GROUNDWATER TREATMENT SYSTEM
QUARTERLY MONITORING REPORT
THIRD QUARTER 2002

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:

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February 2003

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Prepared by: Travis Klingforth — 2/28/03

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Date

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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.

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.

MWH began eight initial rounds of off-gas sampling of the catalytic oxidizer/scrubber described in the PSVP during April 2002. Sampling rounds four through eight were conducted during the third quarter 2002. In addition, two more off-gas samples were collected in August and September 2002.

The treated effluent from the treatment system is discharged to the nearby wetlands, west of the treatment system, in accordance with Agency approvals. This Groundwater Treatment System report summarizes effluent analytical data, catalytic oxidizer/scrubber off-gas analytical data, and water level gauging data collected from July 2002 through September 2002. This report also details modifications or upgrades to the GWTP during the reporting period.

2.0 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) requires quarterly effluent sampling for biological oxygen demand (BOD), total suspended solids (TSS), pH, SVOCs, metals, and polychlorinated biphenyls (PCBs) in the system, and monthly effluent sampling for VOCs, as shown in the table below.

During the past several years as the water treatment system has been modified and optimized, MWH has conducted sampling and analysis of all discharge regulated compounds on a monthly basis to maintain a closer documentation of system performance. The water treatment components are now functioning efficiently and showing stability in operation. Therefore, on June 5, 2002, MWH distributed a memorandum to the Agencies recommending that the sampling frequency be reduced to a monthly timeframe for volatile organic compounds (VOCs) and pH, and a quarterly timeframe for all other analytes, as specified in the PSVP. The Agencies agreed and in accordance with this plan, a full monthly effluent compliance sample was collected during July and analyzed for all of the analytes listed above. During August and September, the monthly effluent compliance samples were analyzed for VOCs and pH only.

Sampling and analyses were performed in accordance with the Quality Assurance Project Plan (QAPP) prepared by MWH for the ACS RD/RA Executive Committee in March 2001 and approved by the Agencies in November 2001. Quality control measures were also instituted in accordance with the PSVP and QAPP. 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 and pH	–	Continuous
BOD, TSS, SVOCs and Metals	181 days onward	Once per quarter
VOCs	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 third quarter 2002. Samples were collected on the following dates and analyzed for the listed analytes for this reporting period:

August 8, 2002	full analysis (pH, TSS, BOD, Metals, VOCs, SVOCs, pentachlorophenol, and PCBs)
August 29, 2002	pH and VOCs
September 26, 2002	pH and VOCs

The August 8, 2002 sample was originally collected on July 30, 2002, however it arrived at the laboratory above the holding temperature prescribed in the QAPP due to a shipping delay. Therefore, it was resampled on August 8, 2002.

The above samples were collected directly from a sample 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 sample containers were refrigerated 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 presented in Table 2.1 throughout the quarter. No exceedences were reported. The analytical data sheets for the compliance samples are provided in Appendix A.

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 OFF-GAS SAMPLING AND RESULTS

Off-Gas Sampling

Influent and effluent off-gas samples were collected from the catalytic oxidizer/scrubber unit (ME-106) in the GWTP six times during the third quarter 2002. These samples consisted of the final four of eight initial rounds planned for the catalytic oxidizer/scrubber unit and two additional rounds, Rounds 9 and 10. Samples collected during Rounds 1 through 8 were collected to comply with the PSVP and QAPP. Rounds 9 and 10 were performed to collect data for additional verification. Samples were collected on the following dates:

- July 2, 2002 (Round 5)
- July 12, 2002 (Round 6)
- July 18, 2002 (Round 7)
- July 25, 2002 (Round 8)
- August 8, 2002 (Round 9)
- September 30, 2002 (Round 10) – VOCs only

In accordance with the procedures of the PSVP, eight initial rounds of off-gas compliance sampling were collected from the catalytic oxidizer from April to July 2002. The catalytic oxidizer unit was sampled again in August and September 2002 (Rounds 9 and 10) while MWH evaluated the future catalytic oxidizer sampling frequency needs based on data from the initial eight rounds.

The sample collected on September 30, 2002 could only analyzed for VOCs due to a laboratory handling error that left the sample above the hold temperature prescribed in the QAPP for the other compounds.

The samples were collected directly from a sample tap on the influent and effluent lines of the catalytic oxidizer/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 the QAPP and laboratory guidelines. The VOC sample was collected using a summa canister and the SVOC sample was collected in sorbent tubes.

Following sample collection, the SVOC sample containers were refrigerated 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 for the following parameters by the following analytical methods:

Parameter	Analytical Method
VOCs	TO-14
SVOCs	TO-13

Sampling Results

The influent and effluent off-gas data summarized in Tables 2.3 and 2.4, verify that the off-gas from the catalytic oxidizer was less than the IDEM discharge limit of three pounds per hour VOC discharge throughout the quarter. For example, the VOC discharge reported from the July 2, 2002 sample was 0.009 pounds per hour, approximately 0.3 percent of the discharge limit. The analytical data sheets for the compliance samples are provided in Appendix B.

As the data from rounds one through eight indicate, the catalytic oxidizer is operating within it's permitted requirement of discharging less than three pounds of VOCs per day. The data from rounds 9 and 10 provide further verification. Therefore, the catalytic oxidizer will be sampled annually, in accordance with the PSVP and the applicable IDEM regulations. The next sample is tentatively scheduled to be collected during June 2003.

Air Toxics Laboratories of Folsom, California analyzed the samples. The analytical results are summarized in Tables 2.3 and 2.4. 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 2.3 and 2.4 and are written in the margin of the analytical data sheets provided in Appendix B.

3.0 TREATMENT SYSTEM PROCESS MODIFICATIONS

During the third quarter of 2002, minor modifications were made in the GWTP treatment system process. During July 2002, temporary piping was installed to distribute treated effluent from the GWTP to the On-Site Area and Off-Site Area for use in dust control during cover installation.

During August 2002, piping was installed in preparation for a heat exchanger pump system to be installed in Tank T-2. The heat exchanger pump system receives heated water from the in-situ soil vapor extraction system thermal oxidizer/scrubber. The heat exchanger was manufactured by Omega Thermo Products. A copy of the as-built fabrication drawing of the heat exchanger is included in Appendix C. To facilitate installation of the heat exchanger, tank T-2 was emptied, cleaned, and a 48-inch diameter manway was installed in its sidewall. Installation was performed by MWH and Ryan Construction personnel following the Site Health and Safety Plan (MWH, June 1999), including confined space entry procedures. Also, the activated sludge plant and aeration tank were insulated during August 2002. The insulation consists of three inches of R20 urethane foam that was installed by Momper Insulation. The insulation and heat exchanger system are designed to improve the treatment efficiency of the activated sludge plant and aeration tank during the winter months.

4.0 PGCS AND BWES GAUGING ACTIVITIES

The Perimeter Groundwater Containment System (PGCS) trench groundwater extraction wells were operated in "auto" mode continuously throughout the third quarter 2002. In "auto" mode, the PGCS extraction wells will pump continuously unless there is a high water level in Aeration Equalization Tank (T-102) or a low water level in individual extraction wells. This mode is used to control the flowrate through the treatment system. The GWTP also received influent from the Barrier Wall Extraction System (BWES) during the third quarter 2002.

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 presents a discussion on the groundwater elevation findings during the months of July, August, and September 2002. Groundwater elevation measurements were collected throughout the Site on September 9, 2002 as part of the groundwater monitoring program. The groundwater elevations and resulting contours outside the barrier wall are shown in Table 4.1 and on Figure 4.1. The water table contours shown on Figure 4.1 indicate that the PGCS continues to create a trough in the water table, which acts to contain groundwater flowing around the northern edge of the barrier wall.

The barrier wall was constructed to contain a contaminated zone under the Site, and the BWES was installed to collect the impacted water within the barrier wall. Piezometers were installed in pairs, one piezometer of each pair on either side of the barrier wall, spaced around the site. This allows measurement and tracking of water levels in order to ensure that the barrier wall is serving its designed function.

Table 4.2 presents the groundwater elevations inside and outside the barrier wall on September 9, 2002. They are illustrated on Figure 4.2. The groundwater elevation measurements were generally 1.57 feet to 7.08 feet higher outside the barrier wall. Only at two barrier wall pairs, P107/P108 and P114/P115, were the elevations higher inside the wall.

At On-Site Area piezometers P107 and P108 the water level was 1.57 feet higher inside the wall. This is due in part to the current focused dewatering of the Off-Site Area to allow for operation of the ISVE systems in the Off-Site Containment Area and Kapica-Pazmey Area, and due to seasonally low elevations outside the barrier wall. Also, there is no extraction trench near this area.

At Off-Site Area piezometers P114 and P115 the water level was 0.87 feet higher inside the wall. As MWH has actively dewatered the Site, especially the Off-Site Area, water table elevations at P114 have been steadily decreasing. The water level data measured outside the barrier wall during September were seasonally low. This is likely a temporary situation, as the water level measurement during March 2002 was several 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 from the known source areas of the Site inside the barrier wall. Due largely to the seasonally low groundwater levels outside the barrier wall, a few points showed outward gradients. However, MWH believes this is only a temporary situation, especially considering the consistently decreasing levels inside the barrier wall. MWH will continue to collect regular water level measurements across the Site as described in the PSVP.

To keep track of the groundwater table 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 4.3. Water levels were measured at seven piezometers in the On-Site Area regularly throughout the quarter (P29, P31, P32, P36, P49, P106, and P108). Water levels were measured at seven piezometers 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 are depicted graphically on Figures 4.3 and 4.4. The target water levels in each area are shown on these figures for reference. 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. The water levels inside the barrier wall are being lowered for proper operation of the in-situ soil vapor extraction (ISVE) systems.

TMK/CAS/JDP/RAA/PJV/jmf
J:\209\0603 ACS\0301 GWTP\6030301a022.doc
2090603.030102

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

Table 2.2
Summary of Effluent Analytical Results - Third Quarter 2002
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event Date	Month 62 8/8/02[1]	Month 63 8/29/02	Month 64 9/26/02	Effluent Limits	Lab Reporting
pH	7.51 /J	7.39	7.40	6-9	none
TSS	ND	NS	NS	30	10
BOD	ND	NS	NS	30	2
Arsenic	3.2 B/	NS	NS	50	3.4
Beryllium	ND	NS	NS	NE	0.2
Cadmium	ND	NS	NS	4.1	0.3
Manganese	5.8 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	ND	NS	NS	411	1.2
Benzene	ND	ND	ND	5	0.5
Acetone	2 JB/UBJ	3 B/UB	2 JB/3 UBJ	6,800	3
2-Butanone	ND /UJ	ND	ND	210	3
Chloromethane	ND	0.4 J/	ND	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	2	2 B/UBJ	2 B/UBJ	5	0.6
Tetrachloroethene	ND	ND	0.09 J/	5	0.5
Trichloroethene	ND	ND	0.1 J/J	5	0.5
Vinyl chloride	ND	ND	ND	2	0.5
4-Methyl-2-pentanone	ND /UJ	ND	ND	15	3
bis (2-Chloroethyl) ether	ND	NS	NS	9.6	9.6
bis(2-Ethylhexyl) - phthalate	0.76 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:

1 The July 30, 2002 sample could not be analyzed due because it arrived warm to the laboratory due to a shipping delay. It was resampled on August 8, 2002.

Data has been validated in accordance with the Project QAPP (November 2001) and the U.S. EPA National Functional Guidelines for Organic Data Review

Shaded cells indicate discharge exceedances

pH data is expressed in S.U.

TSS and BOD5 data is expressed in mg/L

Metals, VOC, SVOC and PCB data is expressed in ug/L

ND = Not detected

NS = This analyte was not sampled or analyzed for

NE = No effluent limit established.

NA = Sample not analyzed for this compound

DL = Detection Limit

* = 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 concentration and the compound is also detected in the method blank resulting in a potential high bias

U = Analyte is not detected at or above the indicated 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

Table 2.3
Summary of Catalytic Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 5 - Sampled 7/2/02					
		Analytical Data			Destruction Efficiency		
Compounds	**Units**	**Influent IN1**	**Influent IN2**	**Effluent EF1**	**Low**	**High**	**Average**
Method TO-14							
Chloromethane	ppbv	ND	ND	67	NC	NC	NC
Vinyl Chloride	ppbv	2,200	2,700	160	92.73%	94.07%	93.40%
Bromomethane	ppbv	ND	ND	ND	NC	NC	NC
Chloroethane	ppbv	1,200	1,400	85	92.92%	93.93%	93.42%
1,1-Dichloroethene	ppbv	14 J/J	16 J/J	10	NC	NC	NC
Methylene Chloride	ppbv	290	440	50	82.76%	88.64%	85.70%
1,1-Dichloroethane	ppbv	340	510	20	94.12%	96.08%	95.10%
cis-1,2-Dichloroethene	ppbv	3,900	5,000	320	91.79%	93.60%	92.70%
Chlororform	ppbv	5.6 J/J	7.0 J/J	0.64 J/J	NC	NC	NC
1,1,1-Trichloroethane	ppbv	160	240	5.7	96.44%	97.63%	97.03%
Carbon Tetrachloride	ppbv	ND	ND	ND	NC	NC	NC
Benzene	ppbv	7,000	9,300	690	90.14%	92.58%	91.36%
1,2-Dichloroethane	ppbv	ND	ND	ND	NC	NC	NC
Trichloroethene	ppbv	32	51	2.4 J/J	NC	NC	NC
1,2-Dichloropropane	ppbv	40	42	2.2 J/J	NC	NC	NC
cis-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
Toluene	ppbv	4,100	5,400	310	92.44%	94.26%	93.35%
trans-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	7.1 J/J	8.1 J/J	0.93 J/J	NC	NC	NC
Tetrachloroethene	ppbv	16 J/J	23 J/J	1.8 J/J	NC	NC	NC
Chlorobenzene	ppbv	240	330	21	91.25%	93.64%	92.44%
Ethylbenzene	ppbv	700	960	28	96.00%	97.08%	96.54%
m,p-Xylene	ppbv	3,400	5,000	160	95.29%	96.80%	96.05%
o-Xylene	ppbv	1,100	1,400	54	95.09%	96.14%	95.62%
Styrene	ppbv	36	ND	15	NC	58.33%	NC
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	0.74 J/J	NC	NC	NC
Acetone	ppbv	500	380	72	85.60%	81.05%	83.33%
Carbon Disulfide	ppbv	ND	ND	2.4 J/J	NC	NC	NC
trans-1,2-Dichloroethene	ppbv	ND	ND	15	NC	NC	NC
2-Butanone (MEK)	ppbv	32 J/J	31 J/J	30	NC	NC	NC
Bromodichloromethane	ppbv	ND	ND	ND	NC	NC	NC
4-Methyl-2-pentanone	ppbv	200	150	10 J/J	NC	NC	NC
2-Hexanone	ppbv	ND	ND	ND	NC	NC	NC
Dibromochloromethane	ppbv	ND	ND	ND	NC	NC	NC
Bromoform	ppbv	ND	ND	ND	NC	NC	NC
Total	**ppbv**	**24,198**	**33,303**	**2,113**	**91.27%**	**93.66%**	**92.46%**
Total	**lb/hr**	**0.115**	**0.152**	**0.009**	**NC**	**NC**	**NC**
IDEM Discharge Requirement	**lb/hr**			**3**	**NA**	**NA**	**NA**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
ppbv - parts per billion volume
Destruction efficiency is not calculated where influent and/or effluent values are estimated
Total VOCs in lb/hr calculation based on air flow rate of V = 330 acfm
Estimated values are not used to calculate total ppbv

Qualifiers:
J - Result is estimated

Table 2.3
Summary of Catalytic Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 6 - Sampled 7/12/02					
		Analytical Data			Destruction Efficiency		
Compounds	Units	Influent IN1	Influent IN2	Effluent EF1	Low	High	Average
Method TO-14							
Chloromethane	ppbv	1.9	2.3	1.4	26.32%	39.13%	32.72%
Vinyl Chloride	ppbv	63	23	4.2	81.74%	93.33%	87.54%
Bromomethane	ppbv	ND	ND	ND	NC	NC	NC
Chloroethane	ppbv	44	16	2.6	83.75%	94.09%	88.92%
1,1-Dichloroethene	ppbv	1.1 J/J	ND	1.4	NC	NC	NC
Methylene Chloride	ppbv	170	92	19	79.35%	88.82%	84.09%
1,1-Dichloroethane	ppbv	37	15	1.5	90.00%	95.95%	92.97%
cis-1,2-Dichloroethene	ppbv	220	100	14	86.00%	93.64%	89.82%
Chlororform	ppbv	3.1	1.5	0.39 J/J	NC	NC	NC
1,1,1-Trichloroethane	ppbv	28	8.8	0.88	90.00%	96.86%	93.43%
Carbon Tetrachloride	ppbv	ND	ND	ND	NC	NC	NC
Benzene	ppbv	180	66	20	69.70%	88.89%	79.29%
1,2-Dichloroethane	ppbv	6.5	4.2	ND	100.00%	100.00%	100.00%
Trichloroethene	ppbv	5.3	2.1	ND	100.00%	100.00%	100.00%
1,2-Dichloropropane	ppbv	2.5	1.2 J/J	ND	NC	100.00%	NC
cis-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
Toluene	ppbv	160	68	11	83.82%	93.13%	88.47%
trans-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	1.2 J/J	0.97 J/J	ND	NC	NC	NC
Tetrachloroethene	ppbv	1.4 J/J	ND	ND	NC	NC	NC
Chlorobenzene	ppbv	12	5.8	1.4	75.86%	88.33%	82.10%
Ethylbenzene	ppbv	43	17	2.2	87.06%	94.88%	90.97%
m,p-Xylene	ppbv	140	61	8.4	86.23%	94.00%	90.11%
o-Xylene	ppbv	56	22	2.5	88.64%	95.54%	92.09%
Styrene	ppbv	ND	ND	0.68 J/J	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	1.6 J/J	1.3	ND	NC	100.00%	NC
Acetone	ppbv	520	440	40	90.91%	92.31%	91.61%
Carbon Disulfide	ppbv	8.3	2.1 J/J	4.5	NC	45.78%	NC
trans-1,2-Dichloroethene	ppbv	ND	ND	1.0 J/J	NC	NC	NC
2-Butanone (MEK)	ppbv	210	94	17	81.91%	91.90%	86.91%
Bromodichloromethane	ppbv	ND	ND	ND	NC	NC	NC
4-Methyl-2-pentanone	ppbv	150	98	2.2 J/J	NC	NC	NC
2-Hexanone	ppbv	ND	ND	ND	NC	NC	NC
Dibromochloromethane	ppbv	ND	ND	ND	NC	NC	NC
Bromoform	ppbv	ND	ND	ND	NC	NC	NC
Total	**ppbv**	**2,061**	**1,138**	**152**	**92.62%**	**86.64%**	**89.63%**
Total	**lb/hr**	**0.009**	**0.005**	**0.001**	**NC**	**NC**	**NC**
IDEM Discharge Requirement	**lb/hr**			**3**	**NA**	**NA**	**NA**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
ppbv - parts per billion volume
Destruction efficiency is not calculated where influent and/or effluent values are estimated
Total VOCs in lb/hr calculation based on air flow rate of V = 330 acfm
Estimated values are not used to calculate total ppbv

