



Phase V Operations, Maintenance, and Monitoring Report

Tank K Area –

October 2003 thru March 2004

Groundwater Source Control Area –

September 2003 thru March 2004

**Former GE Facility (RTN# 3-0518)
Wilmington, Massachusetts**

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EXECUTIVE SUMMARY

The following report presents results for the on-going monitoring programs at the former General Electric (GE) facility site (Site), release tracking number (RTN) 3-0518, located at 50 Fordham Road in Wilmington, Massachusetts (Figure 1-1). The program areas presented herein include:

- Phase V Operations, Maintenance and Monitoring (OM&M) of the Tank K Area
Monitoring period: October 2003- March 2004.
- Phase V OM&M Program for the Groundwater Source Control System
Monitoring period: September 2003- March 2004.

Tank K

TRC identified low flow conditions at several sparge points. As a result, five sparge points were replaced in December 2003. As a result, the system has been in continuous operation except during minor maintenance activities, and the fully functional system is now running under normal operating parameters.

TRC will continue the OM&M program and groundwater monitoring at Tank K.

Groundwater Source Control

In August 2003, the newly installed groundwater treatment system underwent shakedown and startup testing. On September 24, 2003, the system went into full operational mode. Since then, the system has been in continuous operation except for several minor and brief deactivation periods.

Analysis of the monitoring parameters indicates the system has operated within normal ranges during this reporting period. As of March 24, 2004, a total of 493,888 gallons was pumped and treated by the system.

Baseline source control groundwater sampling was completed in August 2003 to document conditions prior to system start-up. In general, the first six months of system operations has resulted in several significant drops in baseline concentrations of contaminants in groundwater at the pumping well and at the source control wells.

TRC will continue the Source Control Area OM&M program and groundwater monitoring.

1.0 INTRODUCTION

The following report presents results for the on-going monitoring programs at the former General Electric (GE) facility site (Site), release tracking number (RTN) 3-0518, located at 50 Fordham Road in Wilmington, Massachusetts (Figure 1-1). The program areas presented herein include:

- Phase V Operations, Maintenance and Monitoring (OM&M) of the Tank K Area
Monitoring period: October 2003- March 2004.
- Phase V OM&M Program for the Groundwater Source Control System
Monitoring period: September 2003- March 2004.

For ease of review, each monitoring program is presented in a stand-alone section. However, the maps and other supporting documentation present comprehensive site-wide conditions (i.e., all data are compiled). The approximate limits of the on-going groundwater monitoring programs are provided in Figure 1-2. A detailed map showing all monitoring well locations is provided in Figure 1-3.

1.1 Reporting Requirements

This report was completed in accordance with the following:

General Regulations

- 310 CMR 40.892 (Phase V Inspection and Monitoring Reports) of the Massachusetts Contingency Plan (MCP);

Tank K

- *Phase IV As-Built Construction and Completion Report, Tank K*, dated March 2001; and,
- *MA DEP Conditional Approval of Tank K Area Phase IV As-Built Construction and Completion Report* letter, dated June 11, 2001.

Groundwater Source Control

- *Phase IV As-Built Construction and Final Inspection Report, Groundwater*, dated September 2003.

1.2 Summary of Monitoring Activities

The Site is currently undergoing extensive groundwater monitoring via the Phase V monitoring programs for: 1) EPL Area, 2) Tank K Area, 3) Groundwater Source Control Area, and 4) Long Term Groundwater Monitoring Program (LTGMP).

These programs, that together represent the site-wide monitoring efforts, are summarized in Table 1-1 and depicted on Figure 1-2. Site-wide groundwater monitoring results are presented in Tables 1-2 and 1-3.

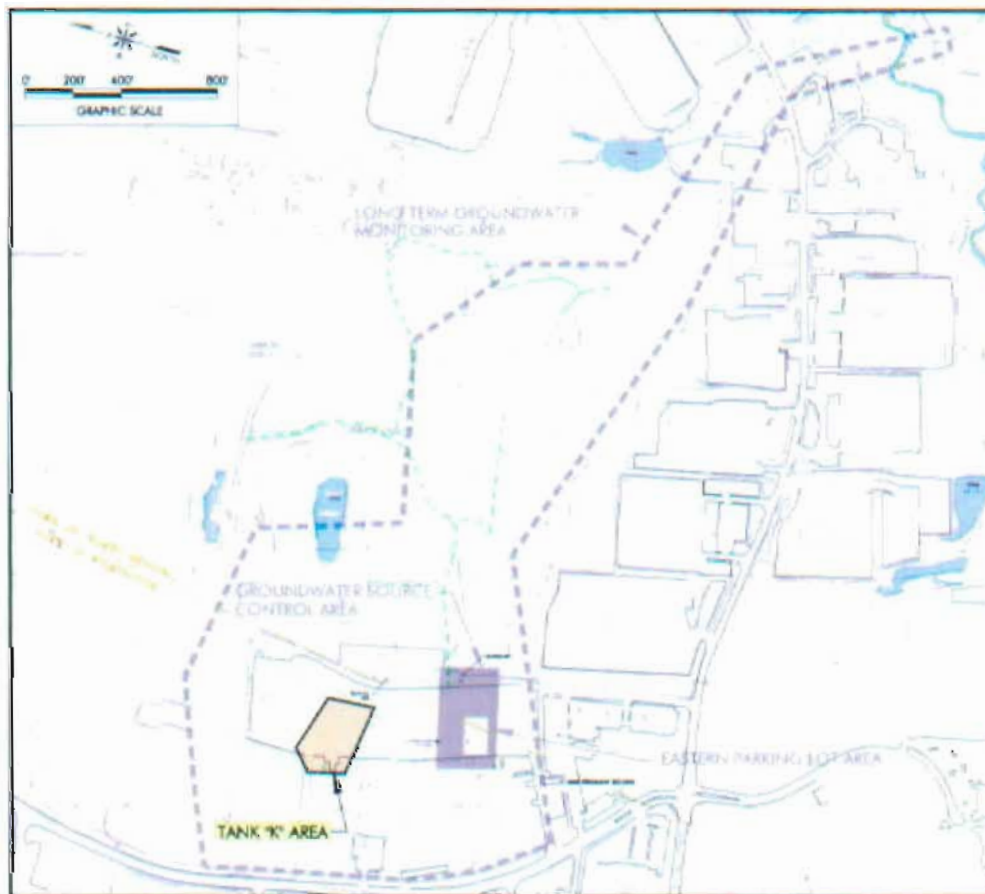
The following report presents the semi-annual results for the Tank K Area and the Groundwater Source Control Area programs.

All supporting documentation related to the groundwater monitoring and sampling efforts, including the Groundwater Sampling Field Forms, and Laboratory Reports with TRC's Data Validation Summary are provided in Appendix A and Appendix B, respectively.

TANK K AREA

Contaminant of Concern: Gasoline-related petroleum hydrocarbons

Description of Area: TRC installed a Soil Vapor Extraction (SVE)/Biosparging System to address the VOCs dissolved in groundwater and adsorbed to the subsurface soil. Since system startup in February 2001, the SVE/Biosparging system undergoes monthly system maintenance and monitoring, quarterly system performance monitoring, and semi-annual sampling of monitoring wells. Periodically, sparge points are replaced as part of the on-going OM&M to optimize air delivery to the subsurface. To date, the system is having a positive effect on reducing the levels and distribution of groundwater contaminants.



2.0 PHASE V OPERATIONS, MAINTENANCE AND MONITORING (OM&M) PROGRAM- TANK K AREA

The Tank K Area Phase V Operations, Maintenance and Monitoring (OM&M) program is performed in accordance with the MA DEP conditional approval letter dated June 11, 2001 for the *Tank K Area Phase IV As-Built Construction and Completion Report*. The OM&M program consists of systems maintenance monitoring, system performance monitoring and groundwater monitoring.

The Phase V OM&M Program for the Tank K Area consists of the following:

PHASE V OM&M PROGRAM- TANK K AREA	
I. System maintenance monitoring - Monthly	<ul style="list-style-type: none"> • Remote monitoring of the system to ensure that it is operational. • Site visits to inspect the treatment system equipment, performing and documenting repairs as needed. • Document the removal of VOCs from the SVE carbon canister air effluent.
II. System performance monitoring - Semi-annual	<ul style="list-style-type: none"> • Measure groundwater quality parameters (temperature, pH, ORP, DO and water level) in the core of the groundwater plume at wells WE-4S, WE-7, WE-8, WE-9 and TRC-106. • Measure groundwater elevation at one downgradient plume location (well WE-4S) to evaluate the efficiency of the air injection system and possible mounding effects.
III. Groundwater monitoring - Semi annual	<ul style="list-style-type: none"> • Measure water levels and sample for VPH per MA DEP methods at wells WE-4S, WE-7, WE-8, WE-9, TRC-104 and TRC-106.

The location of the Tank K Area monitoring wells is provided on Figure 1-3. The Tank K Biosparging/SVE system layout is depicted in Figure 2-1.

2.1 Significant Modifications

No significant modifications to the system were made during this OM&M period.

2.2 Operations, Maintenance and Monitoring

The main systems of the SVE/Biosparge system include.

Biosparging points - installed to a depth of approximately 15 feet (10 feet immediately adjacent to the GSI building). Each air injection point is connected to the positive displacement pressure blower in the remedial equipment building.

SVE System - horizontal laterals are installed in a trench along the rows of injection points, approximately 1 foot below the grade. Each extraction line is connected to a manifold in the remedial system building. Control valves, vacuum gauges, and sampling ports are installed on each extraction line to allow individual control.

Regenerative Blower - the vacuum source for the SVE component.

GAC system - the air treatment device to treat the soil gas before discharging it into the atmosphere.

2.2.1 System Maintenance Monitoring

During the August 15, 2003 system maintenance monitoring visit, four sparge points (A-3, B-4, B-5, and C-3) were running at elevated pressure and low air flow, indicating a potential blockage in the system. Given these conditions, TRC directed their contractor, Innovative Engineering Solutions, Inc (IESI), to clean the sparge points by pressure washing and air injection. Immediate analysis of the system indicated flow and pressure appeared to return to normal.

Subsequent monitoring of the sparge points indicated the air flow started to again decrease, and the pressure at sparge points A-2, A-3, B-4, and B-5 started to increase. In order to resolve this problem, TRC directed IESI to replace the sparge points.

These replacement sparge points were installed in December 2003, with the system still in a functioning mode. A temporary shutdown occurred to allow retrofitting of the individual supply and vacuum lines. Otherwise, the system has been in continuous operation during this monitoring period (see Section 2.3).

TANK K SYSTEM - DEACTIVATION AND CORRECTIVE ACTION		
Dates Impacted	System Malfunction	Corrective Action
Dec. 1-5, 2003	<ul style="list-style-type: none">Air flow decreasing in sparge points A-2, A-3, B-4 and B-5	<ul style="list-style-type: none">Replaced the sparge points on Dec 1, 2003; allowed annular seals to harden, then restarted all points on Dec. 5, 2003.
Jan. 2, 2004	<ul style="list-style-type: none">Pressure increasing in SVE lines.	<ul style="list-style-type: none">Blew out lines to remove any condensate.

TANK K SYSTEM - DEACTIVATION AND CORRECTIVE ACTION

Dates Impacted	System Malfunction	Corrective Action
Jan. 2, 2004	<ul style="list-style-type: none"> • Sparge blower not working correctly. 	<ul style="list-style-type: none"> • Serviced blower (cleaned, greased, replaced) and restarted system.
Feb. 24, 2004	<ul style="list-style-type: none"> • Pressure increasing in SVE lines. 	<ul style="list-style-type: none"> • Blew out lines and observed no change. Believe high water table or deep frost is responsible. Restarted system.
March 10, 2004	<ul style="list-style-type: none"> • SVE line pressure decreased to normal. 	<ul style="list-style-type: none"> • No action needed.

Biosparging System

The primary operational parameters of the biosparging system that are monitored include:

- Injection airflow (target operating range above 1.65 SCFM);
- Pressure at the individual sparge points (target operating range between 5 and 9 psi); and,
- The water level at well WE-4S (to document possible groundwater mounding).

The air flow and pressure measurements have consistently been within normal operating ranges with the exception of sparge point C-2, which has experienced high pressure and low flow recently. C-2 will be closely observed over the next few months.

No groundwater mounding has been observed at WE-4S as a result of sparge point operation.

