16
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 APR8

ID#: 0404170B-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.79 J /R
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	3.3 J /5
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits, possibly due to matrix effects.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	14 Q	50-150
Phenol-d5	90	50-150
Nitrobenzene-d5	89	50-150
2,4,6-Tribromophenol	72	50-150
Fluorene-d10	89	60-120
Pyrene-d10	92	60-120

CRS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 APR8

ID#: 0404170B-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	0.61 J 15
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	0.52 J 15
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CKS
5/24/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 APR8

ID#: 0404170B-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	1.4 J /R
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.66 J /5
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	74	50-150
Phenol-d5	79	50-150
Nitrobenzene-d5	78	50-150
2,4,6-Tribromophenol	76	50-150
Fluorene-d10	80	60-120
Pyrene-d10	87	60-120

PRS
5/24/04

May 18, 2004 Off-Gas Sample Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 MAY18

ID#: 0405305-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1700	1700	4400	4400
Bromomethane	1700	Not Detected	6600	Not Detected
Chloroethane	1700	940 J /5	4500	2500 J
1,1-Dichloroethene	1700	5100	6800	21000
Methylene Chloride	1700	14000	5900	49000
1,1-Dichloroethane	1700	6700	6900	28000
cis-1,2-Dichloroethene	1700	63000	6800	260000
Chloroform	1700	3000	8300	15000
1,1,1-Trichloroethane	1700	82000	9300	460000
Carbon Tetrachloride	1700	Not Detected	11000	Not Detected
Benzene	1700	62000	5400	200000
1,2-Dichloroethane	1700	Not Detected	6900	Not Detected
Trichloroethene	1700	50000	9100	270000
1,2-Dichloropropane	1700	Not Detected	7900	Not Detected
cis-1,3-Dichloropropene	1700	Not Detected	7700	Not Detected
Toluene	1700	350000	6400	1400000
trans-1,3-Dichloropropene	1700	Not Detected	7700	Not Detected
1,1,2-Trichloroethane	1700	Not Detected	9300	Not Detected
Tetrachloroethene	1700	88000	12000	600000
Chlorobenzene	1700	Not Detected	7800	Not Detected
Ethyl Benzene	1700	37000	7400	160000
m,p-Xylene	1700	130000	7400	590000
o-Xylene	1700	42000	7400	180000
Styrene	1700	Not Detected	7200	Not Detected
1,1,2,2-Tetrachloroethane	1700	Not Detected	12000	Not Detected
Bromodichloromethane	1700	Not Detected	11000	Not Detected
Dibromochloromethane	1700	Not Detected	14000	Not Detected
Chloromethane	6700	Not Detected	14000	Not Detected
Acetone	6700	8500	16000	20000
Carbon Disulfide	6700	2600 J /5	21000	8200 J
trans-1,2-Dichloroethene	6700	Not Detected	27000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6700	Not Detected	20000	Not Detected
4-Methyl-2-pentanone	6700	1100 J /5	28000	4800 J
2-Hexanone	6700	Not Detected	28000	Not Detected
Bromoform	6700	Not Detected	70000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 MAY18

ID#: 0405305-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

CPS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 MAY18

ID#: 0405305-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	820	Not Detected	2100	Not Detected
Bromomethane	820	Not Detected	3200	Not Detected
Chloroethane	820	Not Detected	2200	Not Detected
1,1-Dichloroethene	820	4300	3300	17000
Methylene Chloride	820	47000	2900	170000
1,1-Dichloroethane	820	6500	3400	27000
cis-1,2-Dichloroethene	820	6000	3300	24000
Chloroform	820	3000	4100	15000
1,1,1-Trichloroethane	820	52000	4600	290000
Carbon Tetrachloride	820	Not Detected	5300	Not Detected
Benzene	820	37000	2700	120000
1,2-Dichloroethane	820	1700	3400	7100
Trichloroethene	820	29000	4500	160000
1,2-Dichloropropane	820	650 J 15	3900	3000 J
cis-1,3-Dichloropropene	820	Not Detected	3800	Not Detected
Toluene	820	180000	3200	690000
trans-1,3-Dichloropropene	820	Not Detected	3800	Not Detected
1,1,2-Trichloroethane	820	Not Detected	4600	Not Detected
Tetrachloroethene	820	37000	5700	250000
Chlorobenzene	820	Not Detected	3900	Not Detected
Ethyl Benzene	820	20000	3600	90000
m,p-Xylene	820	83000	3600	360000
o-Xylene	820	29000	3600	130000
Styrene	820	1700	3600	7300
1,1,2,2-Tetrachloroethane	820	Not Detected	5800	Not Detected
Bromodichloromethane	820	Not Detected	5600	Not Detected
Dibromochloromethane	820	Not Detected	7100	Not Detected
Chloromethane	3300	Not Detected	6900	Not Detected
Acetone	3300	36000	8000	87000
Carbon Disulfide	3300	3100 J 15	10000	9800 J
trans-1,2-Dichloroethene	3300	Not Detected	13000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3300	22000	9900	66000
4-Methyl-2-pentanone	3300	9900	14000	41000
2-Hexanone	3300	Not Detected	14000	Not Detected
Bromoform	3300	Not Detected	35000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 MAY18

ID#: 0405305-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	102	70-130

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 MAY18

ID#: 0405305-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1700	1200 J /5	4400	3000 J
Bromomethane	1700	Not Detected	6600	Not Detected
Chloroethane	1700	1000 J /5	4500	2800 J
1,1-Dichloroethene	1700	4600	6800	19000
Methylene Chloride	1700	29000	5900	100000
1,1-Dichloroethane	1700	7300	6900	30000
cis-1,2-Dichloroethene	1700	46000	6800	190000
Chloroform	1700	3300	8300	17000
1,1,1-Trichloroethane	1700	79000	9300	440000
Carbon Tetrachloride	1700	Not Detected	11000	Not Detected
Benzene	1700	53000	5400	170000
1,2-Dichloroethane	1700	1100 J /5	6900	4700 J
Trichloroethene	1700	50000	9100	270000
1,2-Dichloropropane	1700	1200 J /5	7900	5900 J
cis-1,3-Dichloropropene	1700	Not Detected	7700	Not Detected
Toluene	1700	340000	6400	1300000
trans-1,3-Dichloropropene	1700	Not Detected	7700	Not Detected
1,1,2-Trichloroethane	1700	Not Detected	9300	Not Detected
Tetrachloroethene	1700	83000	12000	580000
Chlorobenzene	1700	Not Detected	7800	Not Detected
Ethyl Benzene	1700	40000	7400	180000
m,p-Xylene	1700	150000	7400	660000
o-Xylene	1700	49000	7400	210000
Styrene	1700	2000	7200	8900
1,1,2,2-Tetrachloroethane	1700	Not Detected	12000	Not Detected
Bromodichloromethane	1700	Not Detected	11000	Not Detected
Dibromochloromethane	1700	Not Detected	14000	Not Detected
Chloromethane	6700	Not Detected	14000	Not Detected
Acetone	6700	20000	16000	50000
Carbon Disulfide	6700	2500 J /5	21000	7900 J
trans-1,2-Dichloroethene	6700	Not Detected	27000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6700	11000	20000	33000
4-Methyl-2-pentanone	6700	5200 J /5	28000	22000 J
2-Hexanone	6700	Not Detected	28000	Not Detected
Bromoform	6700	Not Detected	70000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 MAY18