Qualifiers:
J - Result is estimated

Table 2.3
Summary of Catalytic Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 7 - Sampled 7/18/02					
		Analytical Data			Destruction Efficiency		
Compounds	**Units**	**Influent IN1**	**Influent IN2**	**Effluent EF1**	**Low**	**High**	**Average**
Method TO-14							
Chloromethane	ppbv	ND	ND	36	NC	NC	NC
Vinyl Chloride	ppbv	940	590	130	77.97%	86.17%	82.07%
Bromomethane	ppbv	ND	ND	ND	NC	NC	NC
Chloroethane	ppbv	600	380	53	86.05%	91.17%	88.61%
1,1-Dichloroethene	ppbv	7.3 J/J	ND	15	NC	NC	NC
Methylene Chloride	ppbv	1,200	1,000	170	83.00%	85.83%	84.42%
1,1-Dichloroethane	ppbv	470	340	39	88.53%	91.70%	90.12%
cis-1,2-Dichloroethene	ppbv	6,600	5,100	600	88.24%	90.91%	89.57%
Chlororform	ppbv	7.4 J/J	5.7 J/J	1.1 J/J	NC	NC	NC
1,1,1-Trichloroethane	ppbv	110	68	7.4	89.12%	93.27%	91.20%
Carbon Tetrachloride	ppbv	ND	ND	ND	NC	NC	NC
Benzene	ppbv	3,400	2,000	440	78.00%	87.06%	82.53%
1,2-Dichloroethane	ppbv	98	71	6.2	91.27%	93.67%	92.47%
Trichloroethene	ppbv	40	24 J/J	4.8	NC	88.00%	NC
1,2-Dichloropropane	ppbv	64	50	4.4	91.20%	93.13%	92.16%
cis-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
Toluene	ppbv	3,000	1,900	250	86.84%	91.67%	89.25%
trans-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	7.6 J/J	6.8 J/J	0.86 J/J	NC	NC	NC
Tetrachloroethene	ppbv	14 J/J	7.4 J/J	3.0	NC	NC	NC
Chlorobenzene	ppbv	220	140	33	76.43%	85.00%	80.71%
Ethylbenzene	ppbv	780	500	47	90.60%	93.97%	92.29%
m,p-Xylene	ppbv	4,200	2,800	220	92.14%	94.76%	93.45%
o-Xylene	ppbv	1,500	1,100	82	92.55%	94.53%	93.54%
Styrene	ppbv	ND	ND	22	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	0.65 J/J	NC	NC	NC
Acetone	ppbv	490	520	52	89.39%	90.00%	89.70%
Carbon Disulfide	ppbv	ND	ND	2.8 J/J	NC	NC	NC
trans-1,2-Dichloroethene	ppbv	34 J/J	20 J/J	68	NC	NC	NC
2-Butanone (MEK)	ppbv	160	160	8.8 J/J	NC	NC	NC
Bromodichloromethane	ppbv	ND	ND	ND	NC	NC	NC
4-Methyl-2-pentanone	ppbv	260	270	9.5 J/J	NC	NC	NC
2-Hexanone	ppbv	ND	ND	ND	NC	NC	NC
Dibromochloromethane	ppbv	ND	ND	ND	NC	NC	NC
Bromoform	ppbv	ND	ND	ND	NC	NC	NC
Total	**ppbv**	**24,132**	**16,989**	**2,283**	**90.54%**	**86.56%**	**88.55%**
Total	**lb/hr**	**0.098**	**0.069**	**0.009**	**NC**	**NC**	**NC**
IDEM Discharge Requirement	**lb/hr**			**3**	**NA**	**NA**	**NA**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
ppbv - parts per billion volume
Destruction efficiency is not calculated where influent and/or effluent values are estimated.
Total VOCs in lb/hr calculation based on air flow rate of V = 330 acfm
Estimated values are not used to calculate total ppbv.

Qualifiers:
J - Result is estimated

Table 2.3
Summary of Catalytic Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 8 - Sampled 7/25/02					
		Analytical Data			Destruction Efficiency		
Compounds	**Units**	**Influent IN1**	**Influent IN2**	**Effluent EF1**	**Low**	**High**	**Average**
Method TO-14							
Chloromethane	ppbv	ND	ND	150	NC	NC	NC
Vinyl Chloride	ppbv	3,600	5,300	450	87.50%	91.51%	89.50%
Bromomethane	ppbv	ND	ND	ND	NC	NC	NC
Chloroethane	ppbv	1,600	2,300	220	86.25%	90.43%	88.34%
1,1-Dichloroethene	ppbv	19 J/J	27 J/J	38	NC	NC	NC
Methylene Chloride	ppbv	1,100	1,600	280	74.55%	82.50%	78.52%
1,1-Dichloroethane	ppbv	550	820	73	86.73%	91.10%	88.91%
cis-1,2-Dichloroethene	ppbv	6,800	9,900	1,200	82.35%	87.88%	85.12%
Chlororform	ppbv	10 J/J	14 J/J	1.6 J/J	NC	NC	NC
1,1,1-Trichloroethane	ppbv	220	330	20	90.91%	93.94%	92.42%
Carbon Tetrachloride	ppbv	ND	ND	ND	NC	NC	NC
Benzene	ppbv	6,200	9,100	1,300	79.03%	85.71%	82.37%
1,2-Dichloroethane	ppbv	49	56	9.2	81.22%	83.57%	82.40%
Trichloroethene	ppbv	60	90	14	76.67%	84.44%	80.56%
1,2-Dichloropropane	ppbv	52	81	6.5	87.50%	91.98%	89.74%
cis-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
Toluene	ppbv	4,700	6,700	670	85.74%	90.00%	87.87%
trans-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	ND	9.4 J/J	ND	NC	NC	NC
Tetrachloroethene	ppbv	23 J/J	34	11	NC	67.65%	NC
Chlorobenzene	ppbv	250	380	66	73.60%	82.63%	78.12%
Ethylbenzene	ppbv	1,100	1,700	130	88.18%	92.35%	90.27%
m,p-Xylene	ppbv	5,400	7,900	600	88.89%	92.41%	90.65%
o-Xylene	ppbv	1,700	2,500	180	89.41%	92.80%	91.11%
Styrene	ppbv	ND	ND	38	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	ND	NC	NC	NC
Acetone	ppbv	210	330	53	74.76%	83.94%	79.35%
Carbon Disulfide	ppbv	ND	ND	ND	NC	NC	NC
trans-1,2-Dichloroethene	ppbv	52 J/J	71 J/J	120	NC	NC	NC
2-Butanone (MEK)	ppbv	110 J/J	170	21 J/J	NC	NC	NC
Bromodichloromethane	ppbv	ND	ND	ND	NC	NC	NC
4-Methyl-2-pentanone	ppbv	160	260	14 J/J	NC	NC	NC
2-Hexanone	ppbv	ND	ND	ND	NC	NC	NC
Dibromochloromethane	ppbv	ND	ND	ND	NC	NC	NC
Bromoform	ppbv	ND	ND	ND	NC	NC	NC
Total	**ppbv**	**33,751**	**49,551**	**5,629**	**83.32%**	**88.64%**	**85.98%**
Total	**lb/hr**	**0.132**	**0.194**	**0.022**	**NC**	**NC**	**NC**
IDEM Discharge Requirement	**lb/hr**			**3**	**NA**	**NA**	**NA**

Notes

_/ - Laboratory data qualifier

/_ - Data validation qualifier

NC - Not calculated

ND - Non-detect

ppbv - parts per billion volume

Destruction efficiency is not calculated where influent and/or effluent values are estimated

Total VOCs in lb/hr calculation based on air flow rate of V = 330 acfm

Estimated values are not used to calculate total ppbv.

Qualifiers:

J - Result is estimated

Table 2.3
Summary of Catalytic Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 9 - Sampled 8/8/02					
		Analytical Data			Destruction Efficiency		
Compounds	**Units**	**Influent IN1**	**Influent IN2**	**Effluent EF1**	**Low**	**High**	**Average**
Method TO-14							
Chloromethane	ppbv	ND	ND	130	NC	NC	NC
Vinyl Chloride	ppbv	5,000	5,600	610	87.80%	89.11%	88.45%
Bromomethane	ppbv	ND	ND	ND	NC	NC	NC
Chloroethane	ppbv	2,100	2,400	180	91.43%	92.50%	91.96%
1,1-Dichloroethene	ppbv	ND	ND	38	NC	NC	NC
Methylene Chloride	ppbv	160	180	100	37.50%	44.44%	40.97%
1,1-Dichloroethane	ppbv	680	780	57	91.62%	92.69%	92.15%
cis-1,2-Dichloroethene	ppbv	10,000	12,000	1,100	90.83%	89.00%	89.92%
Chlororform	ppbv	ND	ND	12	NC	NC	NC
1,1,1-Trichloroethane	ppbv	410	460	19	95.37%	95.87%	95.62%
Carbon Tetrachloride	ppbv	ND	ND	4.5 J/J	NC	NC	NC
Benzene	ppbv	14,000	17,000	1,900	86.43%	88.82%	87.63%
1,2-Dichloroethane	ppbv	84	86	40	52.38%	53.49%	52.93%
Trichloroethene	ppbv	94	120	14	85.11%	88.33%	86.72%
1,2-Dichloropropane	ppbv	63	86	5.2 J/J	NC	NC	NC
cis-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
Toluene	ppbv	8,600	11,000	830	90.35%	92.45%	91.40%
trans-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	ND	ND	ND	NC	NC	NC
Tetrachloroethene	ppbv	ND	65	19	NC	70.77%	NC
Chlorobenzene	ppbv	760	1,000	140	81.58%	88.04%	88.04%
Ethylbenzene	ppbv	2,000	2,600	150	92.50%	94.23%	93.37%
m,p-Xylene	ppbv	7,700	11,000	560	92.73%	94.91%	93.82%
o-Xylene	ppbv	2,400	3,400	180	92.50%	94.71%	93.60%
Styrene	ppbv	ND	ND	28	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	ND	NC	NC	NC
Acetone	ppbv	190	240	120	36.84%	50.00%	43.42%
Carbon Disulfide	ppbv	ND	ND	8.7 J/J	NC	NC	NC
trans-1,2-Dichloroethene	ppbv	ND	ND	100	NC	NC	NC
2-Butanone (MEK)	ppbv	ND	ND	9.4 J/J	NC	NC	NC
Bromodichloromethane	ppbv	ND	ND	ND	NC	NC	NC
4-Methyl-2-pentanone	ppbv	ND	ND	5.5 J/J	NC	NC	NC
2-Hexanone	ppbv	ND	ND	ND	NC	NC	NC
Dibromochloromethane	ppbv	ND	ND	ND	NC	NC	NC
Bromoform	ppbv	ND	ND	ND	NC	NC	NC
Total	**ppbv**	**54,241**	**68,017**	**6,327**	**88.34%**	**90.70%**	**89.52%**
Total	**lb/hr**	**0.188**	**0.238**	**0.021**	**NC**	**NC**	**NC**
IDEM Discharge Requirement	**lb/hr**			**3**	**NA**	**NA**	**NA**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
ppbv - parts per billion volume
Destruction efficiency is not calculated where influent and/or effluent values are estimated.
Total VOCs in lb/hr calculation based on air flow rate of V = 330 acfm
Estimated values are not used to calculate total ppbv

Qualifiers:
J - Result is estimated

Table 2.3
Summary of Catalytic Oxidizer Off-Gas Analytical Results for VOCs (Method TO-14) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 10 - Sampled 9/30/02					
		Analytical Data			Destruction Efficiency		
Compounds	**Units**	**Influent IN1**	**Influent IN2**	**Effluent EF1**	**Low**	**High**	**Average**
Method TO-14							
Chloromethane	ppbv	ND	ND	170	NC	NC	NC
Vinyl Chloride	ppbv	2,400	2,900	410	82.92%	85.86%	84.39%
Bromomethane	ppbv	ND	ND	ND	NC	NC	NC
Chloroethane	ppbv	2,400	2,600	220	90.83%	91.54%	91.19%
1,1-Dichloroethene	ppbv	ND	ND	49	NC	NC	NC
Methylene Chloride	ppbv	3,200	3,300	550	82.81%	83.33%	83.07%
1,1-Dichloroethane	ppbv	870	930	69	92.07%	92.58%	92.32%
cis-1,2-Dichloroethene	ppbv	6,600	7,200	720	90.00%	89.09%	89.55%
Chlororform	ppbv	50 J/J	48 J/J	4.4 J/J	NC	NC	NC
1,1,1-Trichloroethane	ppbv	600	710	32	94.67%	95.49%	95.08%
Carbon Tetrachloride	ppbv	ND	ND	ND	NC	NC	NC
Benzene	ppbv	30,000	36,000	4,000	86.67%	88.89%	87.78%
1,2-Dichloroethane	ppbv	ND	240	ND	NC	NC	NC
Trichloroethene	ppbv	190	220	27	85.79%	87.73%	86.76%
1,2-Dichloropropane	ppbv	34 J/J	48 J/J	2.8 J/J	NC	NC	NC
cis-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
Toluene	ppbv	11,000	13,000	940	91.45%	92.77%	92.11%
trans-1,3-Dichloropropene	ppbv	ND	ND	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	ND	ND	ND	NC	NC	NC
Tetrachloroethene	ppbv	140	180	49	65.00%	72.78%	68.89%
Chlorobenzene	ppbv	730	850	120	83.56%	88.04%	88.04%
Ethylbenzene	ppbv	1,700	2,000	110	93.53%	94.50%	94.01%
m,p-Xylene	ppbv	8,000	9,500	470	94.13%	95.05%	94.59%
o-Xylene	ppbv	1,900	2,300	110	94.21%	95.22%	94.71%
Styrene	ppbv	ND	ND	30	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	ND	ND	ND	NC	NC	NC
Acetone	ppbv	1,000	1,100	160	84.00%	85.45%	84.73%
Carbon Disulfide	ppbv	ND	ND	ND	NC	NC	NC
trans-1,2-Dichloroethene	ppbv	ND	ND	56	NC	NC	NC
2-Butanone (MEK)	ppbv	480 J/J	480 J/J	50 J/J	NC	NC	NC
Bromodichloromethane	ppbv	ND	ND	ND	NC	NC	NC
4-Methyl-2-pentanone	ppbv	360 J/J	370 J/J	19 J/J	NC	NC	NC
2-Hexanone	ppbv	ND	ND	ND	NC	NC	NC
Dibromochloromethane	ppbv	ND	ND	ND	NC	NC	NC
Bromoform	ppbv	ND	ND	ND	NC	NC	NC
Total	**ppbv**	**68,200**	**79,900**	**4,000**	**94.13%**	**94.99%**	**94.56%**
Total	**lb/hr**	**0.271**	**0.318**	**0.031**	**NC**	**NC**	**NC**
IDEM Discharge Requirement	**lb/hr**			**3**	**NA**	**NA**	**NA**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
ppbv - parts per billion volume
Destruction efficiency is not calculated where influent and/or effluent values are estimated
Total VOCs in lb/hr calculation based on air flow rate of V = 330 acfm
Estimated values are not used to calculate total ppbv

Qualifiers:
J - Result is estimated

Table 2.4
Summary of Catalytic Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 5 - Sampled 7/2/02					
		Analytical Data			Destruction Efficiency		
Compounds	Units	Influent IN1	Influent IN2	Effluent EF1	Low (%)	High (%)	Average (%)
Method TO-13							
Phenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethyl)ether	µg	0.72 J/J	0.97 J/J	ND	NC	NC	NC
2-Chlorophenol	µg	ND	ND	ND	NC	NC	NC
1,3-Dichlorobenzene	µg	0.49 J/J	1.1	ND	NC	NC	NC
1,4-Dichlorobenzene	µg	5.6	12	ND	NC	NC	NC
1,2-Dichlorobenzene	µg	9.9	18	ND	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	ND	ND	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	ND	ND	NC	NC	NC
4-Methylphenol	µg	ND	ND	ND	NC	NC	NC
Hexachloroethane	µg	ND	ND	ND	NC	NC	NC
Nitrobenzene	µg	ND	ND	ND	NC	NC	NC
Isophorone	µg	ND	ND	ND	NC	NC	NC
2-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dimethylphenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	ND	ND	NC	NC	NC
2,4-dichlorophenol	µg	ND	ND	ND	NC	NC	NC
1,2,4-Trichlorobenzene	µg	1.3	2.3	ND	NC	NC	NC
Naphthalene	µg	1.6	3.4	ND	NC	NC	NC
4-Chloroaniline	µg	ND	ND	ND	NC	NC	NC
Hexachlorobutadiene	µg	ND	ND	ND	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	ND	ND	NC	NC	NC
2-Methylnaphthalene	µg	1.2	1.9	ND	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	ND	ND	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2-Chloronaphthalene	µg	ND	ND	ND	NC	NC	NC
2-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Dimethylphthalate	µg	ND	ND	ND	NC	NC	NC
Acenaphthylene	µg	ND	ND	ND	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
3-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Acenaphthene	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrophenol	µg	ND	ND	ND	NC	NC	NC
4-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
Dibenzofuran	µg	ND	ND	ND	NC	NC	NC
Diethylphthalate	µg	ND	ND	ND	NC	NC	NC
Fluorene	µg	ND	ND	ND	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
4-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	ND	ND	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	ND	ND	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
Hexachlorobenzene	µg	ND	ND	ND	NC	NC	NC
Pentachlorophenol	µg	ND	ND	ND	NC	NC	NC
Phenanthrene	µg	ND	ND	ND	NC	NC	NC
Anthracene	µg	ND	ND	ND	NC	NC	NC
di-n-Butylphthalate	µg	0.79 J/J	0.87 J/J	ND	NC	NC	NC
Fluoranthene	µg	ND	ND	ND	NC	NC	NC
Pyrene	µg	ND	ND	ND	NC	NC	NC
Butylbenzylphthalate	µg	ND	ND	ND	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	ND	ND	NC	NC	NC
Chrysene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)anthracene	µg	ND	ND	ND	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	ND	ND	ND	NC	NC	NC
Di-n-Octylphthalate	µg	ND	ND	ND	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)pyrene	µg	ND	ND	ND	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	ND	ND	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	ND	ND	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	ND	ND	NC	NC	NC
Total	**µg**	**19.60**	**38.70**	**0.00**	**100.00%**	**100.00%**	**100.00%**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect
Destruction efficiency is not calculated where influent and/or effluent values are estimated