SVE System

The primary operational parameters of the SVE system that are monitored include:

- Vapor concentration at each SVE lateral;
- Vapor concentration at the Granular Activated Carbon unit (GAC) inlet, GAC midstream and GAC outlet;
- Vacuum levels at each SVE lateral, the knockout tank inlet and outlet, and the blower outlet; and,
- Compressed air temperature at blower outlet/cooling loop inlet and after the cooling loop.

All SVE operational parameters were acceptable during this monitoring period.

The system maintenance monitoring data is summarized in Table 2-1. In addition, the Tank K Field Monitoring Forms are provided in Appendix C. As shown in Table 2-1, air sampling results show that only low detections of VOCs (close to or below the detection limit of one part

per million by volume [ppmv]) have been observed in the GAC influent and no detectable concentrations were observed in the GAC effluent, except for the samples collected in August 2002. The August 2002 samples were previously documented to have been erroneous due to excessive moisture causing faulty PID readings.

2.2.2 System Performance Monitoring

The system performance is evaluated via in-field measurements of groundwater parameters including depth to water, oxidation/reduction potential (ORP), dissolved oxygen (DO), temperature, and pH at each well point.

The system performance data (i.e. In-Field Groundwater Monitoring Data) is presented in Table 2-2.

In general, DO and ORP results continue to be variable in the system monitoring wells, with no consistent trend. In monitoring well WE-4S, DO and ORP have always varied without regard to water temperature. Well WE-4S is located adjacent to a sparge point, which most likely causes the observed fluctuations. In contrast, DO levels in wells WE-8 and WE-9 have remained low following an initial spike during system activation. Given this location in the center of the plume, low DO is an indicator of active biodegradation.(i.e. the micro-organisms use the free oxygen to support degradation of the contaminants).

2.2.3 Groundwater Monitoring Results

Groundwater Elevation Data

Prior to sampling the monitoring wells, groundwater level elevations are measured with an electronic water level meter and recorded to the nearest 0.01 foot in the field logbook. The probe is decontaminated with a soap and water solution, followed by a de-ionized water rinse after use at each well. A summary of groundwater elevation data is presented on Table 1-3. Groundwater elevations appear consistent with previous spring monitoring events.

Groundwater Sampling Data

As summarized in Table 1-1, groundwater samples are collected with a peristaltic pump via low-flow sampling techniques in accordance with U.S. Environmental Protection Agency Region I *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells* (SOP # GW-0001; July 1996).

A multi-meter outfitted with a flow cell was utilized to measure field stabilization parameters (pH, Eh, conductivity, temperature, turbidity, and DO) in groundwater during the collection of low flow samples.

All samples were packed on ice and sent to a Massachusetts-certified laboratory under a chain-of-custody via a laboratory courier for VPH analysis via MA DEP methods.

The groundwater sampling results are presented in Table 1-3. To support the analysis of total BTEX, MTBE, and naphthalene, and total VPH trends, TRC prepared a series of graphs, plotting the results since startup. Those graphs are presented in Appendix D. Analysis of the tabulated results and graphs resulted in the following notable observations:

- At well TRC-104 (a centrally located downgradient monitoring point), contaminants levels have been below MCP GW-1 standards for three consecutive sampling events.
- At well WE-07 (a well located on the northern plume boundary), contaminant levels have been below MCP GW-1 standards for four consecutive sampling events.
- At well WE-08 (a well located in the center of the plume), total BTEX, MTBE, and naphthalene concentrations have increased from 222.1 to 946.3 µg/L during this monitoring period.
- At well WE-09 (a well located in the center of the plume), total BTEX, MTBE, and naphthalene concentrations have decreased, from 1,760 µg/L to 875.9 µg/L during this monitoring period.

All supporting documentation related to the groundwater sampling efforts, including the Groundwater Sampling Field Forms, and Laboratory Reports with TRC's Data Validation Summary are provided in Appendix A and Appendix B, respectively.

2.3 Change in Conditions/Corrective Measures

As previously mentioned, TRC elected to replace sparge points A-2, A-3, B-4, and B-5 with 2-foot long, 1-inch diameter PVC screens set approximately 13-15 feet below ground surface (bgs). In December 2003, these points were installed into the overburden via overburden drilling equipment (ODEX™) technology. Sand-pack, well seals, and roadboxes were installed at each point to finish the construction.

Tank K replacement sparge point construction logs are provided in Appendix E.

2.4 Continuing Actions

TRC will continue the Tank K OM&M program as outlined herein. The next report on Tank K will follow data validation of the September 2004 groundwater sampling results and the October OM&M activities.

GROUNDWATER SOURCE CONTROL AREA

Contaminant of Concern:

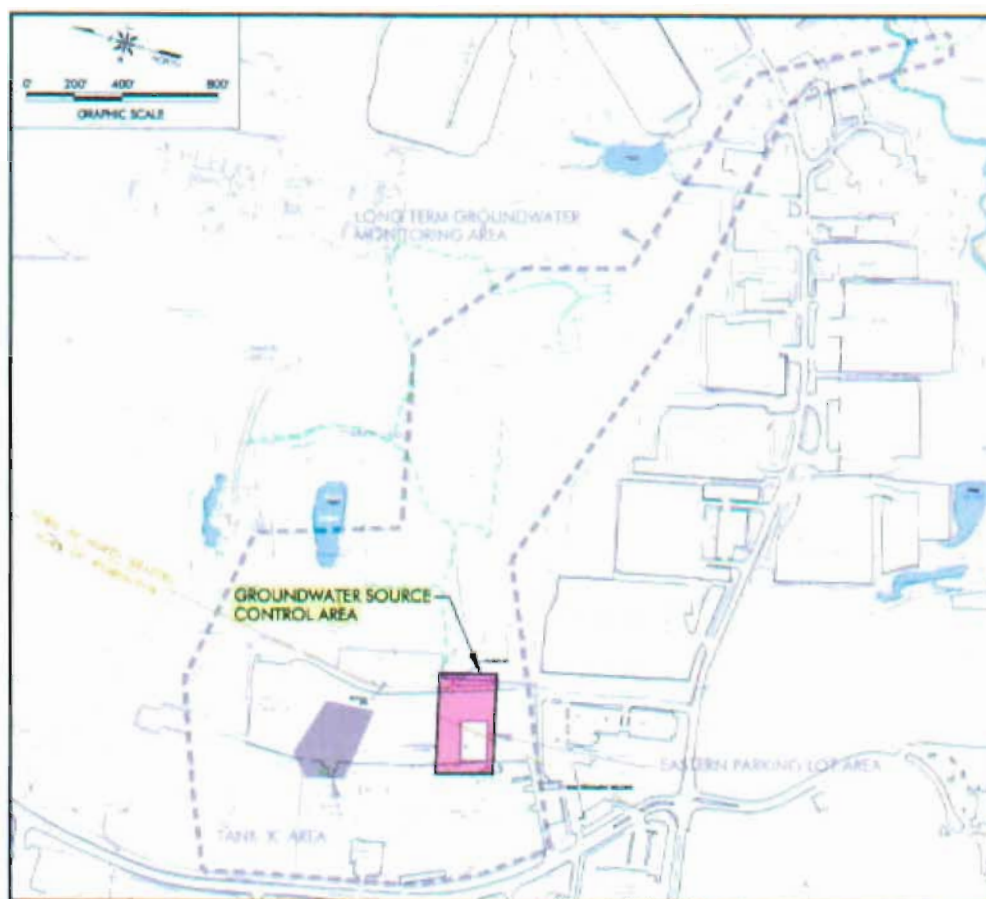
Dissolved-phase Chlorinated Volatile Organic Compounds (CVOCs)

Description of Area:

TRC installed a groundwater "source control" system for the removal of CVOCs in bedrock. The pump and treat system extracts groundwater from well TRC-202R, and transfers the water to the 2003 treatment shed where an air stripper and carbon filtration system removes the CVOCs from the water to meet drinking water standards. The water is then discharged to a storm drain under a NPDES permit.

The system was first started on August 15, 2003.

As part of the Phase IV Remedy Implementation Plan, an enhanced bioremediation treatability study is underway. Based on the results and final recommendations, the existing system may be expanded to include a bioremediation technology.



3.0 PHASE V OPERATIONS, MAINTENANCE AND MONITORING (OM&M) – GROUNDWATER SOURCE CONTROL SYSTEM

The Groundwater Source Control OM&M program is performed in accordance with the MA DEP's *Conditional Approval of Phase IV Remedy Implementation Plan - Groundwater*, dated March 12, 2003. The OM&M program consists of systems maintenance monitoring, system performance monitoring and groundwater monitoring.

In August 2003, the newly installed groundwater treatment system underwent shakedown and startup testing. In addition, baseline source control groundwater sampling was completed to obtain a baseline of groundwater conditions prior to system start-up, and to support the selection of a subset of wells for long-term source control monitoring. On September 24, 2003, the system went into fully operational mode.

In general the Phase V OM&M Program for the Source Control Area includes:

PHASE V OM&M PROGRAM- SOURCE CONTROL AREA	
I. System Operations and Maintenance Monitoring	<ul style="list-style-type: none"> • Bi-weekly liquid and vapor process systems monitoring. • Bi-weekly vapor monitoring at GAC influent, GAC midstream, and GAC effluent. • Monthly groundwater sampling of system influent, untreated GAC influent, GAC midstream, and treated effluent locations. • Monthly groundwater elevation measurements at the pumping well and vicinity wells impacted by drawdown.
II. Groundwater Monitoring	<ul style="list-style-type: none"> • Quarterly groundwater sampling of shallow and deep bedrock wells
III. NPDES Reporting	<ul style="list-style-type: none"> • Monthly reporting of effluent water quality and removal efficiency of treatment system

The wells designated for the monitoring program are summarized on Table 1-1. The Remedial System General Layout is presented on Figure 3-1. The Remedial Equipment Layout is presented as Figure 3-2. The process and instrumentation diagram (P&ID) is presented as Figure 3-3.

Per the requirements of the National Pollutant Discharge Elimination System (NPDES) Exclusion #MA 03I-072, TRC submits monthly analytical results for the groundwater remediation discharge system directly to U.S. Environmental Protection Agency in Boston, under separate cover. A summary of the NPDES sampling results is presented on Table 3-1.

3.1 Significant Modifications

No significant modifications to the program were made during the reporting monitoring period.

3.2 Operations, Maintenance, and Monitoring

The main components of the system are housed in the remedial system equipment building, and include.

Extraction Well and Pump - Groundwater is pumped to the remedial equipment building for treatment.

Air Stripper - Groundwater is initially pumped through a low-profile air stripper to remove the bulk of the VOC contamination. The vapor effluent from the air stripper passes through a series of vapor phase GAC units.

Vapor Granular Activated Carbon System - Two 1,000 lb. vapor phase GAC units (and one additional as a stand-by unit) treat the air stripper effluent prior to discharging to the atmosphere.

Liquid Granular Activated Carbon System - Any trace VOCs remaining in the treated groundwater effluent from the air stripper are removed using two 330 lb. liquid phase GAC units connected in series. Effluent is discharged to the on site storm drain system.

Gauges, Controls, and Valves - A variety of pressure and vacuum gauges, flow meters, sample ports, and valves are present to monitor and control the systems.

3.2.1 System Operations and Maintenance Monitoring

Following start-up, the system has been in continuous operation except for several brief deactivation periods. A summary of system deactivation and correction requirements for this monitoring period is summarized below. Where necessary, a detailed discussion follows.

GROUNDWATER SOURCE CONTROL SYSTEM DEACTIVATION AND CORRECTIVE ACTION		
Dates Impacted	System Malfunction	Corrective Action
August 16-18, 2003	Lightning Strike at System Building.	Repaired and restarted on August 18, 2003.
August 22-September 24, 2003	Following start-up, trace level contaminants are observed in the air stripper water effluent.	After extensive testing, analyses indicate the contaminants are present in ambient air. No breakthrough of carbon units expected; no corrective action required.
October 3 – 6, 2003	System shutdown due to power outage.	Restarted on October 6, 2003

GROUNDWATER SOURCE CONTROL SYSTEM DEACTIVATION AND CORRECTIVE ACTION		
Dates Impacted	System Malfunction	Corrective Action
October 9 –10, 2003	System shutdown due to high condensate level alarm.	Chiller adjusted.
January 20 – 26, 2004	System shutdown due to transfer pump failure and freeze-up.	System repaired.