ID#: 0405305-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 MAY18

ID#: 0405305-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1600	Not Detected	4300	Not Detected
Bromomethane	1600	Not Detected	6500	Not Detected
Chloroethane	1600	990 J /5	4400	2700 J
1,1-Dichloroethene	1600	1300 J /5	6600	5100 J
Methylene Chloride	1600	27000	5800	96000
1,1-Dichloroethane	1600	6800	6800	28000
cis-1,2-Dichloroethene	1600	43000	6600	170000
Chloroform	1600	3200	8200	16000
1,1,1-Trichloroethane	1600	74000	9200	410000
Carbon Tetrachloride	1600	Not Detected	10000	Not Detected
Benzene	1600	48000	5400	160000
1,2-Dichloroethane	1600	1000 J /5	6800	4300 J
Trichloroethene	1600	46000	9000	250000
1,2-Dichloropropane	1600	980 J /5	7800	4600 J
cis-1,3-Dichloropropene	1600	Not Detected	7600	Not Detected
Toluene	1600	310000	6300	1200000
trans-1,3-Dichloropropene	1600	Not Detected	7600	Not Detected
1,1,2-Trichloroethane	1600	Not Detected	9200	Not Detected
Tetrachloroethene	1600	77000	11000	530000
Chlorobenzene	1600	Not Detected	7700	Not Detected
Ethyl Benzene	1600	35000	7300	160000
m,p-Xylene	1600	130000	7300	570000
o-Xylene	1600	41000	7300	180000
Styrene	1600	Not Detected	7100	Not Detected
1,1,2,2-Tetrachloroethane	1600	Not Detected	12000	Not Detected
Bromodichloromethane	1600	Not Detected	11000	Not Detected
Dibromochloromethane	1600	Not Detected	14000	Not Detected
Chloromethane	6600	Not Detected	14000	Not Detected
Acetone	6600	18000	16000	43000
Carbon Disulfide	6600	3000 J /5	21000	9300 J
trans-1,2-Dichloroethene	6600	Not Detected	26000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6600	10000	20000	30000
4-Methyl-2-pentanone	6600	4600 J /5	27000	19000 J
2-Hexanone	6600	Not Detected	27000	Not Detected
Bromoform	6600	Not Detected	69000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 MAY18

ID#: 0405305-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 MAY18

ID#: 0405305-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	34	89	87	230
Bromomethane	34	Not Detected	130	Not Detected
Chloroethane	34	Not Detected	90	Not Detected
1,1-Dichloroethene	34	720	140	2900
Methylene Chloride	34	660	120	2300
1,1-Dichloroethane	34	120	140	520
cis-1,2-Dichloroethene	34	1000	140	4200
Chloroform	34	100	170	520
1,1,1-Trichloroethane	34	1100	180	6100
Carbon Tetrachloride	34	Not Detected	210	Not Detected
Benzene	34	1500	110	5000
1,2-Dichloroethane	34	Not Detected	140	Not Detected
Trichloroethene	34	1200	180	6700
1,2-Dichloropropane	34	20 J 15	160	95 J
cis-1,3-Dichloropropene	34	Not Detected	150	Not Detected
Toluene	34	6800	130	26000
trans-1,3-Dichloropropene	34	Not Detected	150	Not Detected
1,1,2-Trichloroethane	34	Not Detected	180	Not Detected
Tetrachloroethene	34	2000	230	14000
Chlorobenzene	34	Not Detected	160	Not Detected
Ethyl Benzene	34	700	150	3100
m,p-Xylene	34	2400	150	11000
o-Xylene	34	820	150	3600
Styrene	34	230	140	1000
1,1,2,2-Tetrachloroethane	34	Not Detected	230	Not Detected
Bromodichloromethane	34	Not Detected	230	Not Detected
Dibromochloromethane	34	Not Detected	290	Not Detected
Chloromethane	130	100 J 15	280	220 J
Acetone	130	420	320	1000
Carbon Disulfide	130	Not Detected	420	Not Detected
trans-1,2-Dichloroethene	130	160	540	670
2-Butanone (Methyl Ethyl Ketone)	130	220	400	660
4-Methyl-2-pentanone	130	78 J 15	560	320 J
2-Hexanone	130	Not Detected	560	Not Detected
Bromoform	130	Not Detected	1400	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

CRS 6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 MAY18

ID#: 0405305-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 MAY18

ID#: 0405299-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	2.9 J /5
bis(2-Chloroethyl) Ether	1.0	Not Detected /R
2-Chlorophenol	5.0	Not Detected /R
1,3-Dichlorobenzene	1.0	6.3 /5
1,4-Dichlorobenzene	1.0	17 /5
1,2-Dichlorobenzene	1.0	66 /5
2-Methylphenol (o-Cresol)	5.0	Not Detected /R
N-Nitroso-di-n-propylamine	1.0	Not Detected /R
4-Methylphenol/3-Methylphenol	5.0	Not Detected /R
Hexachloroethane	1.0	Not Detected /R
Nitrobenzene	1.0	Not Detected /R
Isophorone	1.0	Not Detected /R
2-Nitrophenol	5.0	Not Detected /R
2,4-Dimethylphenol	5.0	Not Detected /R
bis(2-Chloroethoxy) Methane	1.0	Not Detected /R
2,4-Dichlorophenol	5.0	Not Detected /R
1,2,4-Trichlorobenzene	1.0	Not Detected /R
Naphthalene	1.0	29 /5
4-Chloroaniline	10	Not Detected /R
Hexachlorobutadiene	1.0	1.5 /R
4-Chloro-3-methylphenol	5.0	Not Detected /R
2-Methylnaphthalene	1.0	11 /5
Hexachlorocyclopentadiene	20	Not Detected /R
2,4,6-Trichlorophenol	5.0	Not Detected /R
2,4,5-Trichlorophenol	5.0	Not Detected /R
2-Chloronaphthalene	1.0	Not Detected /R
2-Nitroaniline	10	Not Detected /R
Dimethylphthalate	5.0	Not Detected /R
Acenaphthylene	1.0	Not Detected /R
2,6-Dinitrotoluene	5.0	Not Detected /R
3-Nitroaniline	10	Not Detected /R
Acenaphthene	1.0	Not Detected /R
2,4-Dinitrophenol	20	Not Detected /R
4-Nitrophenol	20	Not Detected /R
2,4-Dinitrotoluene	5.0	Not Detected /R
Dibenzofuran	1.0	Not Detected /R
Diethylphthalate	5.0	Not Detected /R
Fluorene	1.0	Not Detected /R
4-Chlorophenyl-phenyl Ether	1.0	Not Detected /R
4-Nitroaniline	10	Not Detected /R
4,6-Dinitro-2-methylphenol	10	Not Detected /R

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 MAY18

ID#: 0405299-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected /R
4-Bromophenyl-phenyl Ether	1.0	Not Detected /R
Hexachlorobenzene	1.0	Not Detected /R
Pentachlorophenol	20	Not Detected /R
Phenanthrene	1.0	Not Detected /R
Anthracene	1.0	Not Detected /R
di-n-Butylphthalate	5.0	1.1 J /JB
Fluoranthene	1.0	Not Detected /R
Pyrene	1.0	Not Detected /R
Butylbenzylphthalate	5.0	Not Detected /R
3,3'-Dichlorobenzidine	20	Not Detected /R
Chrysene	1.0	Not Detected /R
Benzo(a)anthracene	1.0	Not Detected /R
bis(2-Ethylhexyl)phthalate	5.0	Not Detected /R
Di-n-Octylphthalate	5.0	Not Detected /R
Benzo(b)fluoranthene	1.0	Not Detected /R
Benzo(k)fluoranthene	1.0	Not Detected /R
Benzo(a)pyrene	1.0	Not Detected /R
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected /R
Dibenz(a,h)anthracene	1.0	Not Detected /R
Benzo(g,h,i)perylene	1.0	Not Detected /R

J = Estimated value.