Qualifiers:
J - Result is estimated
JB - Analyte is detected in the method blank resulting in potential bias high. Reported concentration is estimated

Table 2.4
Summary of Catalytic Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 6 - Sampled 7/12/02					
		Analytical Data			Destruction Efficiency		
Compounds	Units	Influent IN1	Influent IN2	Effluent EF1	Low (%)	High (%)	Average (%)
Method TO-13							
Phenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethyl)ether	µg	2.0	1.7	ND	NC	NC	NC
2-Chlorophenol	µg	ND	ND	ND	NC	NC	NC
1,3-Dichlorobenzene	µg	ND	ND	ND	NC	NC	NC
1,4-Dichlorobenzene	µg	0.63 J/J	ND	ND	NC	NC	NC
1,2-Dichlorobenzene	µg	0.82 J/J	ND	ND	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	ND	ND	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	ND	ND	NC	NC	NC
4-Methylphenol	µg	ND	ND	ND	NC	NC	NC
Hexachloroethane	µg	ND	ND	ND	NC	NC	NC
Nitrobenzene	µg	ND	ND	ND	NC	NC	NC
Isophorone	µg	ND	ND	ND	NC	NC	NC
2-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dimethylphenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	ND	ND	NC	NC	NC
2,4-dichlorophenol	µg	ND	ND	ND	NC	NC	NC
1,2,4-Trichlorobenzene	µg	ND	ND	ND	NC	NC	NC
Naphthalene	µg	0.36 J/J	ND	ND	NC	NC	NC
4-Chloroaniline	µg	ND	ND	ND	NC	NC	NC
Hexachlorobutadiene	µg	ND	ND	ND	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	ND	ND	NC	NC	NC
2-Methylnaphthalene	µg	0.53 J/J	ND	ND	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	ND	ND	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2-Chloronaphthalene	µg	ND	ND	ND	NC	NC	NC
2-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Dimethylphthalate	µg	ND	ND	ND	NC	NC	NC
Acenaphthylene	µg	ND	ND	ND	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
3-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Acenaphthene	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrophenol	µg	ND	ND	ND	NC	NC	NC
4-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
Dibenzofuran	µg	ND	ND	ND	NC	NC	NC
Diethylphthalate	µg	ND	ND	0.32 J/J	NC	NC	NC
Fluorene	µg	ND	ND	ND	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
4-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	ND	ND	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	ND	ND	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
Hexachlorobenzene	µg	ND	ND	ND	NC	NC	NC
Pentachlorophenol	µg	ND	ND	ND	NC	NC	NC
Phenanthrene	µg	ND	ND	ND	NC	NC	NC
Anthracene	µg	ND	ND	ND	NC	NC	NC
di-n-Butylphthalate	µg	0.61 J/J	ND	ND	NC	NC	NC
Fluoranthene	µg	ND	ND	ND	NC	NC	NC
Pyrene	µg	ND	ND	ND	NC	NC	NC
Butylbenzylphthalate	µg	0.33 J/JB	0.41 J/JB	0.54 J/JB	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	ND	ND	NC	NC	NC
Chrysene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)anthracene	µg	ND	ND	ND	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	ND	ND	3.0 J/J	NC	NC	NC
Di-n-Octylphthalate	µg	ND	ND	ND	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)pyrene	µg	ND	ND	ND	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	ND	ND	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	ND	ND	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	ND	ND	NC	NC	NC
Total	**µg**	**2.0**	**1.7**	**0.00**	**100.00%**	**100.00%**	**100.00%**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect
Destruction efficiency is not calculated where influent and/or effluent values are estimated

Qualifiers:
J - Result is estimated
JB - Analyte is detected in the method blank resulting in potential bias high Reported concentration is estimated

Table 2.4
Summary of Catalytic Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 7 - Sampled 7/18/02					
		Analytical Data			Destruction Efficiency		
Compounds	Units	Influent IN1	Influent IN2	Effluent EF1	Low (%)	High (%)	Average (%)
Method TO-13							
Phenol	µg	ND	ND /UJ	ND	NC	NC	NC
bis(2-Chloroethyl)ether	µg	ND	ND /UJ	ND	NC	NC	NC
2-Chlorophenol	µg	ND	ND /UJ	ND	NC	NC	NC
1,3-Dichlorobenzene	µg	0.82 J/J	ND /UJ	ND	NC	NC	NC
1,4-Dichlorobenzene	µg	9.3	3.1 /J	ND	NC	NC	NC
1,2-Dichlorobenzene	µg	16	5.5 /J	ND	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	ND /UJ	ND	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	ND /UJ	ND	NC	NC	NC
4-Methylphenol	µg	ND	ND /UJ	ND	NC	NC	NC
Hexachloroethane	µg	ND	ND /UJ	ND	NC	NC	NC
Nitrobenzene	µg	ND	ND /UJ	ND	NC	NC	NC
Isophorone	µg	ND	ND /UJ	ND	NC	NC	NC
2-Nitrophenol	µg	ND	ND /UJ	ND	NC	NC	NC
2,4-Dimethylphenol	µg	ND	ND /UJ	ND	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	ND /UJ	ND	NC	NC	NC
2,4-dichlorophenol	µg	ND	ND /UJ	ND	NC	NC	NC
1,2,4-Trichlorobenzene	µg	1.9	0.67 J/J	ND	NC	NC	NC
Naphthalene	µg	3.4	1.1 /J	ND	NC	NC	NC
4-Chloroaniline	µg	ND	ND /UJ	ND	NC	NC	NC
Hexachlorobutadiene	µg	ND	ND /UJ	ND	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	ND /UJ	ND	NC	NC	NC
2-Methylnaphthalene	µg	1.6	0.54 J/J	ND	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	ND /UJ	ND	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	ND /UJ	ND	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	ND /UJ	ND	NC	NC	NC
2-Chloronaphthalene	µg	ND	ND /UJ	ND	NC	NC	NC
2-Nitroaniline	µg	ND	ND /UJ	ND	NC	NC	NC
Dimethylphthalate	µg	ND	ND /UJ	ND	NC	NC	NC
Acenaphthylene	µg	ND	ND /UJ	ND	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	ND /UJ	ND	NC	NC	NC
3-Nitroaniline	µg	ND	ND /UJ	ND	NC	NC	NC
Acenaphthene	µg	ND	ND /UJ	ND	NC	NC	NC
2,4-Dinitrophenol	µg	ND	ND /UJ	ND	NC	NC	NC
4-Nitrophenol	µg	ND	ND /UJ	ND	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	ND /UJ	ND	NC	NC	NC
Dibenzofuran	µg	ND	ND /UJ	ND	NC	NC	NC
Diethylphthalate	µg	0.36 J/JB	0.32 J/JB	0.37 J/JB	NC	NC	NC
Fluorene	µg	ND	ND /UJ	ND	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	ND /UJ	ND	NC	NC	NC
4-Nitroaniline	µg	ND	ND /UJ	ND	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	ND /UJ	ND	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	ND /UJ	ND	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	ND /UJ	ND	NC	NC	NC
Hexachlorobenzene	µg	ND	ND /UJ	ND	NC	NC	NC
Pentachlorophenol	µg	ND	ND /UJ	ND	NC	NC	NC
Phenanthrene	µg	ND	ND /UJ	ND	NC	NC	NC
Anthracene	µg	ND	ND /UJ	ND	NC	NC	NC
di-n-Butylphthalate	µg	0.60 J/JB	ND /UJ	0.42 J/JB	NC	NC	NC
Fluoranthene	µg	ND	ND /UJ	ND	NC	NC	NC
Pyrene	µg	ND	ND /UJ	ND	NC	NC	NC
Butylbenzylphthalate	µg	0.88 J/JB	0.96 J/JB	1.6 J/JB	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	ND /UJ	ND	NC	NC	NC
Chrysene	µg	ND	ND /UJ	ND	NC	NC	NC
Benzo(a)anthracene	µg	ND	ND /UJ	ND	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	3.4 J/J	4.2 J/J	7.5	NC	NC	NC
Di-n-Octylphthalate	µg	ND	ND /UJ	ND	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	ND /UJ	ND	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	ND /UJ	ND	NC	NC	NC
Benzo(a)pyrene	µg	ND	ND /UJ	ND	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	ND /UJ	ND	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	ND /UJ	ND	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	ND /UJ	ND	NC	NC	NC
Total	**µg**	**32.20**	**0.00**	**7.5**	**76.71%**	**100.00%**	**88.35%**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect
Destruction efficiency is not calculated where influent and/or effluent values are estimated

Qualifiers:
J - Result is estimated
JB - Analyte is detected in the method blank resulting in potential bias high Reported concentration is estimated

Table 2.4
Summary of Catalytic Oxidizer Off-Gas Analytical Results for SVOC's (Method TO-13) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 8 - Sampled 7/25/02					
		Analytical Data			Destruction Efficiency		
Compounds	Units	Influent IN1	Influent IN2	Effluent EF1	Low (%)	High (%)	Average (%)
Method TO-13							
Phenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethyl)ether	µg	ND	ND	ND	NC	NC	NC
2-Chlorophenol	µg	ND	ND	ND	NC	NC	NC
1,3-Dichlorobenzene	µg	1.1	1.4	ND	NC	NC	NC
1,4-Dichlorobenzene	µg	12	15	ND	NC	NC	NC
1,2-Dichlorobenzene	µg	20	25	0.62 J/J	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	ND	ND	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	ND	ND	NC	NC	NC
4-Methylphenol	µg	ND	ND	ND	NC	NC	NC
Hexachloroethane	µg	ND	ND	ND	NC	NC	NC
Nitrobenzene	µg	ND	ND	ND	NC	NC	NC
Isophorone	µg	ND	ND	ND	NC	NC	NC
2-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dimethylphenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	ND	ND	NC	NC	NC
2,4-dichlorophenol	µg	ND	ND	ND	NC	NC	NC
1,2,4-Trichlorobenzene	µg	2.2	2.7	ND	NC	NC	NC
Naphthalene	µg	1.9	2.5	ND	NC	NC	NC
4-Chloroaniline	µg	ND	ND	ND	NC	NC	NC
Hexachlorobutadiene	µg	ND	ND	ND	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	ND	ND	NC	NC	NC
2-Methylnaphthalene	µg	1.1	1.5	ND	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	ND	ND	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2-Chloronaphthalene	µg	ND	ND	ND	NC	NC	NC
2-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Dimethylphthalate	µg	ND	ND	ND	NC	NC	NC
Acenaphthylene	µg	ND	ND	ND	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
3-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Acenaphthene	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrophenol	µg	ND	ND	ND	NC	NC	NC
4-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
Dibenzofuran	µg	ND	ND	ND	NC	NC	NC
Diethylphthalate	µg	0.38 J/JB	0.39 J/JB	0.43 J/JB	NC	NC	NC
Fluorene	µg	ND	ND	ND	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
4-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	ND	ND	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	ND	ND	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
Hexachlorobenzene	µg	ND	ND	ND	NC	NC	NC
Pentachlorophenol	µg	ND	ND	ND	NC	NC	NC
Phenanthrene	µg	ND	ND	ND	NC	NC	NC
Anthracene	µg	ND	ND	ND	NC	NC	NC
di-n-Butylphthalate	µg	0.66 J/JB	0.77 J/JB	ND	NC	NC	NC
Fluoranthene	µg	ND	ND	ND	NC	NC	NC
Pyrene	µg	ND	ND	ND	NC	NC	NC
Butylbenzylphthalate	µg	0.43 J/JB	0.45 J/JB	0.30 J/JB	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	ND	ND	NC	NC	NC
Chrysene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)anthracene	µg	ND	ND	ND	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	ND	ND	ND	NC	NC	NC
Di-n-Octylphthalate	µg	ND	ND	ND	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)pyrene	µg	ND	ND	ND	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	ND	ND	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	ND	ND	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	ND	ND	NC	NC	NC
Total	**µg**	**38.30**	**48.10**	**0.00**	**100.00%**	**100.00%**	**100.00%**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect
Destruction efficiency is not calculated where influent and/or effluent values are estimated

Qualifiers:
J - Result is estimated
JB - Analyte is detected in the method blank resulting in potential bias high Reported concentration is estimated

Table 2.4
Summary of Catalytic Oxidizer Off-Gas Analytical Results for SVOCs (Method TO-13) - Third Quarter 2002
American Chemical Service
Griffith, Indiana

		Round 9 - Sampled 8/8/02					
		Analytical Data			Destruction Efficiency		
Compounds	Units	Influent IN1	Influent IN2	Effluent EF1	Low (%)	High (%)	Average (%)
Method TO-13							
Phenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethyl)ether	µg	ND	ND	ND	NC	NC	NC
2-Chlorophenol	µg	ND	ND	ND	NC	NC	NC
1,3-Dichlorobenzene	µg	0.88 J/J	0.99 J/J	ND	NC	NC	NC
1,4-Dichlorobenzene	µg	9.9	11	2.1	78.79%	91.67%	91.67%
1,2-Dichlorobenzene	µg	14	16	2.6	83.75%	81.43%	82.59%
2-Methylphenol (o-Cresol)	µg	ND	ND	ND	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	ND	ND	NC	NC	NC
4-Methylphenol	µg	ND	ND	ND	NC	NC	NC
Hexachloroethane	µg	ND	ND	ND	NC	NC	NC
Nitrobenzene	µg	ND	ND	ND	NC	NC	NC
Isophorone	µg	ND	ND	ND	NC	NC	NC
2-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dimethylphenol	µg	ND	ND	ND	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	ND	ND	NC	NC	NC
2,4-dichlorophenol	µg	ND	ND	ND	NC	NC	NC
1,2,4-Trichlorobenzene	µg	1.2	1.4	0.39 J/J	NC	NC	NC
Naphthalene	µg	1.9	2.4	ND	100.00%	100.00%	100.00%
4-Chloroaniline	µg	ND	ND	ND	NC	NC	NC
Hexachlorobutadiene	µg	ND	ND	ND	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	ND	ND	NC	NC	NC
2-Methylnaphthalene	µg	0.54 J/J	0.71 J/J	ND	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	ND	ND	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	ND	ND	NC	NC	NC
2-Chloronaphthalene	µg	ND	ND	ND	NC	NC	NC
2-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Dimethylphthalate	µg	ND	ND	ND	NC	NC	NC
Acenaphthylene	µg	ND	ND	ND	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
3-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
Acenaphthene	µg	ND /R	ND /R	ND /R	NC	NC	NC
2,4-Dinitrophenol	µg	ND	ND	ND	NC	NC	NC
4-Nitrophenol	µg	ND	ND	ND	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	ND	ND	NC	NC	NC
Dibenzofuran	µg	ND	ND	ND	NC	NC	NC
Diethylphthalate	µg	0.21 J/J	ND	0.29 J/J	NC	NC	NC
Fluorene	µg	ND	ND	ND	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
4-Nitroaniline	µg	ND	ND	ND	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	ND	ND	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	ND	ND	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	ND	ND	NC	NC	NC
Hexachlorobenzene	µg	ND	ND	ND	NC	NC	NC
Pentachlorophenol	µg	ND	ND	ND	NC	NC	NC
Phenanthrene	µg	ND	ND	ND	NC	NC	NC
Anthracene	µg	ND	ND	ND	NC	NC	NC
di-n-Butylphthalate	µg	ND	ND	ND	NC	NC	NC
Fluoranthene	µg	ND	ND	ND	NC	NC	NC
Pyrene	µg	ND	ND	ND	NC	NC	NC
Butylbenzylphthalate	µg	0.24 J/J	ND	ND	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	ND	ND	NC	NC	NC
Chrysene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)anthracene	µg	ND	ND	ND	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	ND	ND	ND	NC	NC	NC
Di-n-Octylphthalate	µg	ND	ND	ND	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	ND	ND	NC	NC	NC
Benzo(a)pyrene	µg	ND	ND	ND	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	ND	ND	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	ND	ND	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	ND	ND	NC	NC	NC
Total	**µg**	**27.0**	**30.8**	**4.7**	**84.74%**	**82.59%**	**83.67%**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect
Destruction efficiency is not calculated where influent and/or effluent values are estimated

Qualifiers:
J - Result is estimated
JB - Analyte is detected in the method blank resulting in potential bias high Reported concentration is estimated

Table 4.1
Water Table Elevations Across the Barrier Wall and Near the PGCS - Third Quarter 2002
American Chemical Service NPL Site
Griffith, Indiana

Upper Aquifer Wells

Well Designation	Reference Points			9/9/2002		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOIC	level	Elevation		
MW11	6377	7329	640.47	9.58	630.89		n/a
MW13	5050	7814	634.08	6.18	627.90		n/a
MW37	5395	7976	636.78	8.46	628.32		n/a
MW46	4526	7424	633.32	5.23	628.09		n/a
MW48	5669	7814	636.36	7.73	628.63		n/a
MW49	5551	7650	637.00	8.23	628.77		n/a

Staff Gauges & Piezometers

Well Designation	Reference Points			9/9/2002		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOSG	level	Elevation		
P23	4689	7018	636.18	8.38	627.80		n/a
P25	5131	7510	635.01	7.74	627.27		n/a
P26	4764	7309	634.23	5.34	628.89		n/a
P27	4904	7020	639.70	11.83	627.87		n/a
P28	5883	7486	644.53	14.32	630.21		n/a
P32	5746	7026	642.32	10.44	631.88		n/a
P40	5931	7241	638.77	7.68	631.09		n/a
P41	5663	7377	637.23	6.71	630.52		n/a
P49	5145	6949	638.98	9.38	629.60		n/a
SG13	-	-	631.53	4.48	630.01	TOSG = 6.0' mark	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 level is lower inside the barrier wall

Table 4.1
Water Table Elevations Across the Barrier Wall and Near the PGCS - Third Quarter 2002
American Chemical Service NPL Site
Griffith, Indiana

PGCS Piezometer Sets

Well Designation	Reference Points			9/9/2002		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOC	level	Elevation		
P81	5577	7581	636.19	7.36	628.83		n/a
P82	5577	7572	635.77	6.94	628.83		n/a
P83	5577	7561.6	635.95	7.16	628.79		n/a
P84	5322	7603	634.35	CNM	NM	Could not access due to wasps nest	n/a
P85	5326	7594	634.08	6.67	627.41		n/a
P86	5329	7585	634.41	6.70	627.71		n/a
P87	5121	7466	633.88	6.74	627.14		n/a
P88	5130	7460	633.90	CNM	NM	Could not access due to wasps nest	n/a
P89	5137	7454	634.02	6.71	627.31		n/a
P90	4881	7152	632.59	6.33	626.26		n/a
P91	4889	7145	632.97	6.72	626.25		n/a
P92	4896	7138.1	633.63	6.93	626.70		n/a

BWES Water Level and Piezometer Pairs

Well Designation	Reference Points			9/9/2002		Notes	Difference Across Barrier Wall (if applicable)[1]
	East	North	TOC	level	Elevation		
P93 - Outside BW	5136	7067	638.79	CNM	NM	Does not exist - to be replaced	n/a
P94 - Inside BW	5146	7061	638.98	CNM	NM	Does not exist - to be replaced	
P95 - Outside BW	5146	6532	638.58	10.41	628.17		-7.08
P96 - Inside BW	5156	6537	638.39	17.30	621.09		
P105 - Outside BW	5885	6678	638.86	7.26	631.60		-1.51
P106 - Inside BW	5871	6685	638.10	8.01	630.09		
P107 - Outside BW	5766	7339	637.42	7.28	630.14		1.57
P108 - Inside BW	5757	7324	638.13	6.42	631.71		
P109 - Outside BW	5740	6387	644.30	12.50	631.80		-4.60
P110 - Inside BW	5705	6382	647.68	20.48	627.20		
P111 - Outside BW	5551	5950	650.03	18.49	631.54		-5.69
P112 - Inside BW	5525	5960	653.36	27.51	625.85		
P113 - Inside BW	5309	5693	657.53	30.27	627.26		-3.80
ORCPZ102 - Outside BW	5331	5612	652.47	21.41	631.06		
P114 - Inside BW	5035	5729	653.69	25.48	628.21		0.87
P115 - Outside BW	4970	5708	652.50	25.16	627.34		
P116 - Inside BW	5031	6087	646.26	18.69	627.57		-2.66
P117 - Outside BW	5014	6087	643.93	13.70	630.23		
P118 - Inside BW	5402	6539	645.52	19.61	625.91		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 level is lower inside the barrier wall.