Lightning Strike

As previously reported in the *Phase IV- As built and Final Inspection Report for Groundwater* dated September 2003, the system was started on August 13, 2003. However, at approximately 3:00 pm on August 13 a lightning strike occurred in the vicinity of the site. As a result, some equipment and parts were damaged by the resultant electrical discharge. These included the submersible pressure transducer, the intrinsically-safe relay in the control panel, and the 24V DC power supply of the CU-300 groundwater pump control unit.

The item critical for the system operation (the relay) was replaced on August 14, 2003. The control system and the alarms and interlocks were checked again and the system start-up was reinitiated on August 15, 2003. The groundwater treatment system was initially operated using the back-up high/low level switches in the well because the submersible pressure transducer and the CU-300 control unit were damaged. The pressure transducer and the CU-300 control unit were later replaced on September 2, 2003 and the micro frequency drive is now fully operational.

Contaminants in Air Stripper Effluent

During initial system operations, two contaminants, acetone and 2-butanone, were detected in the air stripper water effluent that were not detected in the groundwater influent. Given the high solubility of acetone and 2-butanone, TRC believed that these contaminants were present in ambient air (from Ametek facility emissions), and transferred from air (i.e. drawn through the air stripper) to the water. The groundwater pump and treat system was deactivated on August 22, 2003 until TRC could further evaluate the source of the air contaminants.

An initial system evaluation was conducted on August 29, 2004 by TRC's OM&M contractor (IESI) by way of a "bubbler test". This test consisted of bubbling air in the treatment building through distilled water at an air-to-water ratio equal to that maintained by the actual air stripper. This would allow us to evaluate which contaminants are present in the ambient air, and to confirm that the contaminants can be introduced into the air stripper effluent via transfer from air to water.

The test was conducted concurrently with the system's air stripper operations to fully re-create any pressure systems that develop when the system's blower is operating. The test was conducted for two different operating flow rates; one at 2 gpm (coinciding with a bubbler duration of 13 minutes), and the other at 4 gpm (coinciding with a bubbler duration of 78 minutes). Water samples were obtained from both the bubbler and the air stripper effluent to

provide data control and a basis for comparison, with samples from the 2-gpm test identified as BUBBLER 13, and samples from the 4-gpm test identified as BUBBLER 78.

As shown on Table 3-2, analysis of the air stripper effluent and the bubbler water revealed comparable results, with the presence of acetone, and 2-butanone for both the 2-gpm and 4-gpm tests. This data confirm that the contaminants can be transferred from air to water.

The air stripper effluent samples for the 4-gpm test also revealed the presence of chlorinated VOCs that were not present in the companion bubbler sample (BUBBLER 78). The VOCs include 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene. It is unclear why these contaminants appeared in the air stripper effluent given that the stripper is designed to handle much higher concentrations of contaminants in the groundwater. This was never observed during previous or subsequent sampling efforts, and therefore may be a result of human error during sampling or analysis.

A follow-up system evaluation was conducted on September 5, 2004 by IESI using the "bubbler test" with air intake locations obtained from: 1) inside the building, 2) outside the building, and 3) above the roof of the building. This test was designed to evaluate whether the air stripper system created a low-pressure condition that would suck in the emissions from the Ametek facility, and evaluate whether the conditions at ground level differed from that above the building. The air-to-water ratios were again equal to that maintained by the actual air stripper system for the 2 gpm conditions. As shown on Table 3-2, analysis of the bubbler water revealed that none of the VOCs were detected in the samples. Based on this information, and follow-up discussions with the facility manager, TRC concluded that the facility emissions are not continuous, and that the second bubbler test must have been conducted during a short period of time when the ambient air was not impacted by the VOCs.

Given that the three GAC units (in series) located downstream of the air stripper can effectively remove the contaminants before final discharge, the acetone and 2-butanone did not pose an immediate threat to meeting the final discharge standards. Therefore, TRC decided to reactivate the system on September 24, 2003, and conduct a final series of tests to evaluate the possibility of a remote air intake for the stripper system.

First, to evaluate if the low levels of contaminants in the ambient air could be detected by a SUMMA canister sampling methodology, on September 29, 2003 TRC collected one 8-hour ambient air sample using a SUMMA canister located inside the treatment building (next to the building's air intake). The sample was analyzed per EPA Method TO-15 for VOCs, and revealed that not only VOCs can be detected using this methodology, but that several contaminants other than acetone and 2-butanone are present in ambient air, including chloromethane, ethyl alcohol, iso-propyl alcohol, tetrachloroethene, and trichloroethene. These results are summarized on Table 3-3.

Using the SUMMA canister sampling method, TRC returned to the Site to collect four additional ambient air samples on October 20, 2003. As shown on Figure 3-3, one sample was collected from inside the treatment building at the air intake, and the three remaining samples were collected at locations exterior to the treatment building. All the samples were collected over an

8-hour period with SUMMA canisters, and analyzed per EPA Method TO-15 for VOCs. The analyses revealed consistent results for all sample locations, with acetone, 2-butanone, chloromethane, ethyl alcohol, iso-propyl alcohol, tetrachloroethene, and trichloroethene present at similar concentrations. The results are summarized on Table 3-3.

Based on this information, VOCs in air are ubiquitous across the east side of the site, and therefore a remote air intake would not provide any benefit.

All of the laboratory reports and associated data validation are provided in Appendix F.

Given the observed concentration of contaminants in air, and the intermittent occurrence of these contaminants, IESI evaluated the possible increase in operating costs from GAC usage that would be needed to remove the contaminants introduced into the air stripper effluent. Based on this analysis, IESI concluded that the concentrations would not have a substantial impact on GAC usage. Furthermore, given that the three GAC units in series polish the air stripper effluent, there is adequate protection in place to prevent the final discharge of system effluent that exceeds the drinking water standards. Therefore, the recommendation was to proceed with operations, and anticipate the intermittent impacts by ambient air in the future.

3.2.2 System Performance Monitoring

System performance monitoring is conducted via a series of system checks.

- Bi-weekly liquid and vapor process systems monitoring.
- Bi-weekly vapor monitoring at GAC influent, GAC midstream, and GAC effluent.
- Monthly groundwater sampling of system influent, untreated GAC influent, GAC midstream, and treated effluent locations.

Table 3-4 presents a summary of system performance monitoring parameters measured in the field. Analysis of the system monitoring parameters indicates the systems are operating within normal ranges. As of March 24, 2004, a total of 493,888 gallons has been pumped and treated in the system.

Field forms for system monitoring are presented in Appendix G.

3.2.3 Groundwater Monitoring Results

Groundwater Elevation Data

Prior to sampling the monitoring wells, groundwater level elevations are measured with an electronic water level meter and recorded to the nearest 0.01 foot in the field logbook. The probe is decontaminated with a soap and water solution, followed by a de-ionized water rinse after use at each well. A summary groundwater elevation data is presented on Table 3-5. Analysis of monthly groundwater elevation gauging data indicates that a cone of depression has developed

around the pumping well and all of the source control monitoring wells, thereby revealing that the pumping well is effectively removing groundwater from the target zone.

Groundwater Sampling Data

As summarized on Table 1-1, groundwater samples are collected using PDB samplers, set a minimum of two-weeks prior to sampling, except for well GZA-105R, which is sampled using a peristaltic pump and low-flow sampling techniques because the small well diameter precluded the use of a PDB. Each sample was analyzed by a Massachusetts certified laboratory for VOCs via MCP Method 8260B.

Analysis of the baseline sampling results reveal distinct shallow and deep bedrock zones of VOC contamination in the source control wells. The maximum contaminant levels were observed in the deep bedrock portion of the aquifer, within the target zone for remediation. Note that the bottom of the contaminant plume is constrained at depth by a non-water-bearing competent bedrock zone.

In general, the first six months of system operations have resulted in several significant drops in baseline concentrations of contaminants in the pumping well TRC-202R (sampled monthly) and the eleven source control wells (sampled quarterly). These data further support the conclusion that pumping well TRC-202R is effectively removing contaminated groundwater from the target zone of remediation, and effectively operating as a source control remedy.

Total chlorinated VOC (CVOC) concentrations at the pumping well, TRC-202R, decreased immediately upon system start-up and steadily since, including the following notable results from the reporting period of August 2003 to March 2004:

- Trichloroethene concentrations decreased from 18,000 µg/L to 1,700 µg/L.
- Tetrachloroethene concentrations decreased from 14,000 µg/L to 1,300 µg/L.
- 1,1-Dichloroethene concentrations decreased from 160 µg/L to 20 µg/L in November 2003. Higher detection limits in March 2004 does not allow for additional analysis at this time.
- Vinyl chloride concentrations decreased from 51 µg/L to 6 µg/L in November 2003. Higher detection limits in March 2004 does not allow for additional analysis

As with the pumping well, the source control monitoring wells have also revealed decreased concentrations in total CVOC concentrations since startup, except for wells GZA-105R, BRW-1R2, and BRW-1R4, where CVOC concentrations increased in December 2003 (where concentrations decrease in the other wells), and then decreased in March 2004.

A summary of groundwater sampling results from the source control wells is presented on Table 1-2. A summary of the pumping well TRC-202R monitoring results is presented in Table 3-1 (identified as "A/S influent").

All supporting documentation related to the groundwater sampling efforts, including the Groundwater Sampling Field Forms, and Laboratory Reports with TRC's Data Validation Summary are provided in Appendix A and Appendix B, respectively.

3.3 Changes in Conditions/Corrective Measures

No changes in condition or corrective measures were required during this reporting period.

3.4 Continuing Actions

TRC will continue the Source Control Area OM&M Program as outlined herein, with the next report to follow validation of the data collected during the September 2004 groundwater sampling event.

TABLES

Table 1-1
 Summary of Groundwater Monitoring Program
 Former GE Site, Wilmington, MA

WELL ID	Overburden/Bedrock	Analysis	Well Diameter (Inches)	SPECIFICATIONS			Sampling Method	FREQUENCY				GROUNDWATER GAUGING FREQUENCY	
				Total Depth (ft)	Screened Interval (ft bgs)	Centerline (ft)		Annual	Semi-Annual	Quarterly	Dec-Mar		
Source Control													
BR-WR2													
EMW-1R1													
GZA-105R													
IP-2R1													
IP-4R1													
BR-WR4													
EMW-1R2													
IP-1R2													
IP-2R3													
IP-3R2													
IP-4R3													
Tank K Area													
TRC-104	Overburden		1.25	1.10	10	9							
TRC-106	Overburden		1.25	2.12	12	9							
WE-4S	Overburden		2	3.13	13	10							
WE-7	Overburden		1.5	2.12	12	9							
WE-8	Overburden		4	2.17	17	13							
WE-9	Overburden		2	2.12	12	9							
EPL Area													
EMW-11S	Overburden		2	1.11	11	8							
GZA-105S	Overburden		1.5	4.14	14	10							
TRC-101	Overburden		1.25	1.5-10.5	10.5	7							
TRC-102	Overburden		1.25	2.25-12.25	12.25	9							
TRC-103	Overburden		1.25	1.25-11.25	11.25	8							
LTGMP													
GZA-101R	Bedrock		0.5	36.5-38	38.44	37.5							
GZA-102R2	Bedrock		0.5	25.26.5	29.08	25.5							
GZA-103R1	Bedrock		0.5	18.19	19	18.5							
GZA-103R2	Bedrock		0.5	28.29	29	28.5							
GZA-105D	Overburden		1.5	16.26	26	24							
EMW-10D	Overburden		2	19.29	29	25							
EMW-10R	Bedrock		2	42.52	52	49							
EMW-11D	Overburden		2	22.32	32	29							
EMW-11R3	Bedrock		0.75	158-168	168	165							
GZA-10	Overburden		1.5	13.38	40.09	18							
GZA-14	Overburden		1.5	39.49	51.58	46							
GZA-14A	Overburden		1.5	0.15	17.55	10							
PS-1S	Overburden		0.62	12.17	20	18							
PS-1M	Overburden		0.62	34.25-39.25	41	38							
PS-ID	Overburden		0.62	49.25-54.25	55	53.25							
PS-2M	Overburden		0.62	34.39	41	38.5							
PS-2D	Overburden		0.62	49.1-54.1	55.2	53							
PS-5D	Overburden		0.62	24.1-29.1	30.2	28							
STM-8R	Bedrock		0.75	46.5-51.5	51.5	48							
STM-8M	Overburden		0.75	19.5-24.5	24.5	22							
STM-8D	Overburden		0.75	34.7-39.7	39.7	37							
TRC-301R-C	Bedrock		4	66-172	172	87.5							
W-1	Overburden		2	33.5-38.5	38.5	35.5							
W-2	Overburden		2	15.25	25	22							
MW-4	Overburden		1.5	18.28	30	24							
MW-4A	Overburden		1.5	38-48	50	45							
MW-5	Overburden		1.5	28-38	40	33							
MW-7	Overburden		1.5	15-25	27	22							
Gauging Program Only													
PZ-2S	Overburden												
CW-1	Overburden												
CW-2	Overburden												
EMW-10S	Overburden												
GZA-101M	Overburden												
GZA-103S	Overburden												
GZA-2	Overburden												
GZA-4	Overburden												
GZA-5	Overburden												
GZA-6	Overburden												
GZA-12	Overburden												
MW-1	Bedrock												
PS-2S	Overburden												
PS-3	Overburden												
PS-4	Overburden												
PS-5S	Overburden												
PS-8S	Overburden												
PS-8M	Overburden												
PS-8D	Overburden												
PZ-8R	Bedrock												
PZ-9S	Overburden												
PZ-9D	Overburden												
PZ-9R	Bedrock												
STM-2M	Overburden												
STM-2S	Overburden												
STM-2R1	Bedrock												
STM-2R2	Bedrock												
STM-4R	Bedrock												
STM-7BS	Overburden												
STM-7BR1	Overburden												
STM-7BR2	Overburden												
STM-8S	Overburden												
WE-105R2	Bedrock												