* Not reportable due to matrix interference.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	0 *	50-150
Phenol-d5	66	50-150
Nitrobenzene-d5	0 *	50-150
2,4,6-Tribromophenol	68	50-150
Fluorene-d10	81	60-120
Pyrene-d10	82	60-120

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 MAY18 Duplicate

ID#: 0405299-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	2.3 J 15
bis(2-Chloroethyl) Ether	1.0	Not Detected 1R
2-Chlorophenol	5.0	Not Detected 1R
1,3-Dichlorobenzene	1.0	6.6 15
1,4-Dichlorobenzene	1.0	17 15
1,2-Dichlorobenzene	1.0	66 15
2-Methylphenol (o-Cresol)	5.0	Not Detected 1R
N-Nitroso-di-n-propylamine	1.0	Not Detected 1R
4-Methylphenol/3-Methylphenol	5.0	Not Detected 1R
Hexachloroethane	1.0	Not Detected 1R
Nitrobenzene	1.0	Not Detected 1R
Isophorone	1.0	Not Detected 1R
2-Nitrophenol	5.0	Not Detected 1R
2,4-Dimethylphenol	5.0	Not Detected 1R
bis(2-Chloroethoxy) Methane	1.0	Not Detected 1R
2,4-Dichlorophenol	5.0	Not Detected 1R
1,2,4-Trichlorobenzene	1.0	Not Detected 1R
Naphthalene	1.0	30 15
4-Chloroaniline	10	Not Detected 1R
Hexachlorobutadiene	1.0	1.5 15
4-Chloro-3-methylphenol	5.0	Not Detected 1R
2-Methylnaphthalene	1.0	11 15
Hexachlorocyclopentadiene	20	Not Detected 1R
2,4,6-Trichlorophenol	5.0	Not Detected 1R
2,4,5-Trichlorophenol	5.0	Not Detected 1R
2-Chloronaphthalene	1.0	Not Detected 1R
2-Nitroaniline	10	Not Detected 1R
Dimethylphthalate	5.0	Not Detected 1R
Acenaphthylene	1.0	Not Detected 1R
2,6-Dinitrotoluene	5.0	Not Detected 1R
3-Nitroaniline	10	Not Detected 1R
Acenaphthene	1.0	Not Detected 1R
2,4-Dinitrophenol	20	Not Detected 1R
4-Nitrophenol	20	Not Detected 1R
2,4-Dinitrotoluene	5.0	Not Detected 1R
Dibenzofuran	1.0	Not Detected 1R
Diethylphthalate	5.0	Not Detected 1R
Fluorene	1.0	Not Detected 1R
4-Chlorophenyl-phenyl Ether	1.0	Not Detected 1R
4-Nitroaniline	10	Not Detected 1R
4,6-Dinitro-2-methylphenol	10	Not Detected 1R

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 MAY18 Duplicate

ID#: 0405299-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected /R
4-Bromophenyl-phenyl Ether	1.0	Not Detected /R
Hexachlorobenzene	1.0	Not Detected /R
Pentachlorophenol	20	Not Detected /R
Phenanthrene	1.0	Not Detected /R
Anthracene	1.0	Not Detected /R
di-n-Butylphthalate	5.0	1.2 J /5B
Fluoranthene	1.0	Not Detected /R
Pyrene	1.0	Not Detected /R
Butylbenzylphthalate	5.0	Not Detected /R
3,3'-Dichlorobenzidine	20	Not Detected /R
Chrysene	1.0	Not Detected /R
Benzo(a)anthracene	1.0	Not Detected /R
bis(2-Ethylhexyl)phthalate	5.0	Not Detected /R
Di-n-Octylphthalate	5.0	Not Detected /R
Benzo(b)fluoranthene	1.0	Not Detected /R
Benzo(k)fluoranthene	1.0	Not Detected /R
Benzo(a)pyrene	1.0	Not Detected /R
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected /R
Dibenz(a,h)anthracene	1.0	Not Detected /R
Benzo(g,h,i)perylene	1.0	Not Detected /R

J = Estimated value.

* Not reportable due to matrix interference.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	0 *	50-150
Phenol-d5	69	50-150
Nitrobenzene-d5	0 *	50-150
2,4,6-Tribromophenol	67	50-150
Fluorene-d10	81	60-120
Pyrene-d10	81	60-120

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 OFS1 IN1 MAY18

ID#: 0405299-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)	
Phenol	5.0	4.0 J	15
bis(2-Chloroethyl) Ether	1.0	3.1	15
2-Chlorophenol	5.0	Not Detected	1R
1,3-Dichlorobenzene	1.0	2.6	15
1,4-Dichlorobenzene	1.0	8.0	15
1,2-Dichlorobenzene	1.0	47	15
2-Methylphenol (o-Cresol)	5.0	Not Detected	1R
N-Nitroso-di-n-propylamine	1.0	Not Detected	1R
4-Methylphenol/3-Methylphenol	5.0	1.7 J	15
Hexachloroethane	1.0	Not Detected	1R
Nitrobenzene	1.0	Not Detected	1R
Isophorone	1.0	9.3	15
2-Nitrophenol	5.0	Not Detected	1R
2,4-Dimethylphenol	5.0	Not Detected	1R
bis(2-Chloroethoxy) Methane	1.0	Not Detected	1R
2,4-Dichlorophenol	5.0	Not Detected	1R
1,2,4-Trichlorobenzene	1.0	1.2	15
Naphthalene	1.0	38	1J
4-Chloroaniline	10	Not Detected	1R
Hexachlorobutadiene	1.0	2.6	15
4-Chloro-3-methylphenol	5.0	Not Detected	1R
2-Methylnaphthalene	1.0	7.2	15
Hexachlorocyclopentadiene	20	Not Detected	1R
2,4,6-Trichlorophenol	5.0	Not Detected	1R
2,4,5-Trichlorophenol	5.0	Not Detected	1R
2-Chloronaphthalene	1.0	Not Detected	1R
2-Nitroaniline	10	Not Detected	1R
Dimethylphthalate	5.0	Not Detected	1R
Acenaphthylene	1.0	Not Detected	1R
2,6-Dinitrotoluene	5.0	Not Detected	1R
3-Nitroaniline	10	Not Detected	1R
Acenaphthene	1.0	Not Detected	1R
2,4-Dinitrophenol	20	Not Detected	1R
4-Nitrophenol	20	Not Detected	1R
2,4-Dinitrotoluene	5.0	Not Detected	1R
Dibenzofuran	1.0	Not Detected	1R
Diethylphthalate	5.0	Not Detected	1R
Fluorene	1.0	Not Detected	1R
4-Chlorophenyl-phenyl Ether	1.0	Not Detected	1R
4-Nitroaniline	10	Not Detected	1R
4,6-Dinitro-2-methylphenol	10	Not Detected	1R

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 OFS1 IN1 MAY18

ID#: 0405299-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected /R
4-Bromophenyl-phenyl Ether	1.0	Not Detected /R
Hexachlorobenzene	1.0	Not Detected /R
Pentachlorophenol	20	Not Detected /R
Phenanthrene	1.0	Not Detected /R
Anthracene	1.0	Not Detected /R
di-n-Butylphthalate	5.0	1.4 J /JB
Fluoranthene	1.0	Not Detected /R
Pyrene	1.0	Not Detected /R
Butylbenzylphthalate	5.0	Not Detected /R
3,3'-Dichlorobenzidine	20	Not Detected /R
Chrysene	1.0	Not Detected /R
Benzo(a)anthracene	1.0	Not Detected /R
bis(2-Ethylhexyl)phthalate	5.0	1.4 J /J
Di-n-Octylphthalate	5.0	Not Detected /R
Benzo(b)fluoranthene	1.0	Not Detected /R
Benzo(k)fluoranthene	1.0	Not Detected /R
Benzo(a)pyrene	1.0	Not Detected /R
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected /R
Dibenz(a,h)anthracene	1.0	Not Detected /R
Benzo(g,h,i)perylene	1.0	Not Detected /R

J = Estimated value.