Table 4.2
Water Levels Inside Barrier Wall - Third Quarter 2002
American Chemical Service NPL Site
Griffith, Indiana

Date	On-Site Area							
	Target Level	P-29	P-31	P-32	P-36	P-49	P-106	P-108
5-Jul-02	629.0	633.1	635.2	633.6	630.5	634.9	636.5	637.7
12-Jul-02	629.0	633.1	635.4	633.4	630.4	635.1	636.8	637.4
19-Jul-02	629.0	632.7	634.8	633.2	630.0	634.6	636.1	637.2
26-Jul-02	629.0	632.4	634.2	633.0	629.8	634.1	635.4	637.0
2-Aug-02	629.0	632.1	633.9	632.8	629.4	633.7	635.3	636.8
9-Aug-02	629.0	631.9	633.5	632.7	629.1	633.5	635.3	636.7
16-Aug-02	629.0	631.5	633.1	632.5	628.3	633.2	634.4	636.5
23-Aug-02	629.0	631.4	632.9	632.4	628.2	633.1	634.2	636.5
30-Aug-02	629.0	630.5	632.6	632.1	627.8	632.8	634.2	636.3
6-Sep-02	629.0	630.8	632.4	631.9	627.6	632.4	633.8	635.5
13-Sep-02	629.0	630.9	632.5	632.1	627.6	633.1	634.4	635.9
20-Sep-02	629.0	630.7	632.6	631.9	626.7	631.5	633.3	635.7
27-Sep-02	629.0	630.5	632.6	631.5	626.7	631.5	633.4	635.6

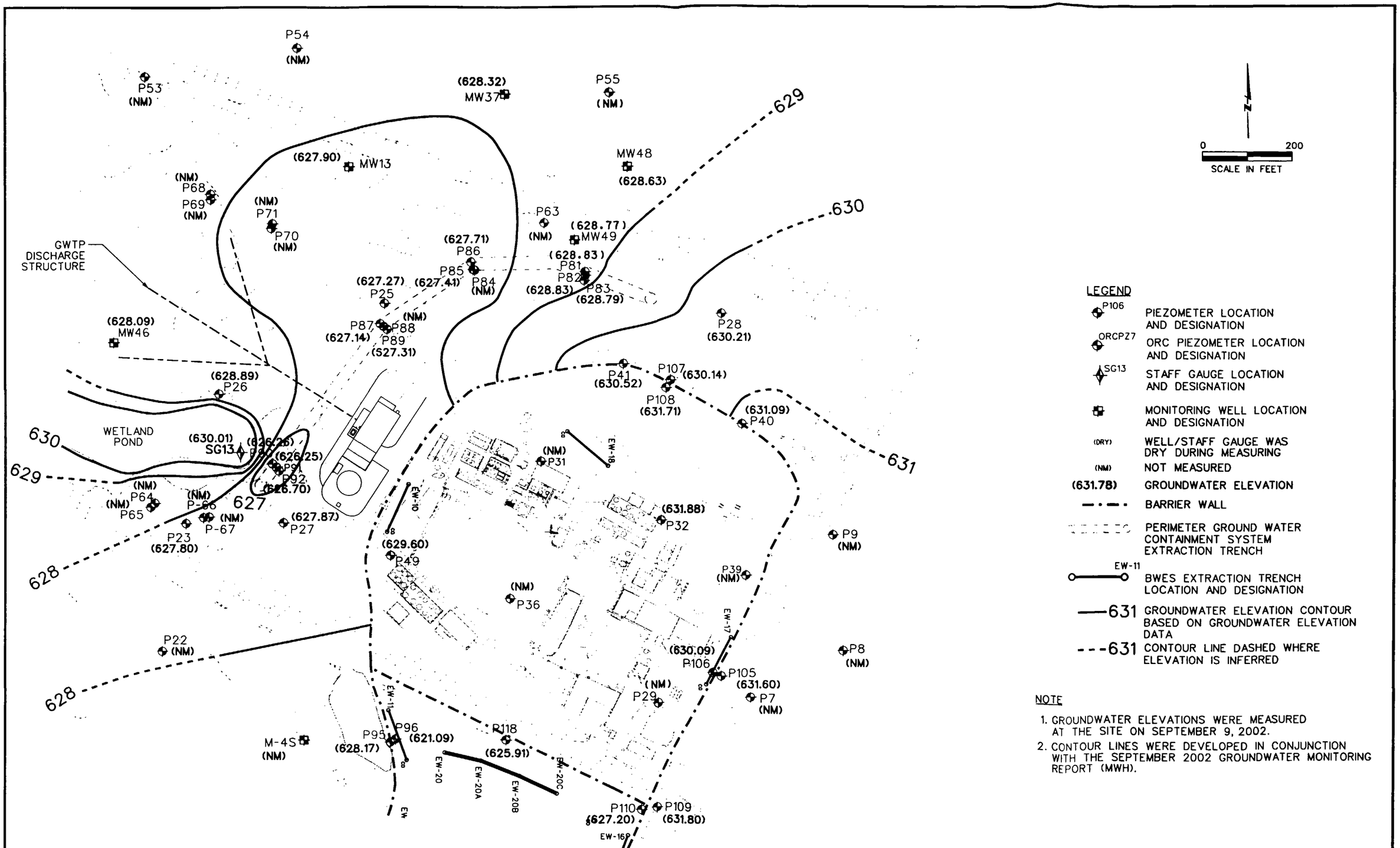
Date	Off-Site Area										
	Target Level	P-96	P-110	P-112	P-113	P-114	P-116	P-118	AS-7	AS-8	AS-9
5-Jul-02	626.0	621.2	627.9	624.8	627.4	628.4	627.8	626.5	627.3	627.1	626.8
12-Jul-02	626.0	621.5	628.0	625.7	627.5	628.5	627.9	626.4	627.2	626.8	626.8
19-Jul-02	626.0	621.3	627.8	625.0	627.4	628.5	627.9	626.4	627.0	626.8	626.7
26-Jul-02	626.0	621.1	627.5	624.2	627.3	628.4	627.9	626.3	627.0	626.8	626.7
2-Aug-02	626.0	620.8	627.3	624.2	627.2	628.1	627.7	626.3	627.4	626.5	626.9
9-Aug-02	626.0	620.6	627.2	624.2	627.0	627.8	627.7	626.2	627.3	627.0	626.6
16-Aug-02	626.0	620.6	627.0	624.3	627.3	628.3	627.8	626.1	627.0	626.9	626.6
23-Aug-02	626.0	620.6	627.1	624.1	627.2	628.2	627.8	626.1	627.0	626.9	626.6
30-Aug-02	626.0	620.5	627.0	624.3	627.2	628.2	627.7	625.9	626.9	626.7	626.5
6-Sep-02	626.0	620.6	626.9	624.3	627.2	628.1	627.5	625.9	626.7	626.7	626.4
13-Sep-02	626.0	620.6	627.2	625.3	627.2	628.1	627.8	626.0	626.6	626.6	626.4
20-Sep-02	626.0	620.5	626.7	624.3	627.0	628.1	627.5	625.8	626.6	626.5	626.3
27-Sep-02	626.0	620.5	626.8	624.3	627.0	627.9	627.4	625.8	626.5	626.5	626.3

Notes:

NA = Not sampled

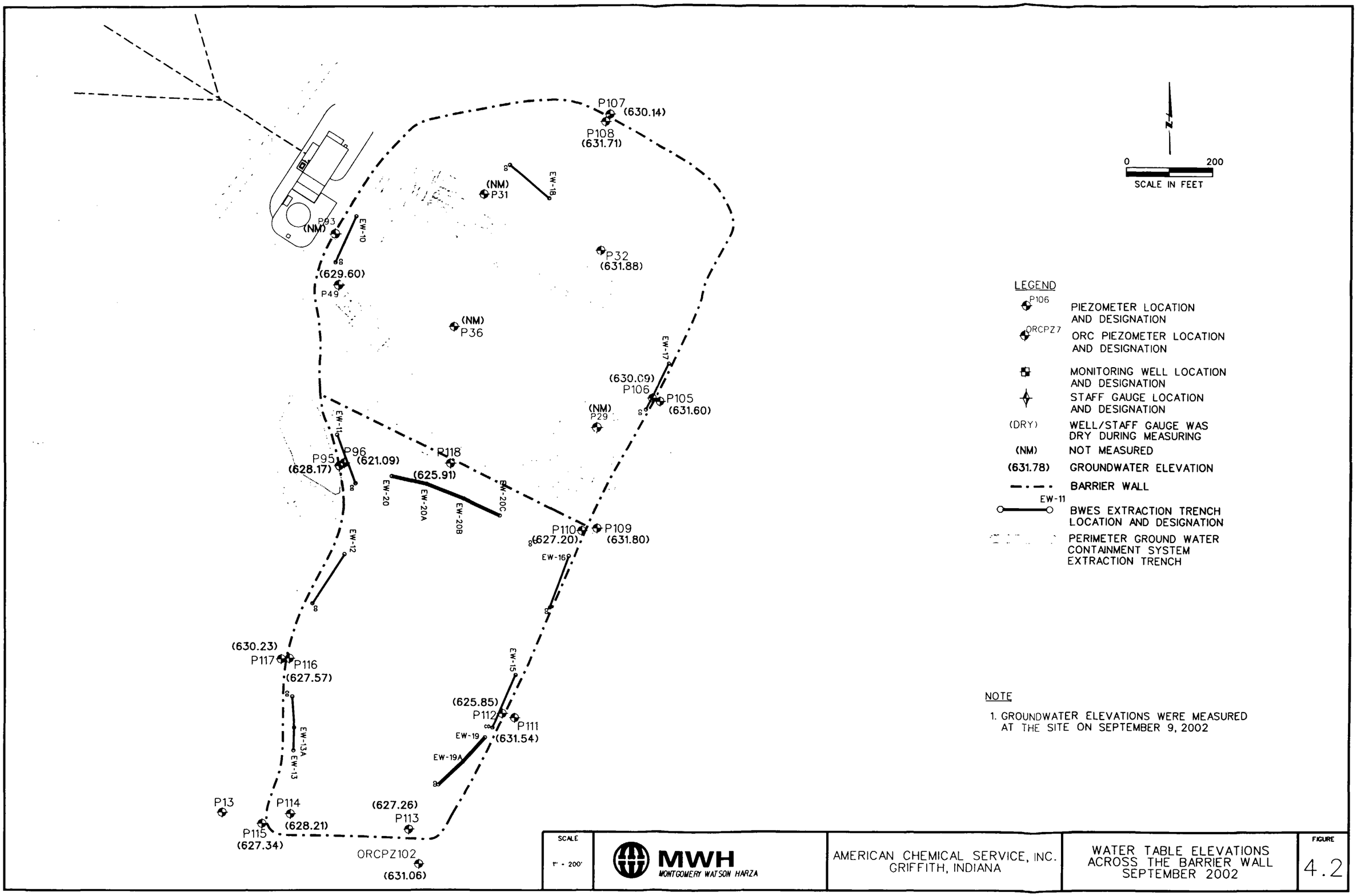
All water level elevations are in feet AMSL

FIGURES



SCALE				FIGURE
1" = 200'	MWH	AMERICAN CHEMICAL SERVICE, INC. GRIFFITH, INDIANA	WATER TABLE ELEVATIONS NEAR THE PGCS SEPTEMBER 2002	4.1

JOB No. MW Job No. FILE: J:\209\0803 ACS\0301 GWTP\Drawings\Water Table 1 SEPT 02.dgn Plot Date: 05-FEB-2003 08:37



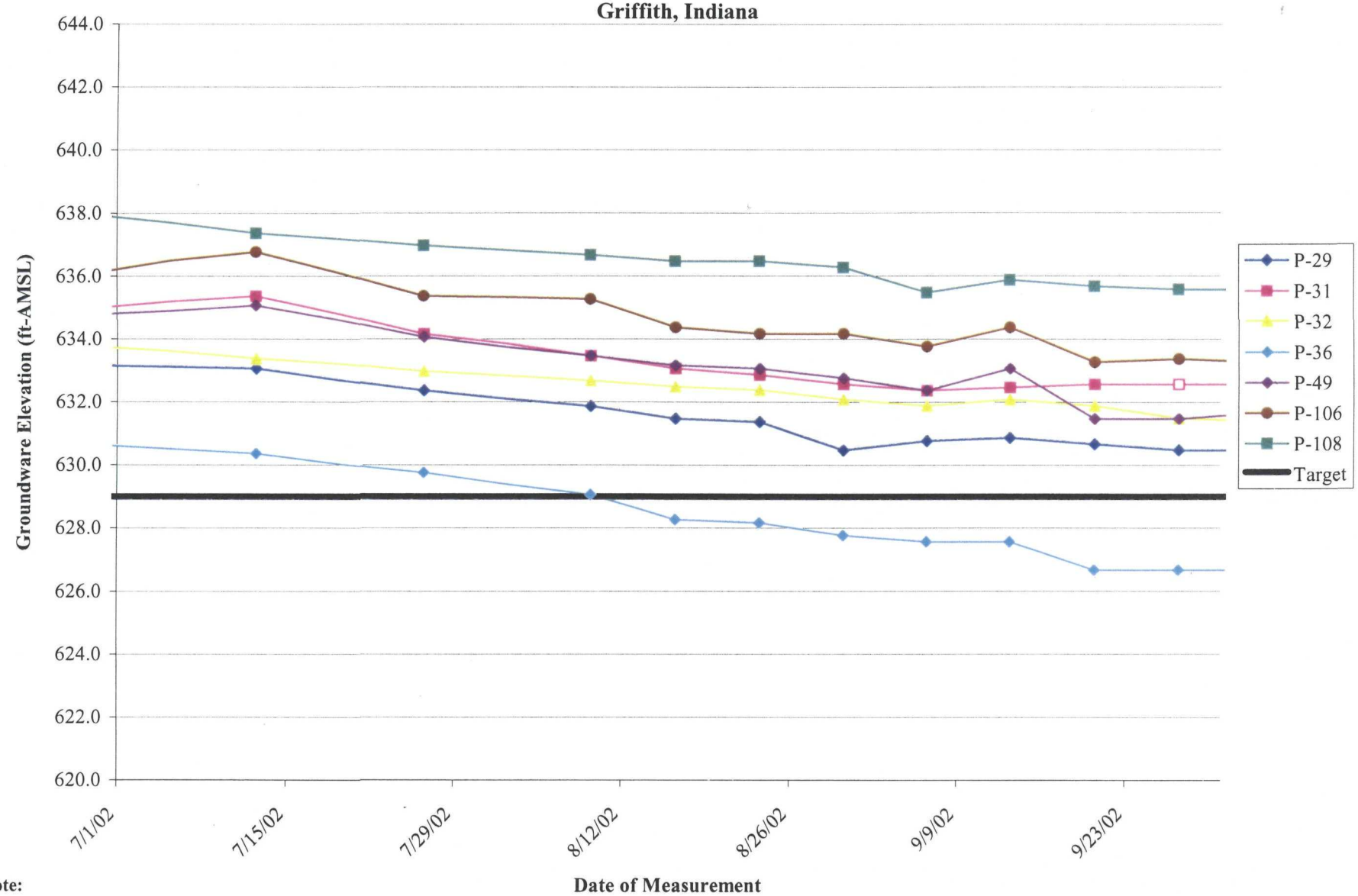
NOTE

1. GROUNDWATER ELEVATIONS WERE MEASURED AT THE SITE ON SEPTEMBER 9, 2002

SCALE				FIGURE
1" = 200'	MWH MONTGOMERY WATSON HARZA	AMERICAN CHEMICAL SERVICE, INC. GRIFFITH, INDIANA	WATER TABLE ELEVATIONS ACROSS THE BARRIER WALL SEPTEMBER 2002	4.2

JOB No. MW Job No. FILE: J:\209\0603 ACS\0301 GWTP\Drawings\Water Table 2 SEPT 02.dgn Plot Date: 21-JAN-2003 10:12