Notes:
 Pz = Field measurements of pH, temperature, specific conductivity, dissolved oxygen, turbidity, and oxidation/reduction potential.
 Ft = Field measurements of pH, temperature, specific conductivity, dissolved oxygen, turbidity, and oxidation/reduction potential.
 PDB = Passive Diffusion Bag
 PDB_s = Small Diameter PDB sampler.
 PP = Peristaltic Pump
 OB = Obstruction at depth prevents use of a PDB.
 Purge mod = Modified purge method (one tubing volume of water)
 Bgs = Below ground surface
 N/A = Not applicable
 (1) - Removed from sampling program April 2004.
 (2) - Annual sampling reduced to bi-annual sampling April 2004.
 (3) - Removed from sampling program April 2004; will be re-sampled once well PS-1D meets MCP GW-1 standards.

Table 2-1
Tank K SVE System Maintenance Monitoring
Former GE Site, Wilmington, MA

Date	PID Readings across GAC (ppm,)		
	Influent	Midpoint	Effluent
<i>Biweekly</i>			
2/8/2001	< 1	< 1	< 1
2/9/2001	< 1	< 1	< 1
2/21/2001	< 1	< 1	< 1
2/23/2001	< 1	< 1	< 1
2/27/2001	< 1	< 1	< 1
3/2/2001	< 1	< 1	< 1
3/7/2001	< 1	< 1	< 1
3/23/2001	< 1	< 1	< 1
<i>Monthly</i>			
4/20/2001	< 1	< 1	< 1
5/25/2001	< 1	< 1	< 1
6/29/2001	< 1	< 1	< 1
7/12/2001	1.2	< 1	< 1
8/6/2001	1.4	< 1	< 1
9/24/2001	1.2	< 1	< 1
10/8/2001	< 1	< 1	< 1
11/28/2001	< 1	< 1	< 1
12/14/2001	< 1	< 1	< 1
1/7/2002	< 1	< 1	< 1
2/22/2002	< 1	< 1	< 1
3/25/2002	< 1	< 1	< 1
4/2002	NM	NM	NM
5/29/2002	NM	NM	NM
6/18/2002	< 1	< 1	< 1
7/31/2002	< 1	< 1	< 1
8/14/2002 ¹	58	43.5	5.1
8/28/2002 ^{1,2}	32	28	26
9/27/2002	< 1	< 1	< 1
10/28/2002	< 1	< 1	< 1
11/12/2002	NM	NM	NM
12/17/2002	< 1	< 1	< 1
12/23/2002	< 1	< 1	< 1
1/24/2003	< 1	< 1	< 1
2/18/2003	< 1	< 1	< 1
3/25/2003	< 1	< 1	< 1
4/18/2003	NM	NM	NM
4/22/2003	< 1	< 1	< 1
5/6/2003	NM	NM	NM
5/23/2003	< 1	< 1	< 1
6/17/2003	< 1	< 1	< 1
7/22/2003	< 1	< 1	< 1
8/4/2003	NM	NM	NM
8/25/2003	< 1	< 1	< 1
9/10/2003	< 1	< 1	< 1
9/26/2003	< 1	< 1	< 1

**Table 2-1
Tank K SVE System Maintenance Monitoring
Former GE Site, Wilmington, MA**

Date	PID Readings across GAC (ppm _v)		
	Influent	Midpoint	Effluent
10/7/03	<1	<1	<1
10/24/03	<1	<1	<1
11/05/03	<1	<1	<1
11/21/03	<1	<1	<1
12/5/03	<1	<1	<1
12/15/03	<1	<1	<1
01/02/04	<1	<1	<1
01/12/04	<1	<1	<1
01/29/04	<1	<1	<1
02/11/04	<1	<1	<1
02/24/04	<1	<1	<1
03/10/04	<1	<1	<1
03/25/04	<1	<1	<1

Note:

GAC = Granular Activated Carbon

NM = Not Measured due to intermittent operations

¹ = VOC data biased high due to faulty PID (sensitive to excessive moisture in the air stream).

² = Second monthly measurement taken to evaluate air stream.

Table 2-2
Tank K Remediation System - In-Field Groundwater Monitoring Data
 Former GE Site, Wilmington, MA

Monitoring Well ID	Date	Depth to Water (feet)	ORP (mV)	DO (mg/L)	Temperature (°C)	pH	Pressure (in. w.c.)
PZ-8S	2/27/2001	NM	67.8	0.61	12.9	5.98	0
	3/23/2001	NM	NM	NM	NM	NM	NM
	6/29/2001	NM	41.2	0.43	18.12	6.03	0
	9/19/2001	NM	NM	NM	NM	NM	NM
	12/14/2001	NM	NM	NM	NM	NM	NM
	4/8/2002	NM	NM	NM	NM	NM	NM
	9/25/2002	NM	NM	NM	NM	NM	NM
	3/18/2003	NM	NM	NM	NM	NM	NM
	9/22/03	NM	NM	NM	NM	NM	NM
03/26/04	NM	NM	NM	NM	NM	NM	NM
TRC-104	2/27/2001	2.82	146.9	1.74	6.74	5.81	0
	3/23/2001	0.95	238	8.64	5.89	5.34	0
	6/29/2001	4.31	47.5	0.35	22.18	5.5	0
	9/19/2001	3.89	-13.7	0.34	25.45	6.11	0
	12/14/2001	3.75	84.8	3.81	10.12	5.91	0
	4/8/2002	3.21	92.6	5.93	10.85	5.79	NM
	9/25/2002	4.00	-4.2	0.25	24.52	6.09	NM
	3/18/2003	2.65	61.6	13.25	6.82	4.85	NM
	9/22/2003	4.27	-273	0.36	23.89	6.30	NM
03/26/04	2.60	196.4	10.14	9.21	5.2	NM	
TRC-105D	2/27/2001	2.88	112.2	0.75	11.27	5.84	0
	3/23/2001	1.00	136	0.52	8.34	5.93	0
	6/29/2001	4.35	61.3	0.48	20.11	6.03	0
	9/19/2001	NM	NM	NM	NM	NM	NM
	12/14/2001	NM	NM	NM	NM	NM	NM
	4/8/2002	NM	NM	NM	NM	NM	NM
	9/25/2002	NM	NM	NM	NM	NM	NM
	3/18/2003	NM	NM	NM	NM	NM	NM
	9/22/03	NM	NM	NM	NM	NM	NM
03/26/04	NM	NM	NM	NM	NM	NM	
TRC-105S	2/27/2001	NM	223.4	4.63	5.32	5.9	0
	3/23/2001	0.63	171	10.32	5.52	6.48	0
	6/29/2001	NM	151.2	3.18	23.21	5.83	0
	9/19/2001	NM	NM	NM	NM	NM	NM
	12/14/2001	NM	NM	NM	NM	NM	NM
	4/8/2002	NM	NM	NM	NM	NM	NM
	9/25/2002	NM	NM	NM	NM	NM	NM
	3/18/2003	NM	NM	NM	NM	NM	NM
	9/22/03	NM	NM	NM	NM	NM	NM
03/26/04	NM	NM	NM	NM	NM	NM	

Notes:
 ORP = Oxidation/Reduction Potential
 DO = Dissolved Oxygen
 NM = Not Measured

Table 2-2 (Cont.)
Tank K Remediation System - In-Field Groundwater Monitoring Data
 Former GE Site, Wilmington, MA

Monitoring Well ID	Date	Depth to Water (feet)	ORP (mV)	DO (mg/L)	Temperature (°C)	pH	Pressure (in. w.c.)	
TRC-106	2/27/2001	3.45	45.9	4.55	8.17	6.51	2.3	
	3/23/2001	Not Located						
	6/29/2001	NM	NM	NM	NM	NM	NM	
	9/19/2001	NM	NM	NM	NM	NM	NM	
	12/14/2001	NM	NM	NM	NM	NM	NM	
	4/8/2002	NM	NM	NM	NM	NM	NM	
	9/25/2002	4.38	14.6	2.12	21.04	7.13	NM	
	3/21/2003	3.40	186.3	5.00	7.99	8.92	NM	
	9/22/2003	5.74	-141.3	0.82	20.60	8.02	NM	
03/25/04	4.15	-43.4	12.11	7.93	6.94	NM		
WE-2R	2/27/2001	NM	NM	NM	NM	NM	NM	
	3/23/2001	NM	NM	NM	NM	NM	NM	
	6/29/2001	4.97	36	3.01	17.2	6.05	0	
	9/19/2001	4.21	179.9	3.22	16.38	5.45	0	
	12/14/2001	4.05	184.3	5.13	12.18	5.87	0.85	
	4/8/2002	3.38	192.2	4.74	13.75	5.64	NM	
	9/25/2002	NM	NM	NM	NM	NM	NM	
	3/18/2003	NM	NM	NM	NM	NM	NM	
	9/22/03	NM	NM	NM	NM	NM	NM	
03/25/04	NM	NM	NM	NM	NM	NM		
WE-4D	2/27/2001	3.35	249.1	1.82	10.15	5.09	0	
	3/23/2001	1.45	190	8.88	7.83	5.74	0	
	6/29/2001	4.83	197.8	1.22	16.01	4.44	0	
	9/19/2001	4.31	207.7	0.83	19.63	4.8	0	
	12/14/2001	4.16	211.2	4.81	11.06	6.21	5.8	
	4/8/2002	NM	NM	NM	NM	NM	NM	
	9/25/2002	NM	NM	NM	NM	NM	NM	
	3/18/2003	NM	NM	NM	NM	NM	NM	
	9/22/03	NM	NM	NM	NM	NM	NM	
03/25/04	NM	NM	NM	NM	NM	NM		
WE-4S	2/27/2001	3.37	306.4	11.83	6.29	5.29	12.5	
	3/23/2001	0.98	192	9.75	6.78	5.62	0	
	6/29/2001	3.21	240.3	6.05	22.1	6.2	0	
	9/19/2001	3.31	-28.3	0.33	25.15	5.97	0	
	12/14/2001	3.12	121.4	9.12	9.55	6.05	12.1	
	4/8/2002	3.71	136.2	9.27	11.16	6.04	NM	
	9/25/2002	4.75	84.3	0.80	23.82	5.97	NM	
	3/18/2003	3.23	48.9	3.19	6.71	5.67	NM	
	9/22/2003	4.27	-85.1	0.27	23.70	5.79	NM	
03/26/04	3.25	29.4	0.47	8.63	5.87	NM		

Notes:
 ORP = Oxidation/Reduction Potential
 DO = Dissolved Oxygen
 NM = Not Measured

Table 2-2 (Cont.)
Tank K Remediation System - In-Field Groundwater Monitoring Data
Former GE Site, Wilmington, MA