* Not reportable due to matrix interference.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	0 *	50-150
Phenol-d5	69	50-150
Nitrobenzene-d5	0 *	50-150
2,4,6-Tribromophenol	60	50-150
Fluorene-d10	70	60-120
Pyrene-d10	73	60-120

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN1 MAY18

ID#: 0405299-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	1.7 J /5
bis(2-Chloroethyl) Ether	1.0	1.9 /5
2-Chlorophenol	5.0	Not Detected /R
1,3-Dichlorobenzene	1.0	2.7 /5
1,4-Dichlorobenzene	1.0	8.4 /5
1,2-Dichlorobenzene	1.0	41 /5
2-Methylphenol (o-Cresol)	5.0	Not Detected /R
N-Nitroso-di-n-propylamine	1.0	Not Detected /R
4-Methylphenol/3-Methylphenol	5.0	Not Detected /R
Hexachloroethane	1.0	Not Detected /R
Nitrobenzene	1.0	Not Detected /R
Isophorone	1.0	4.3 /5
2-Nitrophenol	5.0	Not Detected /R
2,4-Dimethylphenol	5.0	Not Detected /R
bis(2-Chloroethoxy) Methane	1.0	Not Detected /R
2,4-Dichlorophenol	5.0	Not Detected /R
1,2,4-Trichlorobenzene	1.0	0.46 J /5
Naphthalene	1.0	34 /5
4-Chloroaniline	10	Not Detected /R
Hexachlorobutadiene	1.0	1.8 /5
4-Chloro-3-methylphenol	5.0	Not Detected /R
2-Methylnaphthalene	1.0	9.5 /5
Hexachlorocyclopentadiene	20	Not Detected /R
2,4,6-Trichlorophenol	5.0	Not Detected /R
2,4,5-Trichlorophenol	5.0	Not Detected /R
2-Chloronaphthalene	1.0	Not Detected /R
2-Nitroaniline	10	Not Detected /R
Dimethylphthalate	5.0	Not Detected /R
Acenaphthylene	1.0	Not Detected /R
2,6-Dinitrotoluene	5.0	Not Detected /R
3-Nitroaniline	10	Not Detected /R
Acenaphthene	1.0	Not Detected /R
2,4-Dinitrophenol	20	Not Detected /R
4-Nitrophenol	20	Not Detected /R
2,4-Dinitrotoluene	5.0	Not Detected /R
Dibenzofuran	1.0	Not Detected /R
Diethylphthalate	5.0	Not Detected /R
Fluorene	1.0	Not Detected /R
4-Chlorophenyl-phenyl Ether	1.0	Not Detected /R
4-Nitroaniline	10	Not Detected /R
4,6-Dinitro-2-methylphenol	10	Not Detected /R

CRS 6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN1 MAY18

ID#: 0405299-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected /R
4-Bromophenyl-phenyl Ether	1.0	Not Detected /R
Hexachlorobenzene	1.0	Not Detected /R
Pentachlorophenol	20	Not Detected /R
Phenanthrene	1.0	Not Detected /R
Anthracene	1.0	Not Detected /R
di-n-Butylphthalate	5.0	1.1 J /JB
Fluoranthene	1.0	Not Detected /R ~~/J~~ CRS
Pyrene	1.0	Not Detected /R ~~/J~~
Butylbenzylphthalate	5.0	Not Detected /R ~~/J~~
3,3'-Dichlorobenzidine	20	Not Detected /R
Chrysene	1.0	Not Detected /R
Benzo(a)anthracene	1.0	Not Detected /R
bis(2-Ethylhexyl)phthalate	5.0	0.82 J /J
Di-n-Octylphthalate	5.0	Not Detected /R
Benzo(b)fluoranthene	1.0	Not Detected /R
Benzo(k)fluoranthene	1.0	Not Detected /R
Benzo(a)pyrene	1.0	Not Detected /R
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected /R
Dibenz(a,h)anthracene	1.0	Not Detected /R
Benzo(g,h,i)perylene	1.0	Not Detected /R

J = Estimated value.

* Not reportable due to matrix interference.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	0 *	50-150
Phenol-d5	62	50-150
Nitrobenzene-d5	0 *	50-150
2,4,6-Tribromophenol	59	50-150
Fluorene-d10	72	60-120
Pyrene-d10	77	60-120

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 MAY18

ID#: 0405299-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	3.0 J /5
bis(2-Chloroethyl) Ether	1.0	3.1 /5
2-Chlorophenol	5.0	Not Detected /R
1,3-Dichlorobenzene	1.0	4.1 /5
1,4-Dichlorobenzene	1.0	13 /5
1,2-Dichlorobenzene	1.0	58 /5
2-Methylphenol (o-Cresol)	5.0	Not Detected /R
N-Nitroso-di-n-propylamine	1.0	Not Detected /R
4-Methylphenol/3-Methylphenol	5.0	Not Detected /R
Hexachloroethane	1.0	Not Detected /R
Nitrobenzene	1.0	Not Detected /R
Isophorone	1.0	5.5 /5
2-Nitrophenol	5.0	Not Detected /R
2,4-Dimethylphenol	5.0	Not Detected /R
bis(2-Chloroethoxy) Methane	1.0	Not Detected /R
2,4-Dichlorophenol	5.0	Not Detected /R
1,2,4-Trichlorobenzene	1.0	0.75 J /5
Naphthalene	1.0	52 /5
4-Chloroaniline	10	Not Detected /R
Hexachlorobutadiene	1.0	3.2 /5
4-Chloro-3-methylphenol	5.0	Not Detected /R
2-Methylnaphthalene	1.0	16 /5
Hexachlorocyclopentadiene	20	Not Detected /R
2,4,6-Trichlorophenol	5.0	Not Detected /R
2,4,5-Trichlorophenol	5.0	Not Detected /R
2-Chloronaphthalene	1.0	Not Detected /R
2-Nitroaniline	10	Not Detected /R
Dimethylphthalate	5.0	Not Detected /R
Acenaphthylene	1.0	Not Detected /R
2,6-Dinitrotoluene	5.0	Not Detected /R
3-Nitroaniline	10	Not Detected /R
Acenaphthene	1.0	Not Detected /R
2,4-Dinitrophenol	20	Not Detected /R
4-Nitrophenol	20	Not Detected /R
2,4-Dinitrotoluene	5.0	Not Detected /R
Dibenzofuran	1.0	Not Detected /R
Diethylphthalate	5.0	0.62 J /5
Fluorene	1.0	Not Detected /R
4-Chlorophenyl-phenyl Ether	1.0	Not Detected /R
4-Nitroaniline	10	Not Detected /R
4,6-Dinitro-2-methylphenol	10	Not Detected /R

CRS 6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 MAY18

ID#: 0405299-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected /R
4-Bromophenyl-phenyl Ether	1.0	Not Detected /R
Hexachlorobenzene	1.0	Not Detected /R
Pentachlorophenol	20	Not Detected /R
Phenanthrene	1.0	Not Detected /R
Anthracene	1.0	Not Detected /R
di-n-Butylphthalate	5.0	2.0 J /JB
Fluoranthene	1.0	Not Detected /R
Pyrene	1.0	Not Detected /R
Butylbenzylphthalate	5.0	Not Detected /R
3,3'-Dichlorobenzidine	20	Not Detected /R
Chrysene	1.0	Not Detected /R
Benzo(a)anthracene	1.0	Not Detected /R
bis(2-Ethylhexyl)phthalate	5.0	0.98 J /S
Di-n-Octylphthalate	5.0	Not Detected /R
Benzo(b)fluoranthene	1.0	Not Detected /R
Benzo(k)fluoranthene	1.0	Not Detected /R
Benzo(a)pyrene	1.0	Not Detected /R
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected /R
Dibenz(a,h)anthracene	1.0	Not Detected /R
Benzo(g,h,i)perylene	1.0	Not Detected /R

J = Estimated value.