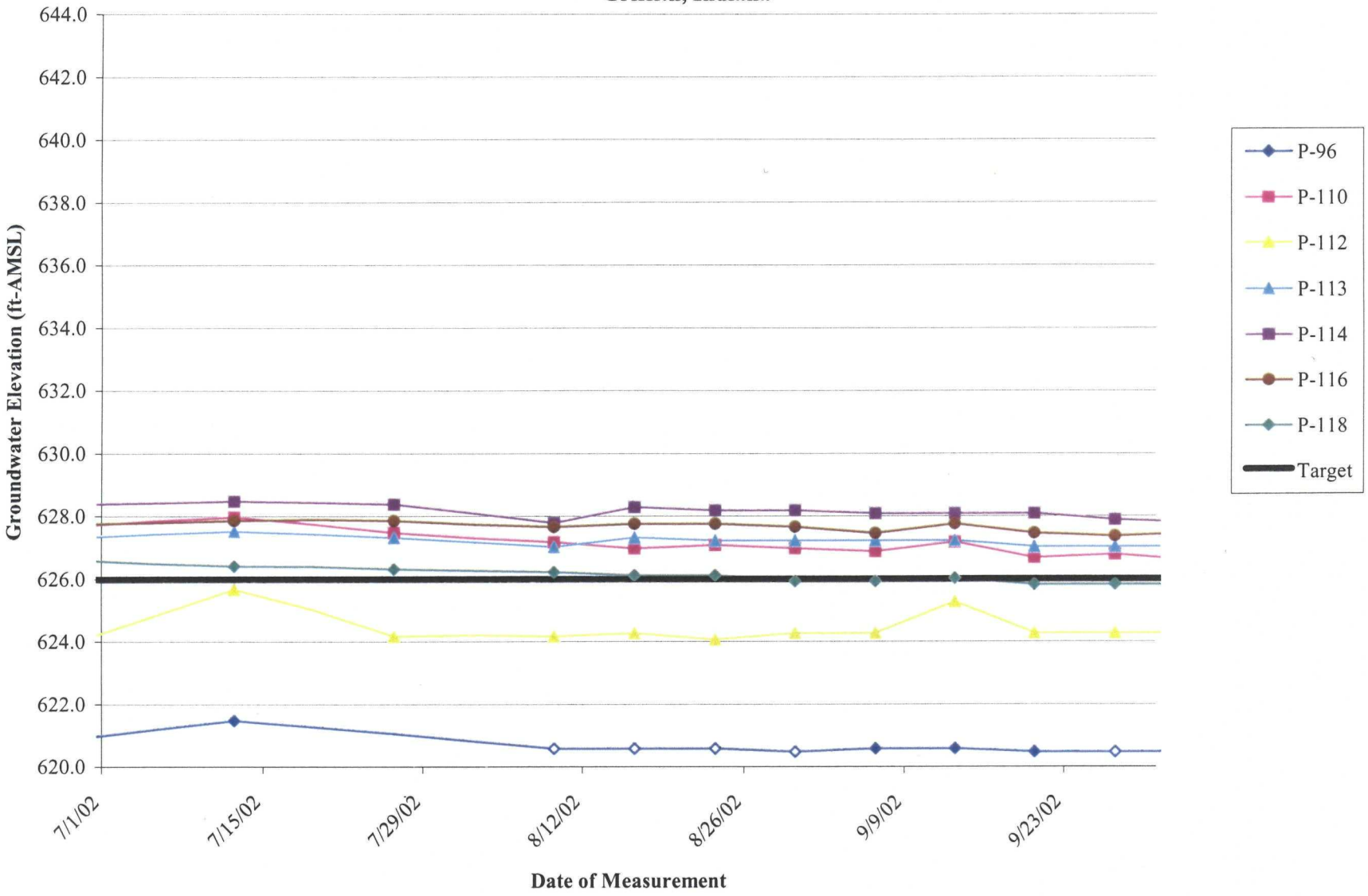
Figure 4.3
Water Level Trends Inside Barrier Wall (On-Site Area)
ACS NPL Site
Griffith, Indiana



Note:
Hollow points represent dry piezometers
(data used for graphing purposes only).

TMK/RHS
J:/209/0603/0301/6030301a023.xls/On-Site Chart for Report

Figure 4.4
Water Level Trends Inside Barrier Wall (Off-Site Area)
Groundwater Monitoring
ACS NPL Site
Griffith, Indiana



Note:
Hollow points represent dry piezometers
(data used for graphing purposes only).

TMK/RHS
J:/209/0603/0301/6030301a023.xls/Off-Site Chart for Report

APPENDIX A

EFFLUENT ANALYTICAL DATA

August 8, 2002 Compliance Sample
Laboratory Results

1-CC

CLASSICAL CHEMISTRY ANALYSES DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: CompuChem Contract:

Lab Code: LIBRTY Case No.: NRAS No.:

SDG No.: RI1024

Matrix (soil/water): WATER Lab Sample ID: RI1024-1

Date Received: 8/9/02 % Solids: 0.00

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

PARAMETER	CONCENTRATION	C	Q	M	DATE ANALYZED
pH	7.51				8/13/02
TSS	1.00	U			8/15/02

Comments:

2

FINAL REPORT OF ANALYSES

COMPUCHEM
Attn: DIANE BYRD
501 MADISON AVENUE
CARY, NC 27513-

REPORT DATE: 08/26/02

SAMPLE NUMBER- 199437 SAMPLE ID- EFFLUENT
DATE SAMPLED- 08/08/02
DATE RECEIVED- 08/09/02 SAMPLER- NOT SPECIFIED
TIME RECEIVED- 1240 DELIVERED BY- CHRIS BRAND

SAMPLE MATRIX- WW
TIME SAMPLED- 1400
RECEIVED BY- ALT

Page 1 of 1 PROJECT NAME :

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
BIOCHEMICAL OXYGEN DEMAND	EPA 405.1	08/09/02	RCB	<2	mg/L	2

PQL = Practical Quantitation Limit
Results followed by the letter J are estimated concentrations.

NC DENR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR _____

1 9110

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: RI1024

Matrix (soil/water): WATER Lab Sample ID: RI1024-1

Level (low/med): LOW Date Received: 8/9/02

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	105			P	
7440-38-2	Arsenic	3.2	B		P	
7440-39-3	Barium	87.6			P	
7440-36-0	Antimony	1.6	U		P	
7440-41-7	Beryllium	0.20	U		P	
7440-43-9	Cadmium	0.20	U		P	
7440-70-2	Calcium	77500			P	
7440-47-3	Chromium	2.8	B		P	
7440-48-4	Cobalt	2.0	B		P	u
7440-50-8	Copper	5.6			P	
7439-89-6	Iron	8.7	U		P	
7439-92-1	Lead	1.1	B		P	
7439-95-4	Magnesium	26400			P	
7439-96-5	Manganese	5.8	B		P	
7439-97-6	Mercury	0.64	U		CV	
7440-02-0	Nickel	35.3			P	
7440-09-7	Potassium	15000			P	
7782-49-2	Selenium	2.9	U		P	
7440-22-4	Silver	0.70	U		P	
7440-23-5	Sodium	312000			P	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	1.6	B		P	u
7440-66-6	Zinc	0.70	U		P	

19111

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

8

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.: RI1024

Matrix: (soil/water) WATER Lab Sample ID: RI1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: RI1024-1A61

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/14/02

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	0.5	U
75-01-4	Vinyl Chloride	0.5	U
74-83-9	Bromomethane	0.5	U UJ
75-00-3	Chloroethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-15-0	Carbon disulfide	0.5	U
67-64-1	Acetone	2	JB & UBJ
75-09-2	Methylene Chloride	2	
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
78-93-3	2-butanone	3	U UJ
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon Tetrachloride	0.5	U
71-43-2	Benzene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-10-1	4-Methyl-2-pentanone	3	U UJ
108-88-3	Toluene	0.2	JB UB
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
591-78-6	2-hexanone	3	U UJ
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
100-41-4	Ethylbenzene	0.5	U
108-38-3	m,p-Xylene	1	U
95-47-6	o-Xylene	0.5	U
100-42-5	Styrene	0.5	U

FORM I VOA

N 9/11/02

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.: RI1024

Matrix: (soil/water) WATER Lab Sample ID: RI1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: RI1024-1A61

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: not dec. _____ Date Analyzed: 08/14/02

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

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

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

FORM I VOA

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.: RI1024

Matrix: (soil/water) WATER Lab Sample ID: RI1024-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: RI1024-1B66

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 08/10/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 08/15/02

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	0.76	J

N9W

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.: RI1024

Matrix: (soil/water) WATER Lab Sample ID: RI1024-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: RI1024-1A64

Level: (low/med) LOW Date Received: 08/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted:08/10/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 08/18/02

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	U

FORM I SV

1D
GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: RI1024

Matrix: (soil/water) WATER Lab Sample ID: RI1024-1

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

% Moisture: _____ decanted: (Y/N)___ Date Received: 08/09/02

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:08/10/02

Concentrated Extract Volume: 5000(uL) Date Analyzed: 08/12/02

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2------	Aroclor-1016	0.50	U
11104-28-2------	Aroclor-1221	1.0	U
11141-16-5------	Aroclor-1232	0.50	U
53469-21-9------	Aroclor-1242	0.50	U
12672-29-6------	Aroclor-1248	0.50	U
11097-69-1------	Aroclor-1254	0.50	U
11096-82-5------	Aroclor-1260	0.50	U

N9112

FORM I PEST

August 29, 2002 Compliance Sample
Laboratory Results

SW-846

1-CC

CLASSICAL CHEMISTRY ANALYSES DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: CompuChem Contract:

Lab Code: LIBRTY Case No.: NRAS No.:

SDG No.: RL1024

Matrix (soil/water): WATER Lab Sample ID: RL1024-1

Date Received: 8/30/02 % Solids: 0.00

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

PARAMETER	CONCENTRATION	C	Q	M	DATE ANALYZED
pH	7.39				8/30/02

10/9/02

Comments:

2

1117A

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EFFLUENT

ab Name: COMPUCHEM Method: 8260B

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: RL1024

latrix: (soil/water) WATER Lab Sample ID: RL1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: RL1024-1B62

evel: (low/med) LOW Date Received: 08/30/02

% Moisture: not dec. _____ Date Analyzed: 09/11/02

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	0.4	J
75-01-4	Vinyl Chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-15-0	Carbon disulfide	0.5	U
67-64-1	Acetone	3	B UB
75-09-2	Methylene Chloride	2	B UB J
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
78-93-3	2-butanone	3	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon Tetrachloride	0.5	U
71-43-2	Benzene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	0.3	JB 0.5 UB
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
591-78-6	2-hexanone	3	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
100-41-4	Ethylbenzene	0.5	U
108-38-3	m,p-Xylene	1	U
95-47-6	o-Xylene	0.5	U
100-42-5	Styrene	0.5	U

FORM I VOA

10/9/02

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.: RL1024

Matrix: (soil/water) WATER Lab Sample ID: RL1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: RL1024-1B62

Level: (low/med) LOW Date Received: 08/30/02

% Moisture: not dec. _____ Date Analyzed: 09/11/02

GC Column: RTX-VMS ID: 0.18 (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	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
540-59-0	1,2-Dichloroethene (total)	0.5	U
1330-20-7	Xylene (total)	0.5	U

FORM I VOA

10/9/02

September 26, 2002 Compliance Sample
Laboratory Results

SW-846

1-CC

CLASSICAL CHEMISTRY ANALYSES DATA SHEET

EPA SAMPLE NO.

EFFLUENT

L.) Name: CompuChem Contract:

Lab Code: LIBRTY Case No.: NRAS No.:

Sl ; No.: RM1024

Matrix (soil/water): WATER Lab Sample ID: RM1024-1

D: :e Received: 9/27/02 % Solids: 0.00

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

PARAMETER	CONCENTRATION	C	Q	M	DATE ANALYZED
pH	7.40				9/27/02

10/24/02

Comments:

2

9949A

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.: RM1024

Matrix: (soil/water) WATER Lab Sample ID: RM1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: RM1024-1A61

Level: (low/med) LOW Date Received: 09/27/02

% Moisture: not dec. _____ Date Analyzed: 10/02/02

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	
74-87-3	Chloromethane	0.5	U	
75-01-4	Vinyl Chloride	0.5	U	
74-83-9	Bromomethane	0.5	U	
75-00-3	Chloroethane	0.5	U	
75-35-4	1,1-Dichloroethene	0.5	U	
75-15-0	Carbon disulfide	0.5	U	
67-64-1	Acetone	2	JB	3 UBJ
75-09-2	Methylene Chloride	2	B	UBJ
156-60-5	trans-1,2-Dichloroethene	0.5	U	
75-34-3	1,1-Dichloroethane	0.5	U	
156-59-2	cis-1,2-Dichloroethene	0.5	U	
78-93-3	2-butanone	3	U	
67-66-3	Chloroform	0.5	U	
71-55-6	1,1,1-Trichloroethane	0.5	U	
56-23-5	Carbon Tetrachloride	0.5	U	
71-43-2	Benzene	0.5	U	
107-06-2	1,2-Dichloroethane	0.5	U	
79-01-6	Trichloroethene	0.1	J	J
78-87-5	1,2-Dichloropropane	0.5	U	
75-27-4	Bromodichloromethane	0.5	U	
10061-01-5	cis-1,3-Dichloropropene	0.5	U	
108-10-1	4-Methyl-2-pentanone	3	U	
108-88-3	Toluene	0.4	JB	0.5 UB
10061-02-6	trans-1,3-Dichloropropene	0.5	U	
79-00-5	1,1,2-Trichloroethane	0.5	U	
127-18-4	Tetrachloroethene	0.09	J	
591-78-6	2-hexanone	3	U	
124-48-1	Dibromochloromethane	0.5	U	
108-90-7	Chlorobenzene	0.5	U	
100-41-4	Ethylbenzene	0.5	U	
108-38-3	m,p-Xylene	0.1	J	
95-47-6	o-Xylene	0.5	U	
100-42-5	Styrene	0.5	U	

FORM I VOA

10/24/02

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.: RM1024

Matrix: (soil/water) WATER Lab Sample ID: RM1024-1

Sample wt/vol: 25 (g/ml) ML Lab File ID: RM1024-1A61

Level: (low/med) LOW Date Received: 09/27/02

% Moisture: not dec. _____ Date Analyzed: 10/02/02

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	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
540-59-0	1,2-Dichloroethene (total)	0.5	U
1330-20-7	Xylene (total)	0.1	J

FORM I VOA

10/24/02

APPENDIX B

CATALYTIC OXIDIZER OFF-GAS ANALYTICAL DATA

July 2, 2002 Off-Gas Sample (Round 5)
Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-005A

ID#: 0207099A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	2.8	5.8	67	140
Vinyl Chloride	2.8	7.2	160	410
Bromomethane	2.8	11	Not Detected	Not Detected
Chloroethane	2.8	7.4	85	230
1,1-Dichloroethene	2.8	11	10	42
Methylene Chloride	2.8	9.8	50	180
1,1-Dichloroethane	2.8	11	20	81
cis-1,2-Dichloroethene	2.8	11	320	1300
Chloroform	2.8	14	0.64 J /J	3.2 J
1,1,1-Trichloroethane	2.8	15	5.7	32
Carbon Tetrachloride	2.8	18	Not Detected	Not Detected
Benzene	2.8	9.0	690	2200
1,2-Dichloroethane	2.8	11	Not Detected	Not Detected
Trichloroethene	2.8	15	2.4 J /J	13 J
1,2-Dichloropropane	2.8	13	2.2 J /J	10 J
cis-1,3-Dichloropropene	2.8	13	Not Detected	Not Detected
Toluene	2.8	11	310	1200
trans-1,3-Dichloropropene	2.8	13	Not Detected	Not Detected
1,1,2-Trichloroethane	2.8	15	0.93 J /J	5.2 J
Tetrachloroethene	2.8	19	1.8 J /J	12 J
Chlorobenzene	2.8	13	21	98
Ethyl Benzene	2.8	12	28	120
m,p-Xylene	2.8	12	160	700
o-Xylene	2.8	12	54	240
Styrene	2.8	12	15	66
1,1,2,2-Tetrachloroethane	2.8	19	0.74 J /J	5.1 J
Acetone	11	27	72	170
Carbon Disulfide	11	35	2.4 J /J	7.7 J
trans-1,2-Dichloroethene	11	45	15	62
2-Butanone (Methyl Ethyl Ketone)	11	33	30	90
Bromodichloromethane	11	76	Not Detected	Not Detected
4-Methyl-2-pentanone	11	46	10 J /J	44 J
2-Hexanone	11	46	Not Detected	Not Detected
Dibromochloromethane	11	96	Not Detected	Not Detected
Bromoform	11	120	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	106	70-130

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-005A

ID#: 0207099A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	102	70-130

GA
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-005A

ID#: 0207099A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	27	56	Not Detected	Not Detected
Vinyl Chloride	27	70	2200	5800
Bromomethane	27	100	Not Detected	Not Detected
Chloroethane	27	72	1200	3100
1,1-Dichloroethene	27	110	14 J IJ	58 J
Methylene Chloride	27	95	290	1000
1,1-Dichloroethane	27	110	340	1400
cis-1,2-Dichloroethene	27	110	3900	16000
Chloroform	27	130	5.6 J IJ	28 J
1,1,1-Trichloroethane	27	150	160	910
Carbon Tetrachloride	27	170	Not Detected	Not Detected
Benzene	27	87	7000	23000
1,2-Dichloroethane	27	110	Not Detected	Not Detected
Trichloroethene	27	150	32	180
1,2-Dichloropropane	27	120	40	190
cis-1,3-Dichloropropene	27	120	Not Detected	Not Detected
Toluene	27	100	4100	16000
trans-1,3-Dichloropropene	27	120	Not Detected	Not Detected
1,1,2-Trichloroethane	27	150	7.1 J IJ	40 J
Tetrachloroethene	27	180	16 J IJ	110 J
Chlorobenzene	27	120	240	1100
Ethyl Benzene	27	120	700	3100
m,p-Xylene	27	120	3400	15000
o-Xylene	27	120	1100	4800
Styrene	27	120	36	160
1,1,2,2-Tetrachloroethane	27	190	Not Detected	Not Detected
Acetone	110	260	500	1200
Carbon Disulfide	110	340	Not Detected	Not Detected
trans-1,2-Dichloroethene	110	430	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	110	320	32 J IJ	95 J
Bromodichloromethane	110	730	Not Detected	Not Detected
4-Methyl-2-pentanone	110	450	200	850
2-Hexanone	110	450	Not Detected	Not Detected
Dibromochloromethane	110	930	Not Detected	Not Detected
Bromoform	110	1100	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	104	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-005A

ID#: 0207099A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	94	70-130

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-005A

ID#: 0207099A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	34	70	Not Detected	Not Detected
Vinyl Chloride	34	87	2700	7000
Bromomethane	34	130	Not Detected	Not Detected
Chloroethane	34	90	1400	3800
1,1-Dichloroethene	34	140	16 J IJ	62 J
Methylene Chloride	34	120	440	1500
1,1-Dichloroethane	34	140	510	2100
cis-1,2-Dichloroethene	34	140	5000	20000
Chloroform	34	170	7.0 J IJ	35 J
1,1,1-Trichloroethane	34	180	240	1300
Carbon Tetrachloride	34	210	Not Detected	Not Detected
Benzene	34	110	9300	30000
1,2-Dichloroethane	34	140	Not Detected	Not Detected
Trichloroethene	34	180	51	280
1,2-Dichloropropane	34	160	42	200
cis-1,3-Dichloropropene	34	150	Not Detected	Not Detected
Toluene	34	130	5400	20000
trans-1,3-Dichloropropene	34	150	Not Detected	Not Detected
1,1,2-Trichloroethane	34	180	8.1 J IJ	45 J
Tetrachloroethene	34	230	23 J IJ	160 J
Chlorobenzene	34	160	330	1600
Ethyl Benzene	34	150	960	4200
m,p-Xylene	34	150	5000	22000
o-Xylene	34	150	1400	6300
Styrene	34	140	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	34	230	Not Detected	Not Detected
Acetone	130	320	380	930
Carbon Disulfide	130	420	Not Detected	Not Detected
trans-1,2-Dichloroethene	130	540	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	130	400	31 J IJ	94 J
Bromodichloromethane	130	910	Not Detected	Not Detected
4-Methyl-2-pentanone	130	560	150	630
2-Hexanone	130	560	Not Detected	Not Detected
Dibromochloromethane	130	1200	Not Detected	Not Detected
Bromoform	130	1400	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	104	70-130

LA 8/29/06

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-005A

ID#: 0207099A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	96	70-130

UH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-005A

ID#: 0207099B-01A

MODIFIED EPA METHOD TO-13 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	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	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

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-005A

ID#: 0207099B-01A

MODIFIED EPA METHOD TO-13 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	Not Detected
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	Not Detected
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

Q = Exceeds Quality Control limits.