Monitoring Well ID	Date	Depth to Water (feet)	ORP (mV)	DO (mg/L)	Temperature (°C)	pH	Pressure (in. w.c.)
WE-7	2/27/2001	3.09	16.8	1.41	4.8	6.07	0
	3/23/2001	0.45	161	4.35	5.44	6.38	0
	6/29/2001	4.11	-113.7	0.43	23.39	6.1	0
	9/19/2001	3.61	-23.5	0.46	23.95	6.13	0
	12/14/2001	3.48	-15.6	1.2	8.65	6.21	0
	4/8/2002	3.17	-81.0	0.74	10.82	6.19	NM
	9/25/2002	4.57	-79.9	0.22	23.77	6.14	NM
	3/18/2003	2.81	50.7	0.54	3.76	6.40	NM
	9/22/2003	4.20	21.4	1.44	24.13	6.64	NM
	03/26/04	2.9	94.3	3.2	7.74	6.18	NM
WE-8	2/27/2001	3.11	-24.2	0.9	8.99	6.26	0
	3/23/2001	0.74	182	7.75	6.86	6.05	0
	6/29/2001	4.13	56	5.90	20.2	6.1	0
	9/19/2001	3.67	46.9	0.30	25.58	5.87	0
	12/14/2001	3.54	61.7	0.72	9.31	6.03	0
	4/8/2002	3.50	15.2	0.46	11.33	6.06	NM
	9/25/2002	4.80	-58.7	0.33	22.58	6.43	NM
	3/18/2003	2.70	-31.9	0.42	7.51	6.51	NM
	9/22/2003	4.28	-62.1	0.95	23.48	6.43	NM
	03/25/04	3.1	-107.9	0.28	9.12	6.45	NM
WE-9	2/27/2001	3.24	9.1	1.91	6.14	6.07	0
	3/23/2001	0.95	135	1.44	7.21	5.97	0
	6/29/2001	4.35	-78	0.33	23.55	6.04	0
	9/19/2001	3.89	-77.2	0.29	25.77	6.15	0
	12/14/2001	3.75	60.1	0.36	9.42	6.14	0
	4/8/2002	3.51	-148.3	0.21	11.11	6.26	NM
	9/25/02	4.85	-123.0	0.58	24.38	6.20	NM
	3/18/2003	2.90	-47.0	1.25	5.06	6.41	NM
	9/22/2003	4.28	-173.2	0.20	24.43	6.33	NM
	03/25/04	3.17	-195.1	0.36	7.91	6.40	NM

Notes:

ORP = Oxidation/Reduction Potential

DO = Dissolved Oxygen

NM = Not Measured

Table 3-1
Groundwater Treatment System - Groundwater Analytical Results
Former GE Facility, Wilmington, MA

Location Name	Date	AIS Inflow										NPDES Discharge Standards		Method 1 MCP GW-1			
		8/15/03	8/17/03	8/20/03	9/24/03	9/26/03	9/29/03	10/6/03	10/13/03	10/20/03	11/18/03	12/23/03	1/26/04		2/25/04	3/24/04	MCLs
Dichlorodifluoromethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<50	<80	<100	<80	<100	100	
Chloromethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<50	<80	<100	<80	100		
Vinyl chloride	ug/L	51	<500	<250	12	<50	<80	<80	<80	<80	<20	<32	<40	<50	2	2	
Bromomethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<50	<80	<100	<80	100	10	
Chloroethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<50	<80	<100	<80	100		
Fluoromethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<50	<80	<100	<80	100		
1,1-Dichloroethene	ug/L	160	<500	<250	23	<120	<200	<200	<200	<200	20	<80	<100	<80	7	7	
Acetone	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	3 J	<80	<100	<80	100	3000	
Methyl iodide	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
Carbon disulfide	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
Methylene chloride	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	1 JB	<80	<100	<80	100		
trans-1,2-Dichloroethane	ug/L	14	<500	<250	2 J	<120	<200	<200	<200	<200	2 J	<80	<100	<80	100		
Methyl tert-butyl ether	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
1,1-Dichloroethane	ug/L	420 E	110 J	<250	79	<120	160 J	160 J	160 J	160 J	94	40 J	50 J	30 J	70	70	
Vinyl Acetate	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
2-Ethanol (MEK)	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
cis-1,2-Dichloroethene	ug/L	480 E	170 J	<250	100	<120	200 J	200 J	200 J	200 J	160	86	140	100 J	70	70	
2,2-Dichloropropane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
Bromochloromethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
Chloroform	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
1,1,1-Trichloroethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
1,1-Dichloropropene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	200	
Carbon tetrachloride	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	0.5	
1,2-Dichloroethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Benzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Trichloroethene	ug/L	10000	6000	6700	5900	3500	4400	4400	4400	4400	4700	2000	1800	1700	5	5	
1,2-Dichloropropane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Dibromomethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Bromodichloroethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	80	
cis-1,3-Dichloropropene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
4-Methyl-2-pentanone	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	0.5	
Toluene	ug/L	12	<500	<250	7	<120	<200	<200	<200	<200	4 J	<80	<100	<80	100	10000	
trans-1,3-Dichloropropene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	0.5	
1,1,2-Trichloroethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
1,3-Dichloropropene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Tetrachloroethene	ug/L	14000	5300	4400	4300	2600	4400	4400	4400	4400	3200	1500	1400	1300	5	5	
2-Hexanone	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Chlorodibromomethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	350	
Ethylendibromide	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	0.2	
Chlorobenzene	ug/L	3 J	<500	<250	2 J	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	100	
1,1,1,2-Tetrachloroethane	ug/L	1 J	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Ethylbenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	700	
o-Xylene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	10000	
m & p-Xylene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	10000	
Xylenes (total)	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	10000	
Styrene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	100	
Bromoforn	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
Isopropylbenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	2	
1,1,2,2-Tetrachloroethane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
Bromobenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
n-Propylbenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
2-Chlorotoluene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
1,3,5-Trinitrobenzene	ug/L	1 J	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
4-Chlorotoluene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
tert-Butylbenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
1,2,4-Trinitrobenzene	ug/L	2 J	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
sec-Butylbenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
p-Isopropyltoluene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
1,3-Dichlorobenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
1,4-Dichlorobenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100		
n-Butylbenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	600	
1,2-Dichlorobenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	5	
1,2-Dibromo-3-chloropropane	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	600	
1,2,4-Trichlorobenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	0.2	
Hexachlorocyclopentadiene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	70	
Naphthalene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	0.6	
1,2,3-Trichlorobenzene	ug/L	<5	<500	<250	<5	<120	<200	<200	<200	<200	<5	<80	<100	<80	100	20	
pH	S.U.	<10	<10	<10													

Table 3-1
Groundwater Treatment System - Groundwater Analytical Results
Former GE Facility, Wilmington, MA

Analyte	Location Name	Date	Treated Effluent												MCLs	Max Allowable Conc.	Method 1 MCP GW-1	
			8/15/03	8/17/03	8/20/03	9/24/03	9/26/03	9/29/03	10/6/03	10/13/03	10/20/03	11/18/03	12/30/03	1/26/04				2/25/04
Dichlorodifluoromethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Chloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Vinyl chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2	2
Bromomethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	10
Chloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Fluorotrichloromethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,1-Dichloroethene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	7
Acetone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	3000
Methyl iodide	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Carbon disulfide	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	
trans-1,2-Dichloroethene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	100
Methyl tert-butyl ether	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	70	70
1,1-Dichloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	70
Vinyl Acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	350
2-Butanone (MEK)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	70
cis-1,2-Dichloroethene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
2,2-Dichloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Bromochloromethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
Chloroform	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	80	5
1,1,1-Trichloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	200	200
1,1-Dichloroethene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	0.5
Carbon tetrachloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
1,2-Dichloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Benzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Trichloroethene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
1,2-Dichloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Dibromomethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Bromodichloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
cis-1,3-Dichloropropene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
4-Methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Toluene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	1000
trans-1,3-Dichloropropene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	0.5
1,1,2-Trichloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
1,3-Dichloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Tetrachloroethene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
2-Hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	5
Chlorodibromomethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	80	5
Ethylacetyl bromide	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	3.50
Chlorobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	80	0.2
1,1,1,2-Tetrachloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.05	100
Ethylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	100
o-Xylene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	700
m & p-Xylene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	10000
Xylenes (total)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	10000
Styrene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	10000
Bromoforn	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	100
Isopropylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	80	5
1,1,2,2-Tetrachloroethane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	2
Bromobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,2,3-Trichloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
n-Propylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
2-Chlorotoluene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,3,5-Trimethylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
4-Chlorotoluene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
tert-Butylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,2,4-Trimethylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
sec-Butylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
p-Isopropyltoluene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,3-Dichlorobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,4-Dichlorobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
n-Butylbenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	
1,2-Dichlorobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	600
1,2-Dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	75	5
1,2,4-Trichlorobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	600	600
Hexachlorobutadiene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.2	70
Naphthalene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	0.6
1,2,3-Trichlorobenzene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	100	20
Total suspended solids (TSS)	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	4.5-8.3	
pH	S.U.	6.7	6.8	6.8	7.8	7.2	7.4	7.45	7.28	7.51	7.65	7.45	7.61	7.32	7.73	<10	90	

Notes:
1. "<" denotes analyte was not detected at concentrations above the given quantitation limit.
2. Method 1 MCP Standards are taken from the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000.
3. MCLs are taken from the USEPA National Primary Drinking Water Regulations (July 2002).
4. All detected analytes are shown in bold type.
5. Compounds exceeding listed standards are shown in bold and shaded type.
6. "E" denotes test results evaluating system efficiency at 2 GPM
7. "N/A" denotes test results evaluating system efficiency at 4 GPM

Table 3-2
Volatile Organic Compounds in Air - Bubbler Experiment at Groundwater Treatment Building

Sample Collection Date	1st Bubbler Test					2nd Bubbler Test			
	8/29/2003 Bubbler 13	8/29/2003 A/S EFPL2	8/29/2003 Bubbler 78	8/29/2003 A/S EFFL4	8/29/2003 TB	9/5/2003 Inside Shed	9/5/2003 Outside Shed	9/5/2003 Above Roof	9/5/2003 Rinse
Contaminant									
Dichlorodifluoromethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Chloromethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Vinyl Chloride	2U	2U	2U	2	2U	2U	2U	2U	2U
Bromomethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Chloroethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Trichlorofluoromethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethene	5U	5U	5U	6U	5U	5U	5U	5U	5U
Acetone	12	11	12	13	5U	5U	5U	5U	5U
Iodomethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Carbon Disulfide	5U	5U	5U	5U	5U	5U	5U	5U	5U
Methylene Chloride	5U	5U	5U	5U	5U	5U	5U	5U	5U
trans-1,2-Dichloroethene	5U	5U	5U	5U	5U	5U	5U	5U	5U
Methyl tert-butyl ether	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloroethane	5U	5U	5U	33	5U	5U	5U	5U	5U
Vinyl acetate	5U	5U	5U	5U	5U	5U	5U	5U	5U
2-Butanone	2.9J	4J	5	3J	5U	5U	5U	5U	5U
cis-1,2-Dichloroethene	5U	5U	5U	50	5U	5U	5U	5U	5U
2,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Bromochloromethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Chloroform	5U	5U	5U	5U	3.4J	5U	5U	5U	2J
1,1,1-Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,1-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U	5U
Carbon Tetrachloride	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloroethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Benzene	5U	5U	5U	940E	5U	5U	5U	5U	5U
Trichloroethene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichloropropane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Dibromomethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Bromodichloromethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U	5U
4-Methyl-2-pentanone	5U	5U	5U	5U	5U	5U	5U	5U	5U
Toluene	5U	5U	5U	3J	5U	5U	5U	5U	5U
trans-1,3-Dichloropropene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,1,2-Trichloroethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,3-Dichloropropane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Tetrachloroethene	5U	5U	5U	850E	5U	5U	5U	5U	5U
2-Hexanone	5U	5U	5U	5U	5U	5U	5U	5U	5U
Dibromochloromethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dibromoethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Chlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,1,1,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Ethylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
m,p-Xylene	5U	5U	5U	5U	5U	5U	5U	5U	5U
o-Xylene	5U	5U	5U	5U	5U	5U	5U	5U	5U
Xylene (Total)	5U	5U	5U	5U	5U	5U	5U	5U	5U
Styrene	5U	5U	5U	5U	5U	5U	5U	5U	5U
Bromoform	5U	5U	5U	5U	5U	5U	5U	5U	5U
Isopropylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,1,2,2-Tetrachloroethane	5U	5U	5U	5U	5U	5U	5U	5U	5U
Bromobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2,3-Trichloropropane	5U	5U	5U	5U	5U	5U	5U	5U	5U
n-Propylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
2-Chlorotoluene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,3,5-Trimethylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
4-Chlorotoluene	5U	5U	5U	5U	5U	5U	5U	5U	5U
tert-Butylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2,4-Trimethylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
sec-Butylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
4-Isopropyltoluene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,3-Dichlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,4-Dichlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
n-Butylbenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dichlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2-Dibromo-3-chloropropane	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2,4-Trichlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U
Hexachlorobutadiene	5U	5U	5U	5U	5U	5U	5U	5U	5U
Naphthalene	5U	5U	5U	5U	5U	5U	5U	5U	5U
1,2,3-Trichlorobenzene	5U	5U	5U	5U	5U	5U	5U	5U	5U

Note: Concentrations reported in micrograms per liter.