* Not reportable due to matrix interference.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	0 *	50-150
Phenol-d5	79	50-150
Nitrobenzene-d5	0 *	50-150
2,4,6-Tribromophenol	72	50-150
Fluorene-d10	80	60-120
Pyrene-d10	80	60-120

CRS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF1 MAY18

ID#: 0405299-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	Not Detected
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.58 J 15
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

OKS
6/15/04

AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF1 MAY18

ID#: 0405299-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	1.8 J 1513
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	6.7
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	54	50-150
Phenol-d5	63	50-150
Nitrobenzene-d5	59	50-150
2,4,6-Tribromophenol	69	50-150
Fluorene-d10	72	60-120
Pyrene-d10	80	60-120

CRS
6/15/04

June 17, 2004 Off-Gas Sample Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 JUN17

ID#: 0406328A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	4500	2800 J /5	12000	7200 J
Bromomethane	4500	Not Detected	18000	Not Detected
Chloroethane	4500	Not Detected	12000	Not Detected
1,1-Dichloroethene	4500	2200 J /5	18000	8700 J
Methylene Chloride	4500	24000	16000	86000
1,1-Dichloroethane	4500	12000	18000	50000
cis-1,2-Dichloroethene	4500	140000	18000	580000
Chloroform	4500	7200	22000	36000
1,1,1-Trichloroethane	4500	180000	25000	1000000
Carbon Tetrachloride	4500	Not Detected	28000	Not Detected
Benzene	4500	95000	14000	310000
1,2-Dichloroethane	4500	1600 J /5	18000	6700 J
Trichloroethene	4500	170000	24000	920000
1,2-Dichloropropane	4500	3600 J /5	21000	17000 J
cis-1,3-Dichloropropene	4500	Not Detected	20000	Not Detected
Toluene	4500	1200000	17000	4500000
trans-1,3-Dichloropropene	4500	Not Detected	20000	Not Detected
1,1,2-Trichloroethane	4500	Not Detected	25000	Not Detected
Tetrachloroethene	4500	310000	31000	2100000
Chlorobenzene	4500	1000 J /5	21000	4700 J
Ethyl Benzene	4500	160000	20000	720000
m,p-Xylene	4500	630000	20000	2800000
o-Xylene	4500	190000	20000	850000
Styrene	4500	Not Detected	19000	Not Detected
1,1,2,2-Tetrachloroethane	4500	Not Detected	31000	Not Detected
Bromodichloromethane	4500	Not Detected	30000	Not Detected
Dibromochloromethane	4500	Not Detected	39000	Not Detected
Chloromethane	18000	Not Detected	37000	Not Detected
Acetone	18000	6200 J /5	43000	15000 J
Carbon Disulfide	18000	1900 J /5	56000	6000 J
trans-1,2-Dichloroethene	18000	Not Detected	72000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	18000	3900 J /5	54000	12000 J
4-Methyl-2-pentanone	18000	3000 J /5	74000	12000 J
2-Hexanone	18000	Not Detected	74000	Not Detected
Bromoform	18000	Not Detected	190000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 JUN17

ID#: 0406328A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130

Chuck
8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 JUN17

ID#: 0406328A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2680	[illegible]	[illegible]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1300	Not Detected	3500	Not Detected
Bromomethane	1300	Not Detected	5300	Not Detected
Chloroethane	1300	Not Detected	3600	Not Detected
1,1-Dichloroethene	1300	360 J /5	5400	1500 J
Methylene Chloride	1300	48000	4700	170000
1,1-Dichloroethane	1300	9000	5500	37000
cis-1,2-Dichloroethene	1300	9500	5400	38000
Chloroform	1300	4200	6600	21000
1,1,1-Trichloroethane	1300	73000	7400	400000
Carbon Tetrachloride	1300	Not Detected	8600	Not Detected
Benzene	1300	48000	4400	150000
1,2-Dichloroethane	1300	2500	5500	10000
Trichloroethene	1300	45000	7300	240000
1,2-Dichloropropane	1300	900 J /5	6300	4200 J
cis-1,3-Dichloropropene	1300	Not Detected	6200	Not Detected
Toluene	1300	280000	5100	1000000
trans-1,3-Dichloropropene	1300	Not Detected	6200	Not Detected
1,1,2-Trichloroethane	1300	390 J /5	7400	2200 J
Tetrachloroethene	1300	55000	9200	380000
Chlorobenzene	1300	Not Detected	6300	Not Detected
Ethyl Benzene	1300	30000	5900	130000
m,p-Xylene	1300	130000	5900	580000
o-Xylene	1300	43000	5900	190000
Styrene	1300	Not Detected	5800	Not Detected
1,1,2,2-Tetrachloroethane	1300	Not Detected	9400	Not Detected
Bromodichloromethane	1300	Not Detected	9100	Not Detected
Dibromochloromethane	1300	Not Detected	12000	Not Detected
Chloromethane	5400	Not Detected	11000	Not Detected
Acetone	5400	42000	13000	100000
Carbon Disulfide	5400	2600 J /5	17000	8300 J
trans-1,2-Dichloroethene	5400	Not Detected	22000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5400	33000	16000	100000
4-Methyl-2-pentanone	5400	15000	22000	62000
2-Hexanone	5400	670 J /5	22000	2800 J
Bromoform	5400	Not Detected	56000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130

2/12/14

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 JUN17

ID#: 0406328A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	100	70-130

Check
8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 JUN17

ID#: 0406328A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name	[illegible]	Date of Collection	[illegible]
Dil. Factor	[illegible]	Date of Analysis	[illegible]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	2700	1800 J /5	7100	4700 J
Bromomethane	2700	Not Detected	11000	Not Detected
Chloroethane	2700	1400 J /5	7300	3600 J
1,1-Dichloroethene	2700	660 J /5	11000	2600 J
Methylene Chloride	2700	30000	9600	100000
1,1-Dichloroethane	2700	8400	11000	34000
cis-1,2-Dichloroethene	2700	62000	11000	250000
Chloroform	2700	4600	13000	23000
1,1,1-Trichloroethane	2700	100000	15000	570000
Carbon Tetrachloride	2700	Not Detected	17000	Not Detected
Benzene	2700	57000	8800	180000
1,2-Dichloroethane	2700	1800 J /5	11000	7300 J
Trichloroethene	2700	79000	15000	430000
1,2-Dichloropropane	2700	1700 J /5	13000	7900 J
cis-1,3-Dichloropropene	2700	Not Detected	12000	Not Detected
Toluene	2700	520000	10000	2000000
trans-1,3-Dichloropropene	2700	Not Detected	12000	Not Detected
1,1,2-Trichloroethane	2700	Not Detected	15000	Not Detected
Tetrachloroethene	2700	130000	19000	870000
Chlorobenzene	2700	Not Detected	13000	Not Detected
Ethyl Benzene	2700	65000	12000	280000
m,p-Xylene	2700	250000	12000	1100000
o-Xylene	2700	77000	12000	340000
Styrene	2700	Not Detected	12000	Not Detected
1,1,2,2-Tetrachloroethane	2700	Not Detected	19000	Not Detected
Bromodichloromethane	2700	Not Detected	18000	Not Detected
Dibromochloromethane	2700	Not Detected	24000	Not Detected
Chloromethane	11000	Not Detected	23000	Not Detected
Acetone	11000	21000	26000	51000
Carbon Disulfide	11000	1400 J /5	34000	4400 J
trans-1,2-Dichloroethene	11000	Not Detected	44000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	11000	15000	33000	44000
4-Methyl-2-pentanone	11000	6900 J /5	45000	29000 J
2-Hexanone	11000	Not Detected	45000	Not Detected
Bromoform	11000	Not Detected	110000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	101	70-130