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	70	50-150
Phenol-d5	62	50-150
Nitrobenzene-d5	53	50-150
2-Fluorobiphenyl	55 Q	60-120
2,4,6-Tribromophenol	72	50-150
Terphenyl-d14	60	60-120

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-005A

ID#: 0207099B-02A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.72 J
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	0.49 J
1,4-Dichlorobenzene	1.0	5.6
1,2-Dichlorobenzene	1.0	9.9
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	1.3
Naphthalene	1.0	1.6
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	1.2
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

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-005A

ID#: 0207099B-02A

MODIFIED EPA METHOD TO-13 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
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	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	48 Q	50-150
Phenol-d5	63	50-150
Nitrobenzene-d5	61	50-150
2-Fluorobiphenyl	64	60-120
2,4,6-Tribromophenol	58	50-150
Terphenyl-d14	72	60-120

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-005A

ID#: 0207099B-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	0.97 J
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	1.1
1,4-Dichlorobenzene	1.0	12
1,2-Dichlorobenzene	1.0	18
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	2.3
Naphthalene	1.0	3.4
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	1.9
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

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-005A

ID#: 0207099B-03A

MODIFIED EPA METHOD TO-13 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	0.87 J
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	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	44 Q	50-150
Phenol-d5	70	50-150
Nitrobenzene-d5	75	50-150
2-Fluorobiphenyl	77	60-120
2,4,6-Tribromophenol	59	50-150
Terphenyl-d14	79	60-120

8/29/02

July 12, 2002 Off-Gas Sample (Round 6)
Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-006A

ID#: 0207281A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	107251	Date of Collection: 7/12/02
Dil. Factor:	1.3	Date of Analysis: 7/25/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	0.70	1.4	1.4	3.0
Vinyl Chloride	0.70	1.8	4.2	11
Bromomethane	0.70	2.7	Not Detected	Not Detected
Chloroethane	0.70	1.9	2.6	7.0
1,1-Dichloroethene	0.70	2.8	1.4	5.9
Methylene Chloride	0.70	2.4	19	67
1,1-Dichloroethane	0.70	2.8	1.5	6.2
cis-1,2-Dichloroethene	0.70	2.8	14	56
Chloroform	0.70	3.4	0.39 J 1J	2.0 J
1,1,1-Trichloroethane	0.70	3.8	0.88	4.9
Carbon Tetrachloride	0.70	4.4	Not Detected	Not Detected
Benzene	0.70	2.2	20	65
1,2-Dichloroethane	0.70	2.8	Not Detected	Not Detected
Trichloroethene	0.70	3.8	Not Detected	Not Detected
1,2-Dichloropropane	0.70	3.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
Toluene	0.70	2.7	11	42
trans-1,3-Dichloropropene	0.70	3.2	Not Detected	Not Detected
1,1,2-Trichloroethane	0.70	3.8	Not Detected	Not Detected
Tetrachloroethene	0.70	4.8	Not Detected	Not Detected
Chlorobenzene	0.70	3.2	1.4	6.4
Ethyl Benzene	0.70	3.1	2.2	9.8
m,p-Xylene	0.70	3.1	8.4	37
o-Xylene	0.70	3.1	2.5	11
Styrene	0.70	3.0	0.68 J 1J	2.9 J
1,1,2,2-Tetrachloroethane	0.70	4.8	Not Detected	Not Detected
Acetone	2.8	6.7	40	96
Carbon Disulfide	2.8	8.8	4.5	14
trans-1,2-Dichloroethene	2.8	11	1.0 J 1J	4.1 J
2-Butanone (Methyl Ethyl Ketone)	2.8	8.3	17	51
Bromodichloromethane	2.8	19	Not Detected	Not Detected
4-Methyl-2-pentanone	2.8	12	2.2 J 1J	9.3 J
2-Hexanone	2.8	12	Not Detected	Not Detected
Dibromochloromethane	2.8	24	Not Detected	Not Detected
Bromoform	2.8	29	Not Detected	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	147 Q	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-006A

ID#: 0207281A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

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

Surrogates	%Recovery	Method Limits
Toluene-d8	114	70-130
4-Bromofluorobenzene	111	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-006A

ID#: 0207281A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	1.7	3.6	1.9	4.0
Vinyl Chloride	1.7	4.5	63	160
Bromomethane	1.7	6.8	Not Detected	Not Detected
Chloroethane	1.7	4.6	44	120
1,1-Dichloroethene	1.7	7.0	1.1 J J	4.3 J
Methylene Chloride	1.7	6.1	170	600
1,1-Dichloroethane	1.7	7.1	37	150
cis-1,2-Dichloroethene	1.7	7.0	220	890
Chloroform	1.7	8.6	3.1	15
1,1,1-Trichloroethane	1.7	9.6	28	160
Carbon Tetrachloride	1.7	11	Not Detected	Not Detected
Benzene	1.7	5.6	180	590
1,2-Dichloroethane	1.7	7.1	6.5	27
Trichloroethene	1.7	9.5	5.3	29
1,2-Dichloropropane	1.7	8.1	2.5	12
cis-1,3-Dichloropropene	1.7	8.0	Not Detected	Not Detected
Toluene	1.7	6.6	160	620
trans-1,3-Dichloropropene	1.7	8.0	Not Detected	Not Detected
1,1,2-Trichloroethane	1.7	9.6	1.2 J J	6.8 J
Tetrachloroethene	1.7	12	1.4 J J	9.8 J
Chlorobenzene	1.7	8.1	12	59
Ethyl Benzene	1.7	7.6	43	190
m,p-Xylene	1.7	7.6	140	630
o-Xylene	1.7	7.6	56	250
Styrene	1.7	7.5	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.7	12	1.6 J J	11 J
Acetone	6.9	17	520	1300
Carbon Disulfide	6.9	22	8.3	26
trans-1,2-Dichloroethene	6.9	28	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.9	21	210	640
Bromodichloromethane	6.9	47	Not Detected	Not Detected
4-Methyl-2-pentanone	6.9	29	150	620
2-Hexanone	6.9	29	Not Detected	Not Detected
Dibromochloromethane	6.9	60	Not Detected	Not Detected
Bromoform	6.9	73	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	105	70-130

LH 8/29/12

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-006A

ID#: 0207281A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

File Name:	10x260	Date of Collection:	7-12-02
Dil. Fac.:	5x	Date of Analysis:	7/26/02

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	112	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-006A

ID#: 0207281A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

[illegible]	[illegible]	Date of Collection:	7/12/02
[illegible]	[illegible]	Date of Analysis:	7/28/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	1.3	2.7	2.3	4.8
Vinyl Chloride	1.3	3.4	23	59
Bromomethane	1.3	5.1	Not Detected	Not Detected
Chloroethane	1.3	3.5	16	44
1,1-Dichloroethene	1.3	5.2	Not Detected	Not Detected
Methylene Chloride	1.3	4.6	92	330
1,1-Dichloroethane	1.3	5.3	15	62
cis-1,2-Dichloroethene	1.3	5.2	100	410
Chloroform	1.3	6.4	1.5	7.2
1,1,1-Trichloroethane	1.3	7.2	8.8	48
Carbon Tetrachloride	1.3	8.3	Not Detected	Not Detected
Benzene	1.3	4.2	66	210
1,2-Dichloroethane	1.3	5.3	4.2	17
Trichloroethene	1.3	7.1	2.1	11
1,2-Dichloropropane	1.3	6.1	1.2 J IJ	5.9 J
cis-1,3-Dichloropropene	1.3	6.0	Not Detected	Not Detected
Toluene	1.3	5.0	68	260
trans-1,3-Dichloropropene	1.3	6.0	Not Detected	Not Detected
1,1,2-Trichloroethane	1.3	7.2	0.97 J IJ	5.4 J
Tetrachloroethene	1.3	9.0	Not Detected	Not Detected
Chlorobenzene	1.3	6.1	5.8	27
Ethyl Benzene	1.3	5.7	17	76
m,p-Xylene	1.3	5.7	61	270
o-Xylene	1.3	5.7	22	96
Styrene	1.3	5.6	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	1.3	9.1	1.3	9.3
Acetone	5.2	12	440	1000
Carbon Disulfide	5.2	16	2.1 J IJ	6.6 J
trans-1,2-Dichloroethene	5.2	21	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.2	16	94	280
Bromodichloromethane	5.2	35	Not Detected	Not Detected
4-Methyl-2-pentanone	5.2	22	98	410
2-Hexanone	5.2	22	Not Detected	Not Detected
Dibromochloromethane	5.2	45	Not Detected	Not Detected
Bromoform	5.2	55	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	102	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-006A

ID#: 0207281A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	109	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-006A

ID#: 0207281B-01A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name:	0071707	Date of Collection: 7/12/02
Dil. Factor:	[illegible]	Date of Analysis: [illegible]
		Date of Extraction: 7/15/02

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	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	0.32 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

LA 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-006A

ID#: 0207281B-01A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[illegible]	[illegible]	Date of Collection: [illegible]
[illegible]	[illegible]	Date of Analysis: [illegible]
		Date of Extraction: [illegible]

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	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.54 J JB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	3.0 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.

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	89	50-150
Phenol-d5	97	50-150
Nitrobenzene-d5	91	50-150
2-Fluorobiphenyl	87	60-120
2,4,6-Tribromophenol	91	50-150
Terphenyl-d14	86	60-120

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-006A

ID#: 0207281B-02A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	2.0
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	0.63 J IJ
1,2-Dichlorobenzene	1.0	0.82 J IJ
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	0.36 J IJ
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	0.53 J IJ
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

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-006A

ID#: 0207281B-02A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name	0207281	Date of Collection: 7/ 2002
Dilution	1.00	Date of Analysis: 7/ 2002
		Date of Extraction: 7/ 2002

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	0.61 J 15
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.33 J 1JB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	82	50-150
Phenol-d5	93	50-150
Nitrobenzene-d5	95	50-150
2-Fluorobiphenyl	88	60-120
2,4,6-Tribromophenol	74	50-150
Terphenyl-d14	88	60-120

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-006A

ID#: 0207281B-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name: [illegible] Date of Collection: 7/12/02
Dil Factor: [illegible] Date of Analysis: 7/17/02
Date of Extraction: [illegible]

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	1.7
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	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	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

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-006A

ID#: 0207281B-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name:	071709	Date of Collection:	7/12/02
Dil. Factor:	100	Date of Analysis:	7/17/02
		Date of Extraction:	N/A

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	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.41 J KJB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	72	50-150
Phenol-d5	85	50-150
Nitrobenzene-d5	86	50-150
2-Fluorobiphenyl	84	60-120
2,4,6-Tribromophenol	70	50-150
Terphenyl-d14	85	60-120

LH 8/29/02

July 18, 2002 Off-Gas Sample (Round 7)
Laboratory Results

July 18, 2002 Off-Gas Sample (Round 7)
Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-007A

ID#: 0207450R1-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	2.8	5.8	36	77
Vinyl Chloride	2.8	7.2	130	340
Bromomethane	2.8	11	Not Detected	Not Detected
Chloroethane	2.8	7.4	53	140
1,1-Dichloroethene	2.8	11	15	60
Methylene Chloride	2.8	9.8	170	600
1,1-Dichloroethane	2.8	11	39	160
cis-1,2-Dichloroethene	2.8	11	600	2400
Chloroform	2.8	14	1.1 J IJ	5.7 J
1,1,1-Trichloroethane	2.8	15	7.4	41
Carbon Tetrachloride	2.8	18	Not Detected	Not Detected
Benzene	2.8	9.0	440	1400
1,2-Dichloroethane	2.8	11	6.2	26
Trichloroethene	2.8	15	4.8	26
1,2-Dichloropropane	2.8	13	4.4	21
cis-1,3-Dichloropropene	2.8	13	Not Detected	Not Detected
Toluene	2.8	11	250	950
trans-1,3-Dichloropropene	2.8	13	Not Detected	Not Detected
1,1,2-Trichloroethane	2.8	15	0.86 J IJ	4.8 J
Tetrachloroethene	2.8	19	3.0	21
Chlorobenzene	2.8	13	33	150
Ethyl Benzene	2.8	12	47	210
m,p-Xylene	2.8	12	220	970
o-Xylene	2.8	12	82	360
Styrene	2.8	12	22	95
1,1,2,2-Tetrachloroethane	2.8	19	0.65 J IJ	4.5 J
Acetone	11	27	52	120
Carbon Disulfide	11	35	2.8 J IJ	8.8 J
trans-1,2-Dichloroethene	11	45	68	270
2-Butanone (Methyl Ethyl Ketone)	11	33	8.8 J IJ	26 J
Bromodichloromethane	11	76	Not Detected	Not Detected
4-Methyl-2-pentanone	11	46	9.5 J IJ	40 J
2-Hexanone	11	46	Not Detected	Not Detected
Dibromochloromethane	11	96	Not Detected	Not Detected
Bromoform	11	120	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-007A

ID#: 0207450R1-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	108	70-130

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-007A

ID#: 0207450R1-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	27	56	Not Detected	Not Detected
Vinyl Chloride	27	70	940	2400
Bromomethane	27	100	Not Detected	Not Detected
Chloroethane	27	72	600	1600
1,1-Dichloroethene	27	110	7.3 J IJ	30 J
Methylene Chloride	27	95	1200	4200
1,1-Dichloroethane	27	110	470	1900
cis-1,2-Dichloroethene	27	110	6600	27000
Chloroform	27	130	7.4 J IJ	37 J
1,1,1-Trichloroethane	27	150	110	590
Carbon Tetrachloride	27	170	Not Detected	Not Detected
Benzene	27	87	3400	11000
1,2-Dichloroethane	27	110	98	400
Trichloroethene	27	150	40	220
1,2-Dichloropropane	27	120	64	300
cis-1,3-Dichloropropene	27	120	Not Detected	Not Detected
Toluene	27	100	3000	12000
trans-1,3-Dichloropropene	27	120	Not Detected	Not Detected
1,1,2-Trichloroethane	27	150	7.6 J IJ	42 J
Tetrachloroethene	27	180	14 J IJ	99 J
Chlorobenzene	27	120	220	1000
Ethyl Benzene	27	120	780	3400
m,p-Xylene	27	120	4200	19000
o-Xylene	27	120	1500	6600
Styrene	27	120	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	27	190	Not Detected	Not Detected
Acetone	110	260	490	1200
Carbon Disulfide	110	340	Not Detected	Not Detected
trans-1,2-Dichloroethene	110	430	34 J IJ	140 J
2-Butanone (Methyl Ethyl Ketone)	110	320	160	490
Bromodichloromethane	110	730	Not Detected	Not Detected
4-Methyl-2-pentanone	110	450	260	1100
2-Hexanone	110	450	Not Detected	Not Detected
Dibromochloromethane	110	930	Not Detected	Not Detected
Bromoform	110	1100	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-007A

ID#: 0207450R1-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	92	70-130

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-007A

ID#: 0207450R1-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	27	56	Not Detected	Not Detected
Vinyl Chloride	27	70	590	1500
Bromomethane	27	100	Not Detected	Not Detected
Chloroethane	27	72	380	1000
1,1-Dichloroethene	27	110	Not Detected	Not Detected
Methylene Chloride	27	95	1000	3600
1,1-Dichloroethane	27	110	340	1400
cis-1,2-Dichloroethene	27	110	5100	21000
Chloroform	27	130	5.7 J IJ	28 J
1,1,1-Trichloroethane	27	150	68	380
Carbon Tetrachloride	27	170	Not Detected	Not Detected
Benzene	27	87	2000	6400
1,2-Dichloroethane	27	110	71	290
Trichloroethene	27	150	24 J IJ	130 J
1,2-Dichloropropane	27	120	50	230
cis-1,3-Dichloropropene	27	120	Not Detected	Not Detected
Toluene	27	100	1900	7300
trans-1,3-Dichloropropene	27	120	Not Detected	Not Detected
1,1,2-Trichloroethane	27	150	6.8 J IJ	38 J
Tetrachloroethene	27	180	7.4 J IJ	51 J
Chlorobenzene	27	120	140	660
Ethyl Benzene	27	120	500	2200
m,p-Xylene	27	120	2800	12000
o-Xylene	27	120	1100	4700
Styrene	27	120	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	27	190	Not Detected	Not Detected
Acetone	110	260	520	1200
Carbon Disulfide	110	340	Not Detected	Not Detected
trans-1,2-Dichloroethene	110	430	20 J IJ	80 J
2-Butanone (Methyl Ethyl Ketone)	110	320	160	480
Bromodichloromethane	110	730	Not Detected	Not Detected
4-Methyl-2-pentanone	110	450	270	1100
2-Hexanone	110	450	Not Detected	Not Detected
Dibromochloromethane	110	930	Not Detected	Not Detected
Bromoform	110	1100	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-007A

ID#: 0207450R1-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

[redacted]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	88	70-130

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-007A

ID#: 0207416-01A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[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	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	0.37 J LJB
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

LJ 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-007A

ID#: 0207416-01A

MODIFIED EPA METHOD TO-13 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	0.42 J /JB
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	1.6 J /JB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	7.5
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	72	50-150
Phenol-d5	85	50-150
Nitrobenzene-d5	78	50-150
2-Fluorobiphenyl	69	60-120
2,4,6-Tribromophenol	83	50-150
Terphenyl-d14	72	60-120

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-007A

ID#: 0207416-02A

MODIFIED EPA METHOD TO-13 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	0.82 J
1,4-Dichlorobenzene	1.0	9.3
1,2-Dichlorobenzene	1.0	16
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	1.9
Naphthalene	1.0	3.4
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	1.6
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	0.36 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

IJ

IJB

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-007A

ID#: 0207416-02A

MODIFIED EPA METHOD TO-13 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	0.60 J /JB
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.88 J /JB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	3.4 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.