**Table 3-3
Volatile Organic Compounds in Air - 8 Hour Test with SUMMA Canisters**

	Sample Location				
	Air Intake Inside Treatment Building	Air Intake Inside Treatment Building	South Side of Treatment Building, 20' Above Grade	250' south of Treatment Building, 6' Above Grade	400' east of Treatment Building, 6' Above Grade
Sample Collection Date	9/29/2004	10/20/2003	10/20/2003	10/20/2003	10/20/2003
Sample ID	Ambient Air-092903	AA-104	AA-102	AA-103	AA-101
Contaminant					
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.625	0.5 U	0.5 U
1,2-Dibromoethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Butadiene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	1 U	1 U	1 U	1 U	1 U
2,2,4-Trimethylpentane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone	1.17	3.11	6.09	7.37	1.36
2-Hexanone	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3-Chloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Ethyltoluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	3.42	4.19	42.7	11.4	12.2
Benzene	0.5 U	0.5 U	2.67	1.18	2.3
Benzyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.542	0.5 U	0.699	0.512	0.56
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U
Ethyl alcohol	2.3	2.3	8.83	2.91	4.14
Ethyl acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.731	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Iso-propyl alcohol	1.81	1.59	27.5	4.84	6.67
Methylene chloride	1 U	1 U	1.44	1 U	1 U
4-Methyl-2-pentanone	0.5 U	0.5 U	0.535	0.5 U	0.5 U
Methyl tert butyl ether	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m/p-Xylene	0.5 U	0.5 U	2.84	0.724	0.948
o-Xylene	0.5 U	0.5 U	0.653	0.5 U	0.5 U
Heptane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Hexane	1 U	1 U	1.05	1 U	1 U
Propylene	1 U	1 U	5.81	1.28	1.29
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	1.96	2.22	0.5 U	0.5 U	0.5 U
Tetrachlorofuran	0.928	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.523	17.7	3.59	4.26
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	3.18	4.27	1.11	1.2	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl bromide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

NOTES: Concentrations reported in ppbV

**Table 3-4
Groundwater Treatment System Operating Parameters and Monitoring Results
Former GE Facility, Wilmington, MA**

Date and time of measurement	Groundwater Parameters				Vapor Stream Parameters														
	Total GW pumped ¹ gallons	Average pumping rate ² gpm	Treated GW pH at discharge point	Liquid phase pressure measurements ³ , psi				Vapor phase pressure and vacuum measurements, in.w.c.				VOC Vapor concentration ⁴ , ppmv		Temperature, °F					
				Bag filter inlet (PG-201)	LGAC-201 inlet (PG-202)	LGAC-202 inlet (PG-203)	Discharge (PG-204)	Air stripper vac. (PG-301)	Blower vac. (PG-302)	VGAC-301 inlet pres. (PG-303)	VGAC-302 inlet pres. (PG-304)	VGAC-302 discharge pres. (PG-306)	Diff. Pressure (PG-306)	air flow rate ⁴ CFM	301 Inlet (SP-301)	302 Inlet (SP-302)	Discharge (SP-303)	Air Dryer Inlet (TG-301)	Air Dryer Outlet (TG-302)
8/15/03 14:00	0	2.5	6.7	10	8	8	8	23	8	4	0	0.27	181	10	ND	ND	65	45	63
8/17/03 19:30	5778	1.9	6.8	10	8	8	8	22	7	4	0	0.26	178	5	ND	ND	63	44	65
8/20/03 11:00	12636	1.8	6.8	9	8	8	8	23	8	4	0	0.3	191	4	ND	ND	65	43	64
8/24/03 13:00	28000	2.61																	
9/24/03 10:30	28000	0.00	7.8	10	9.2	9	8.6	18	9.2	5.6	3	0.3	191	1.2	ND	ND	62	50	85
9/26/03 9:40	32957	1.75	7.2	13	8	7.5	7	17.8	9	6	3	0.28	184	1	ND	ND	61	48	83
9/29/03 9:15	40510	1.76	7.4	14	7	6.5	6	18	9.5	5.7	3	0.3	191	1.2	ND	ND	60	45	80
10/3/03 0:00	50012	1.83																	
10/6/03 11:30	50012	0.00	7.45	9.8	10.2	9.0	8.6	18.5	8.8	5.3	2.8	0.3	191	1.4	ND	ND	58	60	88
10/9/03 2:00	57308	1.95																	
10/13/03 10:00	57308	0.00	7.28	10.0	9.0	9.0	8.4	18	8.8	5.2	2.8	0.3	191	1.2	ND	ND	60	60	90
10/20/03 10:30	77165	1.96	7.51	10.0	9.2	8.8	8.6	18	8.8	5.2	2.8	0.3	191	1.3	ND	ND	54	55	86
11/3/03 11:00	118251	2.03	7.32	11.0	9.0	8.8	8.7	18	8.8	5.2	2.8	0.29	188	1	ND	ND	52	54	85
11/18/03 10:00	161650	2.01	7.65	10.0	8.5	8.3	8.0	18	8.8	5.2	2.9	0.31	194	1	ND	ND	50	53	83
12/9/03 10:00	224491	2.08	7.21	11.0	9.0	9.5	7.5	19	8.9	5.1	2.8	0.3	191	1.5	ND	ND	52	54	81
12/23/03 10:00	265131	2.02	7.45	10.0	9.1	9.4	8.0	18	8.8	5.2	2.9	0.3	191	1	ND	ND	50	51	79
1/20/04 13:00	348024	2.05																	
1/26/04 18:00	348024	0.00	7.61	9	8.5	8.3	8	18	8.8	5.1	2.8	0.31	194	1	ND	ND	51	51	80
2/9/04 8:30	381347	1.70		8	7.5	7.5	6	17	9	5.1	2.7	0.3	191	1	ND	ND	52	52	82
2/25/04 18:00	426134	1.90	7.45	8	7	6.5	6	17	8	4.5	2.7	0.28	184	1	ND	ND	52	51	79
3/10/04 18:00	460137	1.69		9	7.5	6	5.5	18	8	4.8	2.8	0.28	184	1	ND	ND	52	51	79
3/24/04 11:00	493888	1.71	7.73	9.5	7.5	6	5.5	17	9	5	2.7	0.3	191	1	ND	ND	54	54	88

Notes

¹Based on FMT-201 reading. FMT-202 is used as a back-up.

²Average for the period between monitoring.

³Refer to P&ID for gauges and instruments locations.

⁴Pitot tube (FM-301) with differential pressure gauge (PG-306) is utilized to calculate the effluent air flow rate.

⁵With Photo-ionization detector

gpm = gallons per minute

CFM = cubic feet per minute

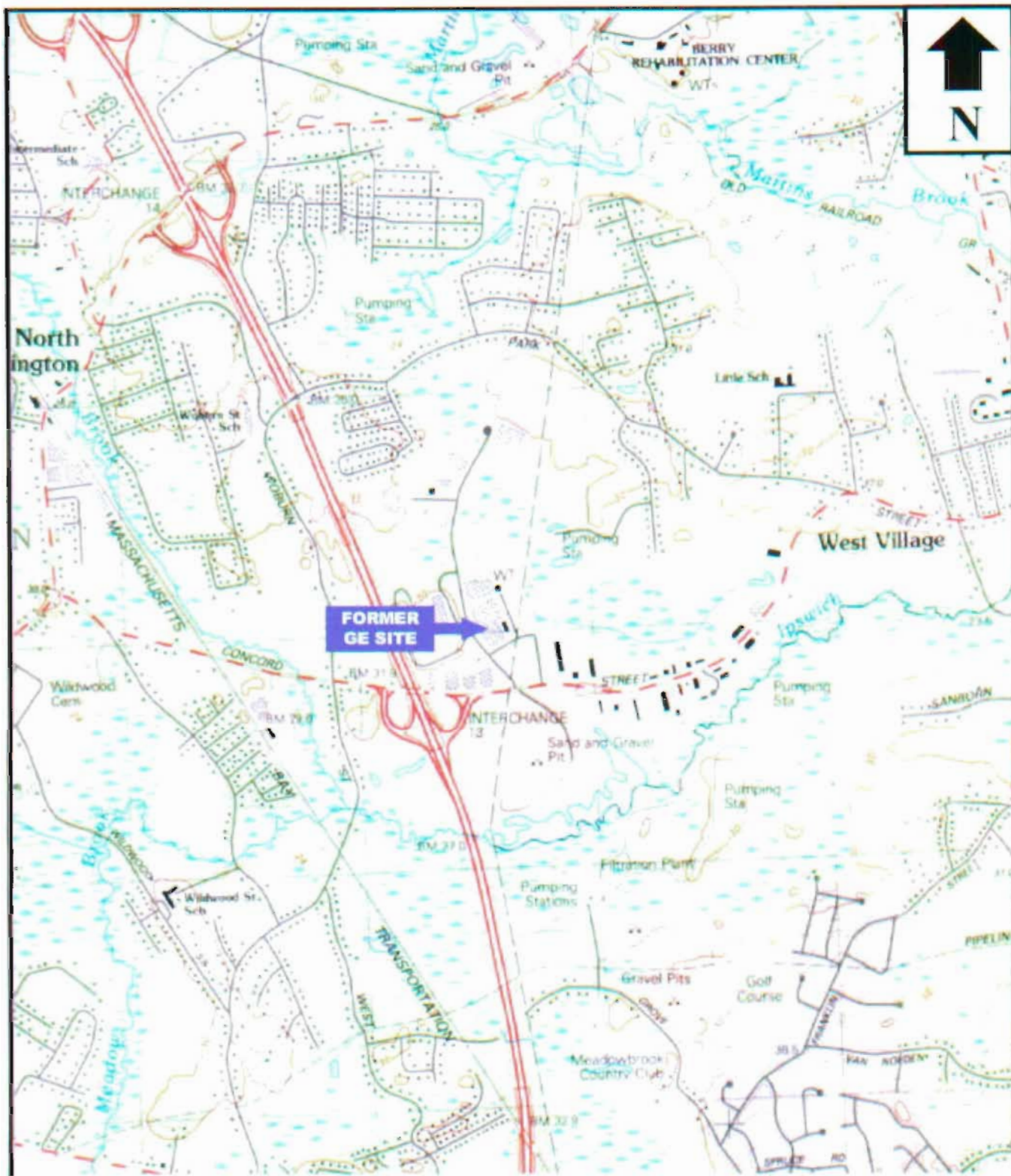
ND = Not Detected

w.c. = water column

**Table 3-5
Source Control Monitoring - Groundwater Elevation Data
Former GE Facility, Wilmington, MA**

Date	Pumping status	TRC-202R	GZA-105R	BRW-1	Depth to groundwater from top of well casing, feet															
					EMW-11-R1	EMW-11-R2	EMW-11-R3	IP1-R1	IP1-R2	IP1-R3	IP2-R1	IP2-R2	IP2-R3	IP2-R4	IP3-R1	IP3-R2	IP4-R1	IP4-R2	IP4-R3	
8/13/2003	Static	4.08	4.44	2.78	3.04	2.95	3.31	3.38	5.40	3.30	6.08	5.75	5.42	5.34	5.29	4.56	4.35	4.61	4.30	4.42
9/23/2003	Static	3.98	4.21	2.93	3.02	3.01	3.31	3.38	5.34	3.25	5.98	5.71	5.35	5.31	5.31	4.55	4.31	4.59	4.25	4.39
10/24/2003	Pumping @ 2 gpm	26.40	5.23	3.05	4.32	7.25	4.00	4.00	6.05	6.02	6.65	6.62	6.15	6.95	6.15	5.55	5.75	5.75	5.30	5.30
11/18/2003	Pumping @ 2 gpm	26.10	5.12	3.01	3.81	4.42	3.36	3.36	5.95	6.01	6.55	6.58	6.11	6.87	6.21	5.42	5.71	4.72	4.68	4.80
12/23/2003	Pumping @ 2 gpm	26.30	5.18	3.03	4.12	5.14	3.56	3.56	6.01	5.95	6.68	6.47	6.15	6.91	6.25	5.61	5.73	4.77	4.75	4.91
1/26/2004	Static	3.85	4.05	2.81	2.77	2.75	3.01	3.01	5.27	5.21	5.91	5.68	5.30	5.28	5.25	4.48	4.25	4.37	4.15	4.27
2/25/2004	Pumping @ 2 gpm	26.30	5.01	3.03	3.78	4.35	3.32	3.32	5.81	5.75	6.51	6.48	6.01	6.71	6.20	5.48	5.61	4.47	4.41	4.53
3/24/2004	Pumping @ 2 gpm	26.20	4.98	3.01	3.35	4.12	3.15	3.15	5.75	5.78	6.25	6.31	5.98	6.63	6.12	5.41	5.55	4.30	4.09	4.37