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 JUN17

ID#: 0406328A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	101	70-130

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 JUN17

ID#: 0406328A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	10[illegible]	Date of Collection: [illegible]
Dil. Factor:	5[illegible]	Date of Analysis: [illegible]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	2800	2500 J /5	7300	6500 J
Bromomethane	2800	Not Detected	11000	Not Detected
Chloroethane	2800	2000 J /5	7600	5500 J
1,1-Dichloroethene	2800	700 J /5	11000	2800 J
Methylene Chloride	2800	34000	10000	120000
1,1-Dichloroethane	2800	10000	12000	42000
cis-1,2-Dichloroethene	2800	73000	11000	300000
Chloroform	2800	5200	14000	26000
1,1,1-Trichloroethane	2800	120000	16000	660000
Carbon Tetrachloride	2800	Not Detected	18000	Not Detected
Benzene	2800	67000	9200	220000
1,2-Dichloroethane	2800	1900 J /5	12000	7900 J
Trichloroethene	2800	94000	15000	510000
1,2-Dichloropropane	2800	1900 J /5	13000	8800 J
cis-1,3-Dichloropropene	2800	Not Detected	13000	Not Detected
Toluene	2800	630000	11000	2400000
trans-1,3-Dichloropropene	2800	Not Detected	13000	Not Detected
1,1,2-Trichloroethane	2800	560 J /5	16000	3100 J
Tetrachloroethene	2800	160000	19000	1100000
Chlorobenzene	2800	Not Detected	13000	Not Detected
Ethyl Benzene	2800	81000	12000	360000
m,p-Xylene	2800	320000	12000	1400000
o-Xylene	2800	99000	12000	440000
Styrene	2800	Not Detected	12000	Not Detected
1,1,2,2-Tetrachloroethane	2800	Not Detected	20000	Not Detected
Bromodichloromethane	2800	Not Detected	19000	Not Detected
Dibromochloromethane	2800	Not Detected	24000	Not Detected
Chloromethane	11000	Not Detected	24000	Not Detected
Acetone	11000	22000	27000	53000
Carbon Disulfide	11000	1300 J /5	36000	4000 J
trans-1,2-Dichloroethene	11000	Not Detected	45000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	11000	17000	34000	52000
4-Methyl-2-pentanone	11000	8700 J /5	47000	36000 J
2-Hexanone	11000	Not Detected	47000	Not Detected
Bromoform	11000	Not Detected	120000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130

Ch 6/13/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 JUN17

ID#: 0406328A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130

2/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 JUN17

ID#: 0406328A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	34	91	88	240
Bromomethane	34	Not Detected	130	Not Detected
Chloroethane	34	37 15	91	100
1,1-Dichloroethene	34	570	140	2300
Methylene Chloride	34	560	120	2000
1,1-Dichloroethane	34	130	140	540
cis-1,2-Dichloroethene	34	1100	140	4300
Chloroform	34	100	170	500
1,1,1-Trichloroethane	34	1200	190	7000
Carbon Tetrachloride	34	3.7 J 15	220	24 J
Benzene	34	1400	110	4500
1,2-Dichloroethane	34	29 J 15	140	120 J
Trichloroethene	34	1500	180	8400
1,2-Dichloropropane	34	23 J 15	160	110 J
cis-1,3-Dichloropropene	34	Not Detected	160	Not Detected
Toluene	34	8700	130	33000
trans-1,3-Dichloropropene	34	Not Detected	160	Not Detected
1,1,2-Trichloroethane	34	Not Detected	190	Not Detected
Tetrachloroethene	34	2800	230	19000
Chlorobenzene	34	19 J 15	160	89 J
Ethyl Benzene	34	1100	150	4700
m,p-Xylene	34	4000	150	18000
o-Xylene	34	1300	150	5600
Styrene	34	330	150	1400
1,1,2,2-Tetrachloroethane	34	Not Detected	240	Not Detected
Bromodichloromethane	34	Not Detected	230	Not Detected
Dibromochloromethane	34	Not Detected	290	Not Detected
Chloromethane	140	130 J 15	280	280
Acetone	140	550	330	1300
Carbon Disulfide	140	Not Detected	430	Not Detected
trans-1,2-Dichloroethene	140	120 J 15	550	490 J
2-Butanone (Methyl Ethyl Ketone)	140	310	410	940
4-Methyl-2-pentanone	140	95 J 15	570	390 J
2-Hexanone	140	Not Detected	570	Not Detected
Bromoform	140	Not Detected	1400	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 JUN17

ID#: 0406328A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 JUN17 Duplicate

ID#: 0406328A-05AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	54	100	140	270
Bromomethane	54	Not Detected	220	Not Detected
Chloroethane	54	45 J 15	150	120 J
1,1-Dichloroethene	54	560	220	2200
Methylene Chloride	54	570	190	2000
1,1-Dichloroethane	54	130	220	540
cis-1,2-Dichloroethene	54	1000	220	4200
Chloroform	54	95	270	470
1,1,1-Trichloroethane	54	1200	300	6800
Carbon Tetrachloride	54	Not Detected	350	Not Detected
Benzene	54	1400	180	4500
1,2-Dichloroethane	54	29 J 15	220	120 J
Trichloroethene	54	1500	300	8400
1,2-Dichloropropane	54	22 J 15	260	100 J
cis-1,3-Dichloropropene	54	Not Detected	250	Not Detected
Toluene	54	8700	210	33000
trans-1,3-Dichloropropene	54	Not Detected	250	Not Detected
1,1,2-Trichloroethane	54	Not Detected	300	Not Detected
Tetrachloroethene	54	2700	380	19000
Chlorobenzene	54	20 J 15	260	92 J
Ethyl Benzene	54	1000	240	4600
m,p-Xylene	54	3900	240	17000
o-Xylene	54	1200	240	5300
Styrene	54	310	240	1300
1,1,2,2-Tetrachloroethane	54	Not Detected	380	Not Detected
Bromodichloromethane	54	Not Detected	370	Not Detected
Dibromochloromethane	54	Not Detected	470	Not Detected
Chloromethane	220	140 J 15	460	280 J
Acetone	220	640	530	1600
Carbon Disulfide	220	Not Detected	690	Not Detected
trans-1,2-Dichloroethene	220	120 J 15	880	470 J
2-Butanone (Methyl Ethyl Ketone)	220	380	650	1100
4-Methyl-2-pentanone	220	100 J 15	910	430 J
2-Hexanone	220	Not Detected	910	Not Detected
Bromoform	220	Not Detected	2300	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130