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	61	50-150
Phenol-d5	80	50-150
Nitrobenzene-d5	76	50-150
2-Fluorobiphenyl	72	60-120
2,4,6-Tribromophenol	81	50-150
Terphenyl-d14	72	60-120

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-007A

ID#: 0207416-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)	
Phenol	5.0	Not Detected	/UJ
bis(2-Chloroethyl) Ether	1.0	Not Detected	/UJ
2-Chlorophenol	5.0	Not Detected	/UJ
1,3-Dichlorobenzene	1.0	Not Detected	
1,4-Dichlorobenzene	1.0	3.1	/J
1,2-Dichlorobenzene	1.0	5.5	/J
2-Methylphenol (o-Cresol)	5.0	Not Detected	/UJ
N-Nitroso-di-n-propylamine	1.0	Not Detected	/UJ
4-Methylphenol	5.0	Not Detected	/UJ
Hexachloroethane	1.0	Not Detected	/UJ
Nitrobenzene	1.0	Not Detected	/UJ
Isophorone	1.0	Not Detected	/UJ
2-Nitrophenol	5.0	Not Detected	/UJ
2,4-Dimethylphenol	5.0	Not Detected	/UJ
bis(2-Chloroethoxy) Methane	1.0	Not Detected	/UJ
2,4-Dichlorophenol	5.0	Not Detected	/UJ
1,2,4-Trichlorobenzene	1.0	0.67 J	/J
Naphthalene	1.0	1.1	/J
4-Chloroaniline	10	Not Detected	/UJ
Hexachlorobutadiene	1.0	Not Detected	/UJ
4-Chloro-3-methylphenol	5.0	Not Detected	/UJ
2-Methylnaphthalene	1.0	0.54 J	/J
Hexachlorocyclopentadiene	20	Not Detected	/UJ
2,4,6-Trichlorophenol	5.0	Not Detected	/UJ
2,4,5-Trichlorophenol	5.0	Not Detected	/UJ
2-Chloronaphthalene	1.0	Not Detected	/UJ
2-Nitroaniline	10	Not Detected	/UJ
Dimethylphthalate	5.0	Not Detected	/UJ
Acenaphthylene	1.0	Not Detected	/UJ
2,6-Dinitrotoluene	5.0	Not Detected	/UJ
3-Nitroaniline	10	Not Detected	/UJ
Acenaphthene	1.0	Not Detected	/UJ
2,4-Dinitrophenol	20	Not Detected	/UJ
4-Nitrophenol	20	Not Detected	/UJ
2,4-Dinitrotoluene	5.0	Not Detected	/UJ
Dibenzofuran	1.0	Not Detected	/UJ
Diethylphthalate	5.0	0.32 J	/JB
Fluorene	1.0	Not Detected	/UJ
4-Chlorophenyl-phenyl Ether	1.0	Not Detected	/UJ
4-Nitroaniline	10	Not Detected	/UJ
4,6-Dinitro-2-methylphenol	10	Not Detected	/UJ

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-007A

ID#: 0207416-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ug)	Amount (ug)	
N-Nitrosodiphenylamine	10	Not Detected	1UJ
4-Bromophenyl-phenyl Ether	1.0	Not Detected	1UJ
Hexachlorobenzene	1.0	Not Detected	1UJ
Pentachlorophenol	20	Not Detected	1UJ
Phenanthrene	1.0	Not Detected	1UJ
Anthracene	1.0	Not Detected	1UJ
di-n-Butylphthalate	5.0	Not Detected	1UJ
Fluoranthene	1.0	Not Detected	1UJ
Pyrene	1.0	Not Detected	1UJ
Butylbenzylphthalate	5.0	0.96 J	1JB
3,3'-Dichlorobenzidine	20	Not Detected	1UJ
Chrysene	1.0	Not Detected	1UJ
Benzo(a)anthracene	1.0	Not Detected	1UJ
bis(2-Ethylhexyl)phthalate	5.0	4.2 J	1J
Di-n-Octylphthalate	5.0	Not Detected	1UJ
Benzo(b)fluoranthene	1.0	Not Detected	1UJ
Benzo(k)fluoranthene	1.0	Not Detected	1UJ
Benzo(a)pyrene	1.0	Not Detected	1UJ
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected	1UJ
Dibenz(a,h)anthracene	1.0	Not Detected	1UJ
Benzo(g,h,i)perylene	1.0	Not Detected	1UJ

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

Surrogates	%Recovery	Method Limits
2-Fluorophenol	35 Q	50-150
Phenol-d5	44 Q	50-150
Nitrobenzene-d5	40 Q	50-150
2-Fluorobiphenyl	38 Q	60-120
2,4,6-Tribromophenol	38 Q	50-150
Terphenyl-d14	39 Q	60-120

LH
8/29/02

July 25, 2002 Off-Gas Sample (Round 8)
Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-008A

ID#: 0207567A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

File Name: [illegible]	Method: [illegible]	Date of Collection: [illegible]
Dilution: [illegible]	Inj.: [illegible]	Date of Analysis: [illegible]

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	5.4	11	150	310
Vinyl Chloride	5.4	14	450	1200
Bromomethane	5.4	22	Not Detected	Not Detected
Chloroethane	5.4	15	220	590
1,1-Dichloroethene	5.4	22	38	150
Methylene Chloride	5.4	19	280	980
1,1-Dichloroethane	5.4	22	73	300
cis-1,2-Dichloroethene	5.4	22	1200	4900
Chloroform	5.4	27	1.6 J IS	7.8 J
1,1,1-Trichloroethane	5.4	30	20	110
Carbon Tetrachloride	5.4	35	Not Detected	Not Detected
Benzene	5.4	18	1300	4300
1,2-Dichloroethane	5.4	22	9.2	38
Trichloroethene	5.4	30	14	79
1,2-Dichloropropane	5.4	26	6.5	31
cis-1,3-Dichloropropene	5.4	25	Not Detected	Not Detected
Toluene	5.4	21	670	2600
trans-1,3-Dichloropropene	5.4	25	Not Detected	Not Detected
1,1,2-Trichloroethane	5.4	30	Not Detected	Not Detected
Tetrachloroethene	5.4	38	11	77
Chlorobenzene	5.4	26	66	310
Ethyl Benzene	5.4	24	130	560
m,p-Xylene	5.4	24	600	2700
o-Xylene	5.4	24	180	820
Styrene	5.4	24	38	160
1,1,2,2-Tetrachloroethane	5.4	38	Not Detected	Not Detected
Acetone	22	53	53	130
Carbon Disulfide	22	69	Not Detected	Not Detected
trans-1,2-Dichloroethene	22	88	120	500
2-Butanone (Methyl Ethyl Ketone)	22	65	21 J IS	62 J
Bromodichloromethane	22	150	Not Detected	Not Detected
4-Methyl-2-pentanone	22	91	14 J IS	60 J
2-Hexanone	22	91	Not Detected	Not Detected
Dibromochloromethane	22	190	Not Detected	Not Detected
Bromoform	22	230	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-008A

ID#: 0207567A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

File Name	[illegible]	Date of Collection	7/25/02
Dil. Factor	[illegible]	Date of Analysis	[illegible]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	104	70-130

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AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-008A

ID#: 0207567A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

[redacted]

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	33	69	Not Detected	Not Detected
Vinyl Chloride	33	86	3600	9500
Bromomethane	33	130	Not Detected	Not Detected
Chloroethane	33	88	1600	4400
1,1-Dichloroethene	33	130	19 J /J	77 J
Methylene Chloride	33	120	1100	4000
1,1-Dichloroethane	33	140	550	2200
cis-1,2-Dichloroethene	33	130	6800	28000
Chloroform	33	160	10 J /J	50 J
1,1,1-Trichloroethane	33	180	220	1200
Carbon Tetrachloride	33	210	Not Detected	Not Detected
Benzene	33	110	6200	20000
1,2-Dichloroethane	33	140	49	200
Trichloroethene	33	180	60	330
1,2-Dichloropropane	33	160	52	240
cis-1,3-Dichloropropene	33	150	Not Detected	Not Detected
Toluene	33	130	4700	18000
trans-1,3-Dichloropropene	33	150	Not Detected	Not Detected
1,1,2-Trichloroethane	33	180	Not Detected	Not Detected
Tetrachloroethene	33	230	23 J /J	160 J
Chlorobenzene	33	150	250	1200
Ethyl Benzene	33	140	1100	5100
m,p-Xylene	33	140	5400	24000
o-Xylene	33	140	1700	7500
Styrene	33	140	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	33	230	Not Detected	Not Detected
Acetone	130	320	210	500
Carbon Disulfide	130	420	Not Detected	Not Detected
trans-1,2-Dichloroethene	130	530	52 J /J	210 J
2-Butanone (Methyl Ethyl Ketone)	130	400	110 J /J	340 J
Bromodichloromethane	130	900	Not Detected	Not Detected
4-Methyl-2-pentanone	130	550	160	680
2-Hexanone	130	550	Not Detected	Not Detected
Dibromochloromethane	130	1100	Not Detected	Not Detected
Bromoform	130	1400	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

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8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-008A

ID#: 0207567A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

File Name	r080[illegible]	Date of Collection [illegible]
Dil. Factor	[illegible]	Date of Analysis [illegible]

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	91	70-130

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AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-008A

ID#: 0207567A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

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

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	33	69	Not Detected	Not Detected
Vinyl Chloride	33	86	5300	14000
Bromomethane	33	130	Not Detected	Not Detected
Chloroethane	33	88	2300	6200
1,1-Dichloroethene	33	130	27 J /J	110 J
Methylene Chloride	33	120	1600	5800
1,1-Dichloroethane	33	140	820	3400
cis-1,2-Dichloroethene	33	130	9900	40000
Chloroform	33	160	14 J /J	70 J
1,1,1-Trichloroethane	33	180	330	1800
Carbon Tetrachloride	33	210	Not Detected	Not Detected
Benzene	33	110	9100	30000
1,2-Dichloroethane	33	140	56	230
Trichloroethene	33	180	90	490
1,2-Dichloropropane	33	160	81	380
cis-1,3-Dichloropropene	33	150	Not Detected	Not Detected
Toluene	33	130	6700	26000
trans-1,3-Dichloropropene	33	150	Not Detected	Not Detected
1,1,2-Trichloroethane	33	180	9.4 J /J	52 J
Tetrachloroethene	33	230	34	230
Chlorobenzene	33	150	380	1800
Ethyl Benzene	33	140	1700	7300
m,p-Xylene	33	140	7900	35000
o-Xylene	33	140	2500	11000
Styrene	33	140	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	33	230	Not Detected	Not Detected
Acetone	130	320	330	790
Carbon Disulfide	130	420	Not Detected	Not Detected
trans-1,2-Dichloroethene	130	530	71 J /J	280 J
2-Butanone (Methyl Ethyl Ketone)	130	400	170	520
Bromodichloromethane	130	900	Not Detected	Not Detected
4-Methyl-2-pentanone	130	550	260	1100
2-Hexanone	130	550	Not Detected	Not Detected
Dibromochloromethane	130	1100	Not Detected	Not Detected
Bromoform	130	1400	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH
8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-008A

ID#: 0207567A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130

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AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-008A

ID#: 0207567B-01A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name:	y07300[illegible]	Date of Collection: 7/25/02
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	Not Detected	
1,4-Dichlorobenzene	1.0	Not Detected	
1,2-Dichlorobenzene	1.0	0.62 J	JJ
2-Methylphenol (o-Cresol)	5.0	Not Detected	
N-Nitroso-di-n-propylamine	1.0	Not Detected	
4-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	0.43 J	JB
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	

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AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-EF1-008A

ID#: 0207567B-01A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

FILE Name:	V073005	Date of Collection:	[illegible]
Dil. Fact:	1.00	Date of Analysis:	[illegible]
		Date of Extraction:	[illegible]

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	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.30 J / JB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	70	50-150
Phenol-d5	78	50-150
Nitrobenzene-d5	73	50-150
2-Fluorobiphenyl	68	60-120
2,4,6-Tribromophenol	72	50-150
Terphenyl-d14	70	60-120

LH 8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-008A

ID#: 0207567B-02A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name:	Y073006		Date of Collection: 7/25/02
Dilution:	1.00		Date of Analysis: 7/30/02
			Date of Extraction: 7/26/02

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	1.1
1,4-Dichlorobenzene	1.0	12
1,2-Dichlorobenzene	1.0	20
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	2.2
Naphthalene	1.0	1.9
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	1.1
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	0.38 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

JB

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AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN1-008A

ID#: 0207567B-02A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name:	y073008	Date of Collection:	7/25/02
Dil. Factor:	1.00	Date of Analysis:	7/30/02
		Date of Extraction:	7/26/02

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	0.66 J JB
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.43 J JB
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	43 Q	50-150
Phenol-d5	64	50-150
Nitrobenzene-d5	66	50-150
2-Fluorobiphenyl	63	60-120
2,4,6-Tribromophenol	55	50-150
Terphenyl-d14	64	60-120

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8/29/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-008A

ID#: 0207567B-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name:	073007	Date of Collection: 7/25/02
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	1.4
1,4-Dichlorobenzene	1.0	15
1,2-Dichlorobenzene	1.0	25
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	2.7
Naphthalene	1.0	2.5
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	1.5
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	0.39 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

iJB

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AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106-IN2-008A

ID#: 0207567B-03A

MODIFIED EPA METHOD TO-13 GC/MS FULL SCAN

File Name	y073007	Date of Collection 7/25/02
Dil Factor	[illegible]	Date of Analysis [illegible]
		Date of Extraction [illegible]

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	0.77 J	/JB
Fluoranthene	1.0	Not Detected	
Pyrene	1.0	Not Detected	
Butylbenzylphthalate	5.0	0.45 J	/JB
3,3'-Dichlorobenzidine	20	Not Detected	
Chrysene	1.0	Not Detected	
Benzo(a)anthracene	1.0	Not Detected	
bis(2-Ethylhexyl)phthalate	5.0	Not Detected	
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	41 Q	50-150
Phenol-d5	66	50-150
Nitrobenzene-d5	71	50-150
2-Fluorobiphenyl	68	60-120
2,4,6-Tribromophenol	59	50-150
Terphenyl-d14	72	60-120

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8/29/02

August 8, 2002 Off-Gas Sample (Round 9)
Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106EF1 AUGA

ID#: 0208207B-01A

MODIFIED EPA METHOD TO-13 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	2.1
1,2-Dichlorobenzene	1.0	2.6
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	0.39 J /J
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 /R
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	0.29 J /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

LH 9/24/

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106EF1 AUGA

ID#: 0208207B-01A

MODIFIED EPA METHOD TO-13 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	Not Detected
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	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	63	50-150
Phenol-d5	77	50-150
Nitrobenzene-d5	72	50-150
2-Fluorobiphenyl	73	60-120
2,4,6-Tribromophenol	80	50-150
Terphenyl-d14	77	60-120

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN1 AUGA

ID#: 0208207A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	45	94	Not Detected	Not Detected
Vinyl Chloride	45	120	5000	13000
Bromomethane	45	180	Not Detected	Not Detected
Chloroethane	45	120	2100	5700
1,1-Dichloroethene	45	180	Not Detected	Not Detected
Methylene Chloride	45	160	160	560
1,1-Dichloroethane	45	180	680	2800
cis-1,2-Dichloroethene	45	180	10000	42000
Chloroform	45	220	Not Detected	Not Detected
1,1,1-Trichloroethane	45	250	410	2200
Carbon Tetrachloride	45	280	Not Detected	Not Detected
Benzene	45	140	14000	47000
1,2-Dichloroethane	45	180	84	340
Trichloroethene	45	240	94	520
1,2-Dichloropropane	45	210	63	300
cis-1,3-Dichloropropene	45	200	Not Detected	Not Detected
Toluene	45	170	8600	33000
trans-1,3-Dichloropropene	45	200	Not Detected	Not Detected
1,1,2-Trichloroethane	45	250	Not Detected	Not Detected
Tetrachloroethene	45	310	Not Detected	Not Detected
Chlorobenzene	45	210	760	3500
Ethyl Benzene	45	200	2000	8600
m,p-Xylene	45	200	7700	34000
o-Xylene	45	200	2400	11000
Styrene	45	190	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	45	310	Not Detected	Not Detected
Acetone	180	430	190	450
Carbon Disulfide	180	560	Not Detected	Not Detected
trans-1,2-Dichloroethene	180	720	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	180	540	Not Detected	Not Detected
Bromodichloromethane	180	1200	Not Detected	Not Detected
4-Methyl-2-pentanone	180	740	Not Detected	Not Detected
2-Hexanone	180	740	Not Detected	Not Detected
Dibromochloromethane	180	1500	Not Detected	Not Detected
Bromoform	180	1900	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN1 AUGA

ID#: 0208207A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	107	70-130

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN2 AUGA

ID#: 0208207B-03A

MODIFIED EPA METHOD TO-13 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	0.99 J /J
1,4-Dichlorobenzene	1.0	11
1,2-Dichlorobenzene	1.0	16
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	1.4
Naphthalene	1.0	2.4
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	0.71 J /J
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 R
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

LH 9/24

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN2 AUGA

ID#: 0208207B-03A

MODIFIED EPA METHOD TO-13 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	Not Detected
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	Not Detected
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: VOST*

Surrogates	%Recovery	Method Limits
2-Fluorophenol	41 Q	50-150
Phenol-d5	64	50-150
Nitrobenzene-d5	59	50-150
2-Fluorobiphenyl	66	60-120
2,4,6-Tribromophenol	56	50-150
Terphenyl-d14	72	60-120