FIGURES

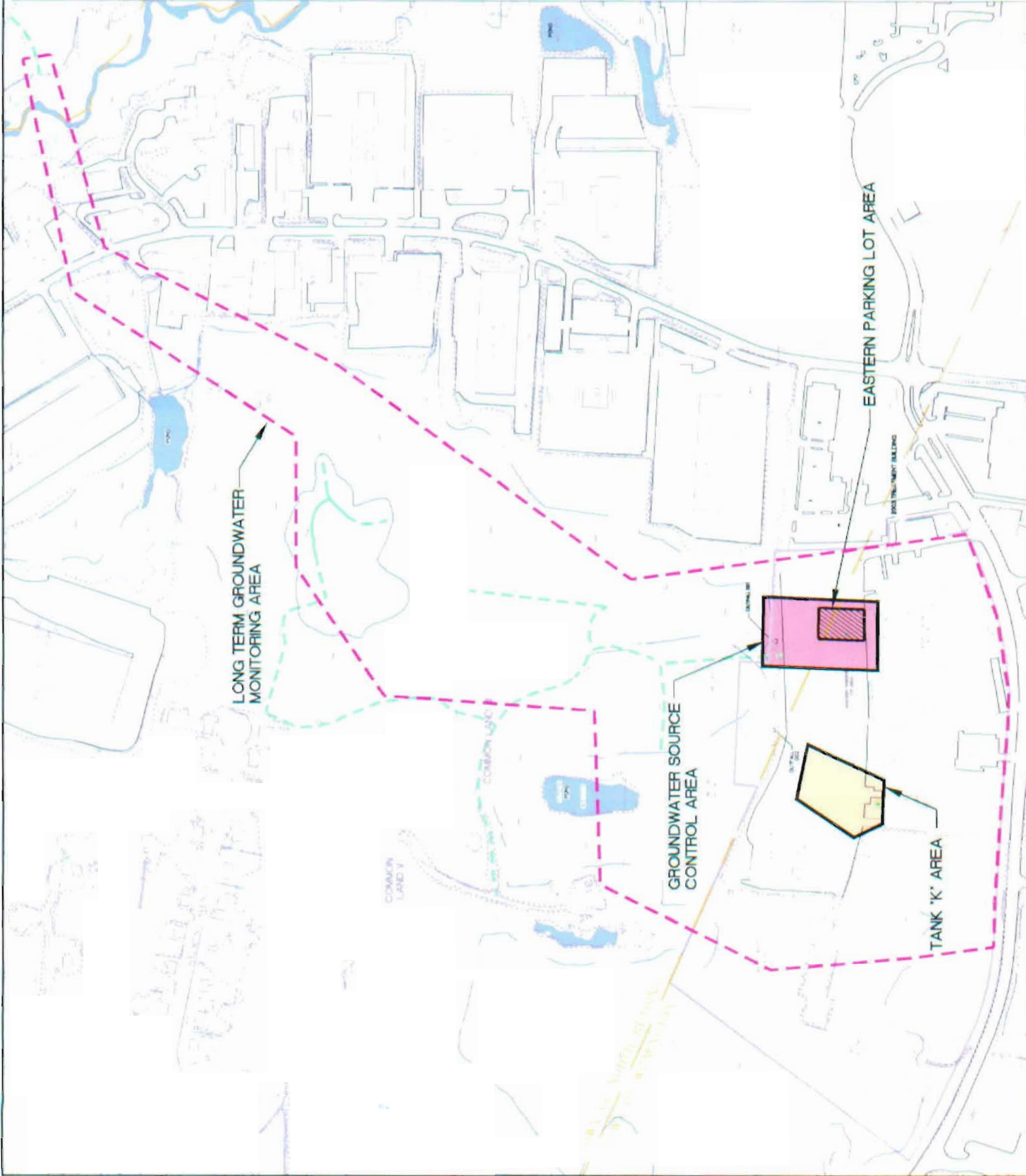


BASE MAP IS A PORTION OF THE FOLLOWING 7.5' x 15' USGS TOPOGRAPHIC QUADRANGLE: READING, MA 1987

E9202 LTOMP 2/03/TOPO



TRC	Boott Mills South Foot of John Street Lowell, MA 01852 (978) 970-5600
	FORMER GE SITE WILMINGTON/NORTH READING, MASSACHUSETTS
FIGURE 1-1 SITE LOCATION MAP	
Date: 3/04	Project No. E9202



LEGEND

	BUILDING
	APPROXIMATE PROPERTY LINE
	APPROXIMATE TANK LINE
	PERMITTED STREAM
	APPROXIMATE EDGE OF WATER/STREAM
	APPROXIMATE EDGE OF WETLANDS
	FENCE LINE
	WETLANDS (LOCATION OF TANK 'V')
	WATER BODY
	TREE LINE

NOTES

1. TOPOGRAPHIC AND PLANNING FEATURES SHOWN WERE COMPILED PHOTOGRAMMETRICALLY FROM AERIAL PHOTOGRAPHY DATED APRIL 18, 1992 BY EAST COAST MAPPING INC., CONCORD, NEW HAMPSHIRE. MAPPING GROUND CONTROL ESTABLISHED BY FIELD SURVEYS CONDUCTED IN APRIL, 1992.
2. THE GRID SYSTEM DEPICTED ON THIS PLAN IS BASED ON THE MASSACHUSETTS STATE PLAIN COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1929.
3. ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
4. MONITORING WELL LOCATIONS ARE APPROXIMATE.
5. PROPERTY AND TANK LINE BOUNDARIES WERE ADAPTED FROM:
 - A) "REGIONAL EXPLORATION PLAN", GENERAL ELECTRIC COMPANY, 50 FORDHAM ROAD PROPERTY, WASHINGTON/NORTH READING, MASSACHUSETTS BY GOLDBERG - ZONIG & ASSOCIATES INC. DATED APRIL, 1990.
 - B) MODIFIED PER NORTH READING O/S DATA, JUNE 2002, AND C) DIVIDED BY MASSDOS FROM A SET OF STABLE BASED FILM PRINTS OF THE 125,000 7.5 QUADRANGLES PURCHASED FROM THE 1950S BY THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS.

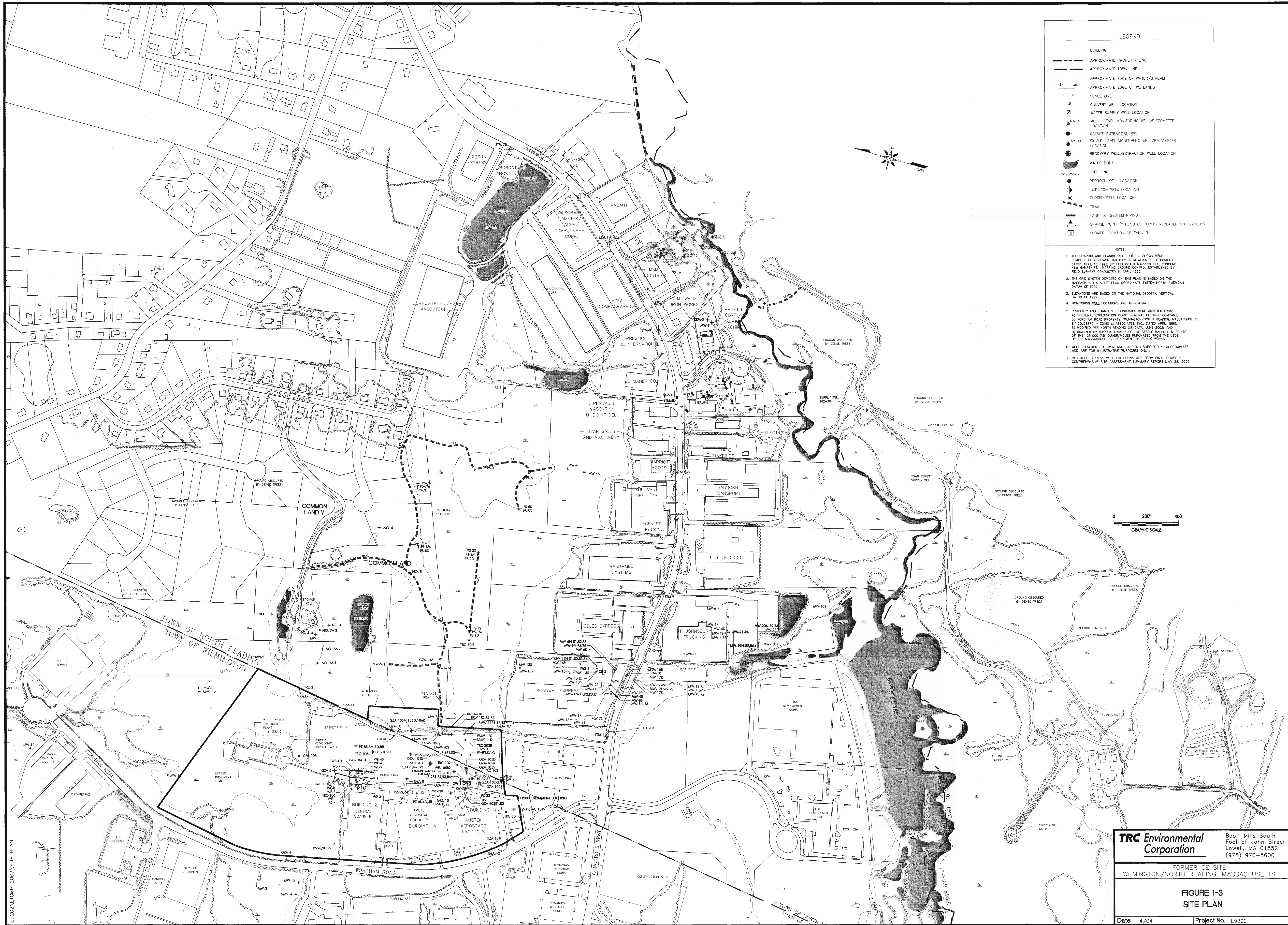


TRC Environmental Corporation
 Booth Mills South
 Foot of John Street
 Lowell, MA 01852
 (978) 970-5800

FORMER GE SITE
 WASHINGTON/NORTH READING, MASSACHUSETTS

FIGURE 1-2
APPROXIMATE LIMITS OF
MONITORING PROGRAM AREAS

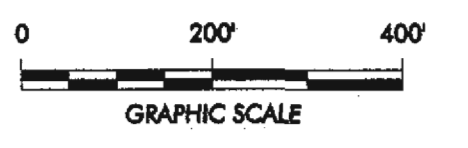
Date: 3/04 Project No.: E9202



LEGEND

- BUILDING
- APPROXIMATE PROPERTY LINE
- APPROXIMATE TOWN LINE
- APPROXIMATE EDGE OF WATER/STREAM
- APPROXIMATE EDGE OF WETLANDS
- FENCE LINE
- CULVERT WELL LOCATION
- WATER SUPPLY WELL LOCATION
- MULTI-LEVEL MONITORING WELL/PIEZOMETER LOCATION
- GROUT EXTRACTION WELL LOCATION
- SINGLE-LEVEL MONITORING WELL/PIEZOMETER LOCATION
- RECOVERY WELL/EXTRACTION WELL LOCATION
- WATER BODY
- TREE LINE
- BEDROCK WELL LOCATION
- INJECTION WELL LOCATION
- CLOSED WELL LOCATION
- TRAIL
- TANK "K" SYSTEM PIPING
- FORMER LOCATION OF TANK "K"