Clark 8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 JUN17 Duplicate

ID#: 0406328A-05AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 JUN17

ID#: 0406328B-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)	
Phenol	5.0	Not Detected	/R
bis(2-Chloroethyl) Ether	1.0	Not Detected	/R
2-Chlorophenol	5.0	Not Detected	/R
1,3-Dichlorobenzene	1.0	6.6	/5
1,4-Dichlorobenzene	1.0	17	/5
1,2-Dichlorobenzene	1.0	66	/5
2-Methylphenol (o-Cresol)	5.0	Not Detected	/R
N-Nitroso-di-n-propylamine	1.0	Not Detected	/R
4-Methylphenol/3-Methylphenol	5.0	Not Detected	/R
Hexachloroethane	1.0	Not Detected	/R
Nitrobenzene	1.0	Not Detected	/R
Isophorone	1.0	Not Detected	/R
2-Nitrophenol	5.0	Not Detected	/R
2,4-Dimethylphenol	5.0	Not Detected	/R
bis(2-Chloroethoxy) Methane	1.0	Not Detected	/R
2,4-Dichlorophenol	5.0	Not Detected	/R
1,2,4-Trichlorobenzene	1.0	Not Detected	/R
Naphthalene	1.0	31	/5
4-Chloroaniline	10	Not Detected	/R
Hexachlorobutadiene	1.0	1.6	/5
4-Chloro-3-methylphenol	5.0	Not Detected	/R
2-Methylnaphthalene	1.0	11	/5
Hexachlorocyclopentadiene	20	Not Detected	/R
2,4,6-Trichlorophenol	5.0	Not Detected	/R
2,4,5-Trichlorophenol	5.0	Not Detected	/R
2-Chloronaphthalene	1.0	Not Detected	/R
2-Nitroaniline	10	Not Detected	/R
Dimethylphthalate	5.0	Not Detected	/R
Acenaphthylene	1.0	Not Detected	/R
2,6-Dinitrotoluene	5.0	Not Detected	/R
3-Nitroaniline	10	Not Detected	/R
Acenaphthene	1.0	Not Detected	/R
2,4-Dinitrophenol	20	Not Detected	/R
4-Nitrophenol	20	Not Detected	/R
2,4-Dinitrotoluene	5.0	Not Detected	/R
Dibenzofuran	1.0	Not Detected	/R
Diethylphthalate	5.0	0.70 J	/5
Fluorene	1.0	Not Detected	/R
4-Chlorophenyl-phenyl Ether	1.0	Not Detected	/R
4-Nitroaniline	10	Not Detected	/R
4,6-Dinitro-2-methylphenol	10	Not Detected	/R

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 ONS1 IN1 JUN17

ID#: 0406328B-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected /R
4-Bromophenyl-phenyl Ether	1.0	Not Detected /R
Hexachlorobenzene	1.0	Not Detected /R
Pentachlorophenol	20	Not Detected /R
Phenanthrene	1.0	Not Detected /R
Anthracene	1.0	Not Detected /R
di-n-Butylphthalate	5.0	1.1 J /B
Fluoranthene	1.0	Not Detected /R
Pyrene	1.0	Not Detected /R
Butylbenzylphthalate	5.0	Not Detected /R
3,3'-Dichlorobenzidine	20	Not Detected /R
Chrysene	1.0	Not Detected /R
Benzo(a)anthracene	1.0	Not Detected /R
bis(2-Ethylhexyl)phthalate	5.0	Not Detected /R
Di-n-Octylphthalate	5.0	Not Detected /R
Benzo(b)fluoranthene	1.0	Not Detected /R
Benzo(k)fluoranthene	1.0	Not Detected /R
Benzo(a)pyrene	1.0	Not Detected /R
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected /R
Dibenz(a,h)anthracene	1.0	Not Detected /R
Benzo(g,h,i)perylene	1.0	Not Detected /R

J = Estimated value.
Q = Exceeds Quality Control limits.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	2.5 Q	50-150
Phenol-d5	70	50-150
Nitrobenzene-d5	64	50-150
2,4,6-Tribromophenol	66	50-150
Fluorene-d10	88	60-120
Pyrene-d10	79	60-120

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 JUN17

ID#: 0406328B-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	6.6	Not Detected
bis(2-Chloroethyl) Ether	1.3	Not Detected
2-Chlorophenol	6.6	Not Detected
1,3-Dichlorobenzene	1.3	3.8
1,4-Dichlorobenzene	1.3	14
1,2-Dichlorobenzene	1.3	89
2-Methylphenol (o-Cresol)	6.6	Not Detected
N-Nitroso-di-n-propylamine	1.3	Not Detected
4-Methylphenol/3-Methylphenol	6.6	8.8
Hexachloroethane	1.3	Not Detected
Nitrobenzene	1.3	Not Detected
Isophorone	1.3	21
2-Nitrophenol	6.6	Not Detected
2,4-Dimethylphenol	6.6	3.6 J 15
bis(2-Chloroethoxy) Methane	1.3	Not Detected
2,4-Dichlorophenol	6.6	Not Detected
1,2,4-Trichlorobenzene	1.3	2.6
Naphthalene	1.3	75
4-Chloroaniline	13	Not Detected
Hexachlorobutadiene	1.3	5.1
4-Chloro-3-methylphenol	6.6	Not Detected
2-Methylnaphthalene	1.3	15
Hexachlorocyclopentadiene	27	Not Detected
2,4,6-Trichlorophenol	6.6	Not Detected
2,4,5-Trichlorophenol	6.6	Not Detected
2-Chloronaphthalene	1.3	Not Detected
2-Nitroaniline	13	Not Detected
Dimethylphthalate	6.6	Not Detected
Acenaphthylene	1.3	Not Detected
2,6-Dinitrotoluene	6.6	Not Detected
3-Nitroaniline	13	Not Detected
Acenaphthene	1.3	Not Detected
2,4-Dinitrophenol	27	Not Detected
4-Nitrophenol	27	Not Detected
2,4-Dinitrotoluene	6.6	Not Detected
Dibenzofuran	1.3	Not Detected
Diethylphthalate	6.6	Not Detected
Fluorene	1.3	Not Detected
4-Chlorophenyl-phenyl Ether	1.3	Not Detected
4-Nitroaniline	13	Not Detected
4,6-Dinitro-2-methylphenol	13	Not Detected

Ch 6/13/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 JUN17

ID#: 0406328B-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	13	Not Detected
4-Bromophenyl-phenyl Ether	1.3	Not Detected
Hexachlorobenzene	1.3	Not Detected
Pentachlorophenol	27	Not Detected
Phenanthrene	1.3	Not Detected
Anthracene	1.3	Not Detected
di-n-Butylphthalate	6.6	0.89 J /B
Fluoranthene	1.3	Not Detected
Pyrene	1.3	Not Detected
Butylbenzylphthalate	6.6	Not Detected
3,3'-Dichlorobenzidine	27	Not Detected
Chrysene	1.3	Not Detected
Benzo(a)anthracene	1.3	Not Detected
bis(2-Ethylhexyl)phthalate	6.6	2.0 J /5
Di-n-Octylphthalate	6.6	Not Detected
Benzo(b)fluoranthene	1.3	Not Detected
Benzo(k)fluoranthene	1.3	Not Detected
Benzo(a)pyrene	1.3	Not Detected
Indeno(1,2,3-c,d)pyrene	1.3	Not Detected
Dibenz(a,h)anthracene	1.3	Not Detected
Benzo(g,h,i)perylene	1.3	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	32 Q	50-150
Phenol-d5	74	50-150
Nitrobenzene-d5	54	50-150
2,4,6-Tribromophenol	66	50-150
Fluorene-d10	72	60-120
Pyrene-d10	69	60-120