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106EF1 AUGA

ID#: 0208207A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	6.7	14	130	280
Vinyl Chloride	6.7	17	610	1600
Bromomethane	6.7	26	Not Detected	Not Detected
Chloroethane	6.7	18	180	490
1,1-Dichloroethene	6.7	27	38	150
Methylene Chloride	6.7	24	100	360
1,1-Dichloroethane	6.7	28	57	240
cis-1,2-Dichloroethene	6.7	27	1100	4300
Chloroform	6.7	33	12	60
1,1,1-Trichloroethane	6.7	37	19	100
Carbon Tetrachloride	6.7	43	4.5 J /J	29 J
Benzene	6.7	22	1900	6200
1,2-Dichloroethane	6.7	28	40	170
Trichloroethene	6.7	36	14	79
1,2-Dichloropropane	6.7	31	5.2 J /J	24 J
cis-1,3-Dichloropropene	6.7	31	Not Detected	Not Detected
Toluene	6.7	26	830	3200
trans-1,3-Dichloropropene	6.7	31	Not Detected	Not Detected
1,1,2-Trichloroethane	6.7	37	Not Detected	Not Detected
Tetrachloroethene	6.7	46	19	130
Chlorobenzene	6.7	31	140	640
Ethyl Benzene	6.7	30	150	660
m,p-Xylene	6.7	30	560	2500
o-Xylene	6.7	30	180	820
Styrene	6.7	29	28	120
1,1,2,2-Tetrachloroethane	6.7	47	Not Detected	Not Detected
Acetone	27	65	120	290
Carbon Disulfide	27	85	8.7 J /J	27 J
trans-1,2-Dichloroethene	27	110	100	410
2-Butanone (Methyl Ethyl Ketone)	27	80	9.4 J /J	28 J
Bromodichloromethane	27	180	Not Detected	Not Detected
4-Methyl-2-pentanone	27	110	5.5 J /J	23 J
2-Hexanone	27	110	Not Detected	Not Detected
Dibromochloromethane	27	230	Not Detected	Not Detected
Bromoform	27	280	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH
9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106EF1 AUGA

ID#: 0208207A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	102	70-130

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN1 AUGA

ID#: 0208207B-02A

MODIFIED EPA METHOD TO-13 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	0.88 J
1,4-Dichlorobenzene	1.0	9.9
1,2-Dichlorobenzene	1.0	14
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-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	1.2
Naphthalene	1.0	1.9
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	0.54 J
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	0.21 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-ME106IN1 AUGA

ID#: 0208207B-02A

MODIFIED EPA METHOD TO-13 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	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.24 J
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
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: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	53	50-150
Phenol-d5	71	50-150
Nitrobenzene-d5	74	50-150
2-Fluorobiphenyl	74	60-120
2,4,6-Tribromophenol	64	50-150
Terphenyl-d14	78	60-120

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN2 AUGA

ID#: 0208207A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	54	110	Not Detected	Not Detected
Vinyl Chloride	54	140	5600	14000
Bromomethane	54	210	Not Detected	Not Detected
Chloroethane	54	140	2400	6300
1,1-Dichloroethene	54	220	Not Detected	Not Detected
Methylene Chloride	54	190	180	650
1,1-Dichloroethane	54	220	780	3200
cis-1,2-Dichloroethene	54	220	12000	48000
Chloroform	54	260	Not Detected	Not Detected
1,1,1-Trichloroethane	54	300	460	2600
Carbon Tetrachloride	54	340	Not Detected	Not Detected
Benzene	54	170	17000	56000
1,2-Dichloroethane	54	220	86	350
Trichloroethene	54	290	120	660
1,2-Dichloropropane	54	250	86	400
cis-1,3-Dichloropropene	54	250	Not Detected	Not Detected
Toluene	54	200	11000	42000
trans-1,3-Dichloropropene	54	250	Not Detected	Not Detected
1,1,2-Trichloroethane	54	300	Not Detected	Not Detected
Tetrachloroethene	54	370	65	450
Chlorobenzene	54	250	1000	4800
Ethyl Benzene	54	240	2600	12000
m,p-Xylene	54	240	11000	47000
o-Xylene	54	240	3400	15000
Styrene	54	230	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	54	370	Not Detected	Not Detected
Acetone	210	520	240	580
Carbon Disulfide	210	680	Not Detected	Not Detected
trans-1,2-Dichloroethene	210	860	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	210	640	Not Detected	Not Detected
Bromodichloromethane	210	1400	Not Detected	Not Detected
4-Methyl-2-pentanone	210	890	Not Detected	Not Detected
2-Hexanone	210	890	Not Detected	Not Detected
Dibromochloromethane	210	1800	Not Detected	Not Detected
Bromoform	210	2200	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister

LH 9/24/02

AIR TOXICS LTD.

SAMPLE NAME: ACS-ME106IN2 AUGA

ID#: 0208207A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	105	70-130

LH 9/24/02

September 30, 2002 Off-Gas Sample (Round 10)
Laboratory Results

AIR TOXICS LTD.

SAMPLE NAME: ACS ME106 EF1 SEPA

ID#: 0210027A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	14	29	170	350
Vinyl Chloride	14	36	410	1100
Bromomethane	14	55	Not Detected	Not Detected
Chloroethane	14	37	220	590
1,1-Dichloroethene	14	56	49	200
Methylene Chloride	14	49	550	1900
1,1-Dichloroethane	14	57	69	280
cis-1,2-Dichloroethene	14	56	720	2900
Chloroform	14	69	4.4 J /J	22 J
1,1,1-Trichloroethane	14	77	32	180
Carbon Tetrachloride	14	89	Not Detected	Not Detected
Benzene	14	45	4000	13000
1,2-Dichloroethane	14	57	Not Detected	Not Detected
Trichloroethene	14	76	27	150
1,2-Dichloropropane	14	65	2.8 J /J	13 J
cis-1,3-Dichloropropene	14	64	Not Detected	Not Detected
Toluene	14	53	940	3600
trans-1,3-Dichloropropene	14	64	Not Detected	Not Detected
1,1,2-Trichloroethane	14	77	Not Detected	Not Detected
Tetrachloroethene	14	96	49	340
Chlorobenzene	14	65	120	580
Ethyl Benzene	14	61	110	470
m,p-Xylene	14	61	470	2000
o-Xylene	14	61	110	490
Styrene	14	60	30	130
1,1,2,2-Tetrachloroethane	14	97	Not Detected	Not Detected
Acetone	56	130	160	390
Carbon Disulfide	56	180	Not Detected	Not Detected
trans-1,2-Dichloroethene	56	220	56	230
2-Butanone (Methyl Ethyl Ketone)	56	170	50 J /J	150 J
Bromodichloromethane	56	380	Not Detected	Not Detected
4-Methyl-2-pentanone	56	230	19 J /J	80 J
2-Hexanone	56	230	Not Detected	Not Detected
Dibromochloromethane	56	480	Not Detected	Not Detected
Bromoform	56	580	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits

LH 11/20/10

AIR TOXICS LTD.

SAMPLE NAME: ACS ME106 EF1 SEPA

ID#: 0210027A-01A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	102	70-130

LH 11/26/02

AIR TOXICS LTD.

SAMPLE NAME: ACS ME106 IN1 SEPA

ID#: 0210027A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	140	280	Not Detected	Not Detected
Vinyl Chloride	140	350	2400	6400
Bromomethane	140	540	Not Detected	Not Detected
Chloroethane	140	360	2400	6500
1,1-Dichloroethene	140	550	Not Detected	Not Detected
Methylene Chloride	140	480	3200	11000
1,1-Dichloroethane	140	560	870	3600
cis-1,2-Dichloroethene	140	550	6600	26000
Chloroform	140	670	50 J /J	250 J
1,1,1-Trichloroethane	140	750	600	3300
Carbon Tetrachloride	140	870	Not Detected	Not Detected
Benzene	140	440	30000	97000
1,2-Dichloroethane	140	560	Not Detected	Not Detected
Trichloroethene	140	740	190	1000
1,2-Dichloropropane	140	640	34 J /J	160 J
cis-1,3-Dichloropropene	140	630	Not Detected	Not Detected
Toluene	140	520	11000	42000
trans-1,3-Dichloropropene	140	630	Not Detected	Not Detected
1,1,2-Trichloroethane	140	750	Not Detected	Not Detected
Tetrachloroethene	140	940	140	960
Chlorobenzene	140	640	730	3400
Ethyl Benzene	140	600	1700	7300
m,p-Xylene	140	600	8000	35000
o-Xylene	140	600	1900	8400
Styrene	140	590	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	140	950	Not Detected	Not Detected
Acetone	540	1300	1000	2400
Carbon Disulfide	540	1700	Not Detected	Not Detected
trans-1,2-Dichloroethene	540	2200	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	540	1600	480 J /J	1400 J
Bromodichloromethane	540	3700	Not Detected	Not Detected
4-Methyl-2-pentanone	540	2300	360 J /J	1500 J
2-Hexanone	540	2300	Not Detected	Not Detected
Dibromochloromethane	540	4700	Not Detected	Not Detected
Bromoform	540	5700	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH 11/26/02

AIR TOXICS LTD.

SAMPLE NAME: ACS ME106 IN1 SEPA

ID#: 0210027A-02A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	100	70-130

LH 11/26/02

AIR TOXICS LTD.

SAMPLE NAME: ACS ME106 IN2 SEPA

ID#: 0210027A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Chloromethane	130	280	Not Detected	Not Detected
Vinyl Chloride	130	340	2900	7500
Bromomethane	130	520	Not Detected	Not Detected
Chloroethane	130	350	2600	7000
1,1-Dichloroethene	130	530	Not Detected	Not Detected
Methylene Chloride	130	470	3300	12000
1,1-Dichloroethane	130	540	930	3800
cis-1,2-Dichloroethene	130	530	7200	29000
Chloroform	130	660	48 J /J	240 J
1,1,1-Trichloroethane	130	730	710	4000
Carbon Tetrachloride	130	840	Not Detected	Not Detected
Benzene	130	430	36000	120000
1,2-Dichloroethane	130	540	240	1000
Trichloroethene	130	720	220	1200
1,2-Dichloropropane	130	620	48 J /J	230 J
cis-1,3-Dichloropropene	130	610	Not Detected	Not Detected
Toluene	130	500	13000	50000
trans-1,3-Dichloropropene	130	610	Not Detected	Not Detected
1,1,2-Trichloroethane	130	730	Not Detected	Not Detected
Tetrachloroethene	130	910	180	1200
Chlorobenzene	130	620	850	4000
Ethyl Benzene	130	580	2000	8900
m,p-Xylene	130	580	9500	42000
o-Xylene	130	580	2300	10000
Styrene	130	570	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	130	920	Not Detected	Not Detected
Acetone	530	1300	1100	2600
Carbon Disulfide	530	1700	Not Detected	Not Detected
trans-1,2-Dichloroethene	530	2100	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	530	1600	480 J /J	1400 J
Bromodichloromethane	530	3600	Not Detected	Not Detected
4-Methyl-2-pentanone	530	2200	370 J /J	1500 J
2-Hexanone	530	2200	Not Detected	Not Detected
Dibromochloromethane	530	4600	Not Detected	Not Detected
Bromoform	530	5500	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

LH 11/26

AIR TOXICS LTD.

SAMPLE NAME: ACS ME106 IN2 SEPA

ID#: 0210027A-03A

MODIFIED EPA METHOD TO-14 GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	101	70-130

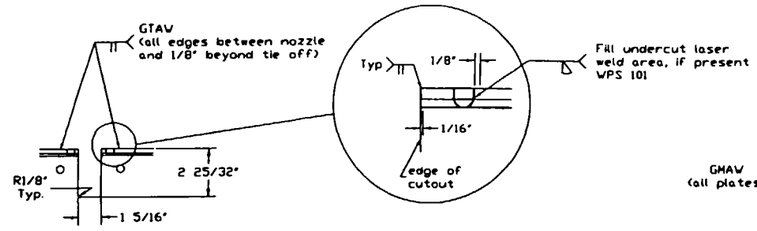
LH 11/26/02

APPENDIX C

HEAT EXCHANGER AS-BUILT DRAWING

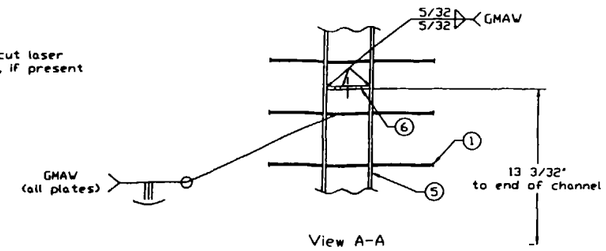
BILL OF MATERIAL

ITEM	QTY	DWG #	DESCRIPTION
1	9	D02172	Plate, 18 ga 2 ply welded 316L s/s, 30" x 84 1/8"
2	2	D02180	Cap, 4-1/2" OD x 1/4" thick 316L s/s
3	2	D02180	Manifold, 4" sch 10s, TP316L s/s
4	2	D02179	Pipe, coped, 3" sch 40s, TP316L s/s
5	4	D02176	Channel, slotted, 7 ga 316L s/s
6	2	D02178	Lifting lug, 7 ga 316L s/s w/ 1" hole
7	18	D02181	Nozzle, formed clam. 1" OD x 0.083" wall, TP316L s/s
8	18	----	Stay, 1/4" diameter round bar, 316L s/s



Detail "A"

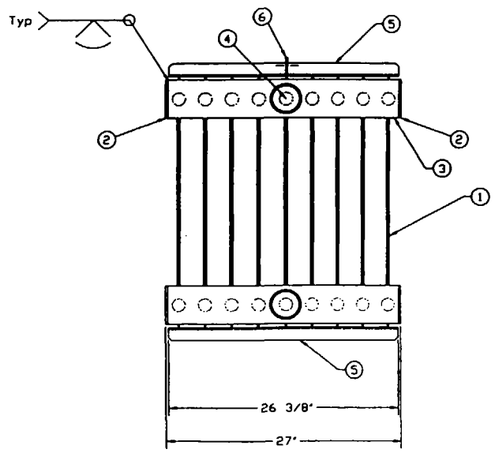
Notching of plates for nozzles

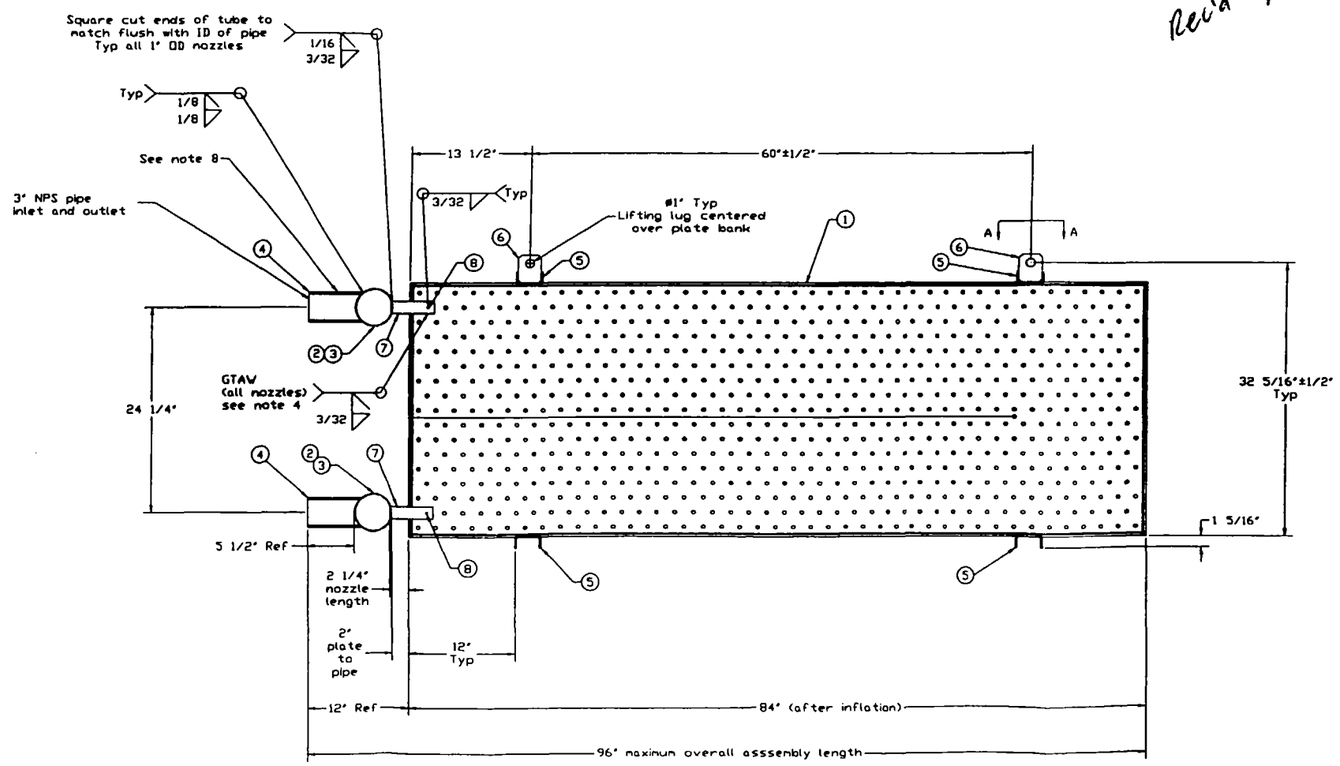


View A-A

Lifting lug and plate attachment to support channels
2X scale

REVISED
Rec'd 10/7/02





Notes:
1. Locate inflation quill (3/8" OD tube) at the plate edge at center of nozzle cutout area.
2. Pillow height = 0.110" @ estimated 450 psig. Inflate with nitrogen.
3. Maximum pneumatic inflation pressure = 500 psig
4. Notch panel & open pillow to 1/4" overall inside pillow.
5. Install plate nozzles. Cap with 14 ga plates (shop supply) for leak testing. Cut to final length after leak testing.
6. Remove discoloration (buff) from nozzle welds prior to leak testing.
7. Leak test individual plates with nitrogen at 250 psig.
8. Stamp s/n 15479 in this location.
9. Leak test plate bank with nitrogen at 225 psig.
10. Heat transfer area = 303 ft^2
11. Internal volume of plate bank = 2.2 ft^3
12. Finished assembly weight = 645 lb.
13. Cap nozzles with plastic caps for shipping.
14. All dimensions are in inches unless specified

Rev	Description	Date	By
1	Plate length was listed as 96"(after inflation). Overall length of 3" nozzles was reduced by design change from 12" extension to 96" overall assembly length.	9/26/02	CRK

Non-code	Proof Tests: Omega 26	
Design pressure = 150 psi	MDMT = -20° F @ 150 psi	
Design temperature: 250°F	NDE: None	PWHT: None
Welded per Omega Thermo Products standards		
Metal pre-weld temperature: 60°F to 100°F		

OMEGA THERMO PRODUCTS
205 Sunset Ave. PO Box 141 Stratford, WI 54484
Phone: (715) 687-8102 Fax: (715) 687-8053

MWH Constructors
9 plate bank
30" x 84" plates
18ga 316Lss

SIZE	SCALE ----	DWG NO. D02182	REV 1

Drawn by: CRKeuler Date: 9/19/02
Tolerances: fractional: ±1/16" decimal: ±0.010" angular: ±1/2"
Approved by: Date