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 JUN17 Duplicate

ID#: 0406328B-02AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	6.6	Not Detected
bis(2-Chloroethyl) Ether	1.3	Not Detected
2-Chlorophenol	6.6	Not Detected
1,3-Dichlorobenzene	1.3	3.8
1,4-Dichlorobenzene	1.3	14
1,2-Dichlorobenzene	1.3	90
2-Methylphenol (o-Cresol)	6.6	Not Detected
N-Nitroso-di-n-propylamine	1.3	Not Detected
4-Methylphenol/3-Methylphenol	6.6	9.0
Hexachloroethane	1.3	Not Detected
Nitrobenzene	1.3	Not Detected
Isophorone	1.3	23
2-Nitrophenol	6.6	Not Detected
2,4-Dimethylphenol	6.6	3.6 J 15
bis(2-Chloroethoxy) Methane	1.3	Not Detected
2,4-Dichlorophenol	6.6	Not Detected
1,2,4-Trichlorobenzene	1.3	2.6
Naphthalene	1.3	80
4-Chloroaniline	13	Not Detected
Hexachlorobutadiene	1.3	5.2
4-Chloro-3-methylphenol	6.6	Not Detected
2-Methylnaphthalene	1.3	15
Hexachlorocyclopentadiene	27	Not Detected
2,4,6-Trichlorophenol	6.6	Not Detected
2,4,5-Trichlorophenol	6.6	Not Detected
2-Chloronaphthalene	1.3	Not Detected
2-Nitroaniline	13	Not Detected
Dimethylphthalate	6.6	Not Detected
Acenaphthylene	1.3	Not Detected
2,6-Dinitrotoluene	6.6	Not Detected
3-Nitroaniline	13	Not Detected
Acenaphthene	1.3	Not Detected
2,4-Dinitrophenol	27	Not Detected
4-Nitrophenol	27	Not Detected
2,4-Dinitrotoluene	6.6	Not Detected
Dibenzofuran	1.3	Not Detected
Diethylphthalate	6.6	Not Detected
Fluorene	1.3	Not Detected
4-Chlorophenyl-phenyl Ether	1.3	Not Detected
4-Nitroaniline	13	Not Detected
4,6-Dinitro-2-methylphenol	13	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 OFS1 IN1 JUN17 Duplicate

ID#: 0406328B-02AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	13	Not Detected
4-Bromophenyl-phenyl Ether	1.3	Not Detected
Hexachlorobenzene	1.3	Not Detected
Pentachlorophenol	27	Not Detected
Phenanthrene	1.3	Not Detected
Anthracene	1.3	Not Detected
di-n-Butylphthalate	6.6	0.89 J /B
Fluoranthene	1.3	Not Detected
Pyrene	1.3	Not Detected
Butylbenzylphthalate	6.6	Not Detected
3,3'-Dichlorobenzidine	27	Not Detected
Chrysene	1.3	Not Detected
Benzo(a)anthracene	1.3	Not Detected
bis(2-Ethylhexyl)phthalate	6.6	2.2 J /5
Di-n-Octylphthalate	6.6	Not Detected
Benzo(b)fluoranthene	1.3	Not Detected
Benzo(k)fluoranthene	1.3	Not Detected
Benzo(a)pyrene	1.3	Not Detected
Indeno(1,2,3-c,d)pyrene	1.3	Not Detected
Dibenz(a,h)anthracene	1.3	Not Detected
Benzo(g,h,i)perylene	1.3	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	32 Q	50-150
Phenol-d5	75	50-150
Nitrobenzene-d5	54	50-150
2,4,6-Tribromophenol	68	50-150
Fluorene-d10	79	60-120
Pyrene-d10	69	60-120

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 JUN17

ID#: 0406328B-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	[illegible]	Date of Collection: [illegible]
Dil. Factor:	[illegible]	Date of Analysis: [illegible]
		Date of Extraction: [illegible]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	2.1
1,4-Dichlorobenzene	1.0	6.4
1,2-Dichlorobenzene	1.0	36
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	2.0 J 15
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	5.4
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.46 J 15
Naphthalene	1.0	26
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	1.3
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	6.1
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

8/3/14

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN1 JUN17

ID#: 0406328B-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	1.0 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	2.3 J /5
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	12 Q	50-150
Phenol-d5	72	50-150
Nitrobenzene-d5	60	50-150
2,4,6-Tribromophenol	72	50-150
Fluorene-d10	77	60-120
Pyrene-d10	69	60-120

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 JUN17

ID#: 0406328B-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	10	Not Detected
bis(2-Chloroethyl) Ether	2.0	Not Detected
2-Chlorophenol	10	Not Detected
1,3-Dichlorobenzene	2.0	6.9
1,4-Dichlorobenzene	2.0	22
1,2-Dichlorobenzene	2.0	120
2-Methylphenol (o-Cresol)	10	Not Detected
N-Nitroso-di-n-propylamine	2.0	Not Detected
4-Methylphenol/3-Methylphenol	10	7.2 J /5
Hexachloroethane	2.0	Not Detected
Nitrobenzene	2.0	Not Detected
Isophorone	2.0	16
2-Nitrophenol	10	Not Detected
2,4-Dimethylphenol	10	Not Detected
bis(2-Chloroethoxy) Methane	2.0	Not Detected
2,4-Dichlorophenol	10	Not Detected
1,2,4-Trichlorobenzene	2.0	1.7 J /5
Naphthalene	2.0	94
4-Chloroaniline	20	Not Detected
Hexachlorobutadiene	2.0	4.5
4-Chloro-3-methylphenol	10	Not Detected
2-Methylnaphthalene	2.0	25
Hexachlorocyclopentadiene	40	Not Detected
2,4,6-Trichlorophenol	10	Not Detected
2,4,5-Trichlorophenol	10	Not Detected
2-Chloronaphthalene	2.0	Not Detected
2-Nitroaniline	20	Not Detected
Dimethylphthalate	10	Not Detected
Acenaphthylene	2.0	Not Detected
2,6-Dinitrotoluene	10	Not Detected
3-Nitroaniline	20	Not Detected
Acenaphthene	2.0	Not Detected
2,4-Dinitrophenol	40	Not Detected
4-Nitrophenol	40	Not Detected
2,4-Dinitrotoluene	10	Not Detected
Dibenzofuran	2.0	Not Detected
Diethylphthalate	10	Not Detected
Fluorene	2.0	Not Detected
4-Chlorophenyl-phenyl Ether	2.0	Not Detected
4-Nitroaniline	20	Not Detected
4,6-Dinitro-2-methylphenol	20	Not Detected

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 IN2 JUN17

ID#: 0406328B-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	20	Not Detected
4-Bromophenyl-phenyl Ether	2.0	Not Detected
Hexachlorobenzene	2.0	Not Detected
Pentachlorophenol	40	Not Detected
Phenanthrene	2.0	Not Detected
Anthracene	2.0	Not Detected
di-n-Butylphthalate	10	0.89 J /B
Fluoranthene	2.0	Not Detected
Pyrene	2.0	Not Detected
Butylbenzylphthalate	10	Not Detected
3,3'-Dichlorobenzidine	40	Not Detected
Chrysene	2.0	Not Detected
Benzo(a)anthracene	2.0	Not Detected
bis(2-Ethylhexyl)phthalate	10	8.6 J /J
Di-n-Octylphthalate	10	Not Detected
Benzo(b)fluoranthene	2.0	Not Detected
Benzo(k)fluoranthene	2.0	Not Detected
Benzo(a)pyrene	2.0	Not Detected
Indeno(1,2,3-c,d)pyrene	2.0	Not Detected
Dibenz(a,h)anthracene	2.0	Not Detected
Benzo(g,h,i)perylene	2.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	16 Q	50-150
Phenol-d5	79	50-150
Nitrobenzene-d5	56	50-150
2,4,6-Tribromophenol	64	50-150
Fluorene-d10	76	60-120
Pyrene-d10	69	60-120

8/3/04

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 JUN17

ID#: 0406328B-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	
		[redacted]	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	0.53 J
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	0.27 J
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.62 J
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: ACS TO2 EFF1 JUN17

ID#: 0406328B-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	1.1 J /5
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.7 J /5
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.
Q = Exceeds Quality Control limits.
Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	52	50-150
Phenol-d5	58	50-150
Nitrobenzene-d5	55	50-150
2,4,6-Tribromophenol	61	50-150
Fluorene-d10	67	60-120
Pyrene-d10	58 Q	60-120

Ch 8/3/04