- NOTES**
1. TOPOGRAPHIC AND PLANIMETRIC FEATURES SHOWN WERE COMPILED PHOTOGRAMMETRICALLY FROM AERIAL PHOTOGRAPHY DATED APRIL 16, 1992 BY EAST COAST MAPPING INC., CONCORD, NEW HAMPSHIRE. MONITORING POINTS ESTABLISHED BY FIELD SURVEYS CONDUCTED IN APRIL 1992.
 2. THE GRID SYSTEM DEPICTED ON THIS PLAN IS BASED ON THE MASSACHUSETTS STATE PLAN COORDINATE SYSTEM NORTH AMERICAN DATUM OF 1983.
 3. ELEVATIONS ARE BASED ON THE NATIONAL GEODESIC VERTICAL DATUM OF 1929.
 4. MONITORING WELL LOCATIONS ARE APPROXIMATE.
 5. PROPERTY AND TOWN LINE BOUNDARIES WERE ADAPTED FROM:
 - A) REGIONAL EXPLORATION PLAN, GENERAL ELECTRIC COMPANY, 60 FORDHAM ROAD PROPERTY, WILMINGTON/NORTH READING, MASSACHUSETTS, BY GOLDBERG - ZONING & ASSOCIATES, INC., DATED APRIL 1990.
 - B) MODIFIED PER NORTH READING GIS DATA, JUNE 2002, AND
 - C) QUOTED BY MASSGIS FROM A SET OF STEREO BASED FILM PRINTS OF THE 1:25,000 7.5' QUADRANGLES PURCHASED FROM THE USGS BY THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS.
 6. WELL LOCATIONS OF ISM AND STERLING SUPPLY ARE APPROXIMATE AND ARE FOR ILLUSTRATIVE PURPOSES ONLY.
 7. ROADWAY EXPRESS WELL LOCATIONS ARE FROM FINAL PHASE 2 COMPREHENSIVE SITE ASSESSMENT SUMMARY REPORT MAY 28, 2002.



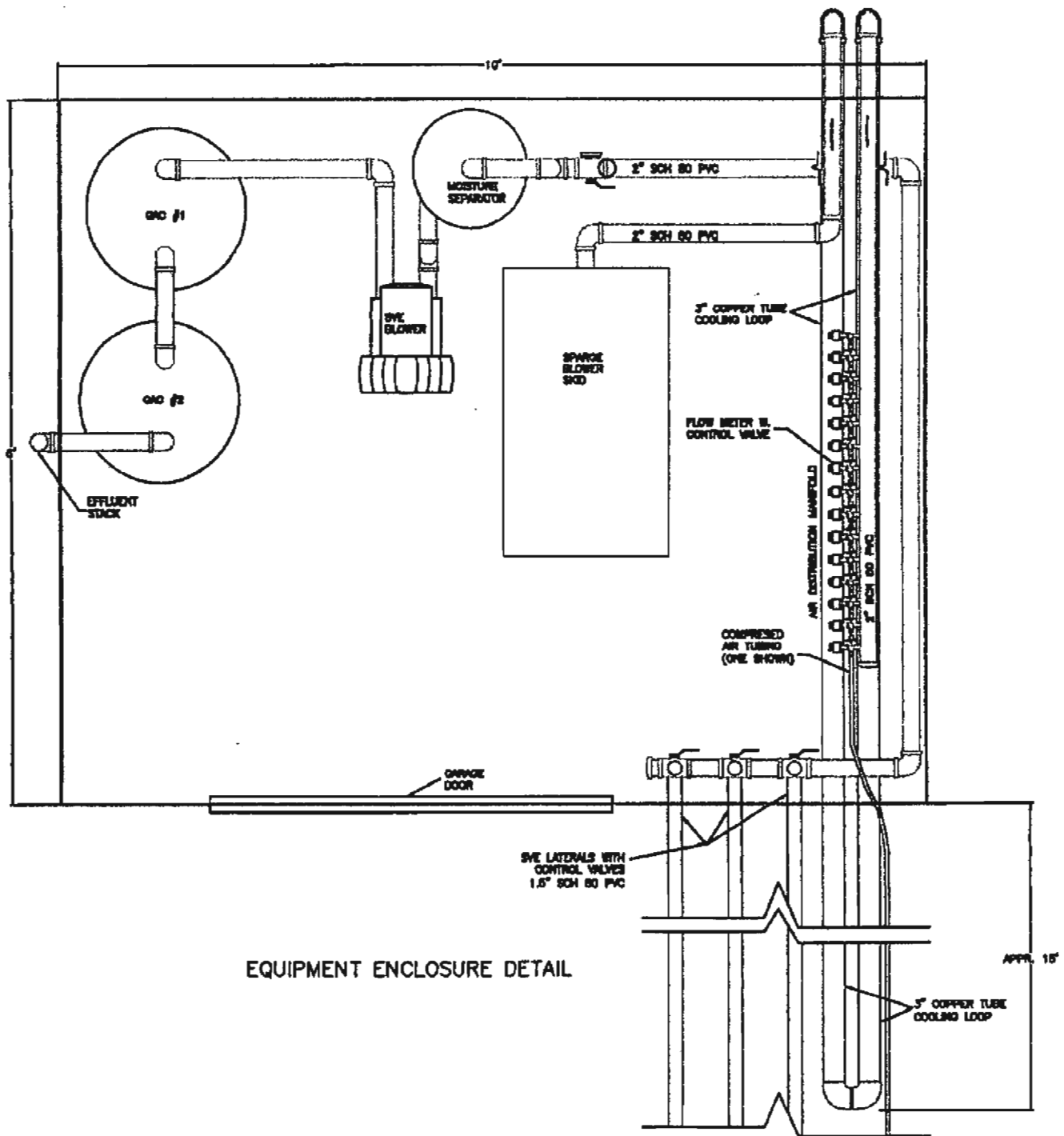
TRC Environmental Corporation
 800 Mill Street
 Lowell, MA 01852
 (978) 970-5600

FORMER GE SITE
 WILMINGTON/NORTH READING, MASSACHUSETTS

**FIGURE I-3
 SITE PLAN**

Date: 4/04 Project No. E9202

E9202\I-TMP 2003\ASITE PLAN



EQUIPMENT ENCLOSURE DETAIL

NOTE:
PLAN WAS PROVIDED BY I.E.S. ENGINEERING OF NORWOOD, MA.

E9202 (PHV_OHM\MARCH 04\SPARGE

	Boot Mills South Foot of John Street Lowell, MA 01852 (978) 970-5600
	FORMER GE SITE WILMINGTON/NORTH READING, MASSACHUSETTS
FIGURE 2-1 TANK K REMEDIATION SYSTEM LAYOUT	
Date: 4/04	Project No. E9202

ES22217.dwg, 03/04/2004 10:58 AM, 2004/03/04 10:58 AM, 2004/03/04 10:58 AM

NOTE: PLAN WAS PROVIDED BY I.E.S ENGINEERING OF NORWOOD, MA

LEGEND

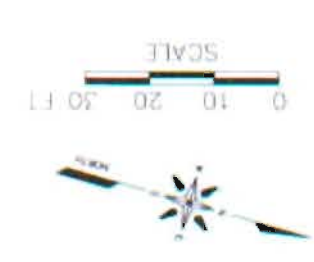
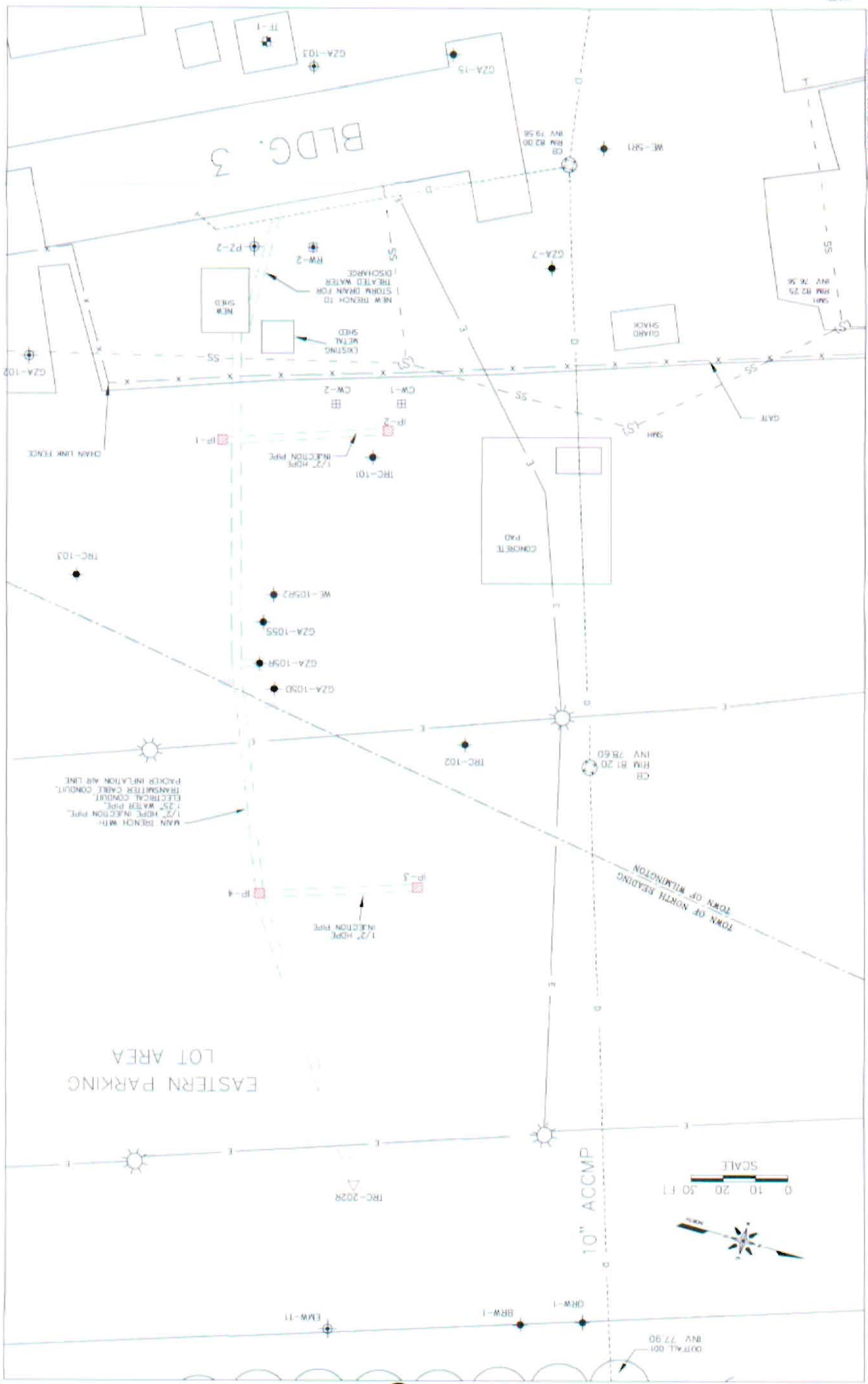
□	BUILDING	⊕	MULTI-LEVEL MONITORING WELL LOCATION
—X—X—	FENCE LINE	●	SINGLE-LEVEL MONITORING WELL LOCATION
---	APPROXIMATE EDGE OF PAVEMENT	⊕	PRODUCT RECOVERY WELL
⊕	OUTLET WELL	⊕	GROUNDWATER RECOVERY WELL
⊕	ABANDONED MONITORING WELL	▽	NEW GROUNDWATER EXTRACTION WELL
		⊕	BIOREMEDIATION INJECTION WELL

TRC
 100 Milk Street
 Lowell, MA 01852
 (978) 970-5800

FORMER DE SITE
 WILMINGTON/NORTH READING, MASSACHUSETTS

FIGURE 3-1
REMEDIAL SYSTEM GENERAL LAYOUT

Date: 4/04
 Project No: 19202



MAN TRENCH WITH
 1/2" HDPE INJECTION PIPE,
 1.25" WATER PIPE,
 ELECTRICAL CONDUIT,
 TRANSFORMER CABLE CONDUIT,
 PACKER INFLATION AIR LINE

EASTERN PARKING
 LOT AREA

BLDG. 3

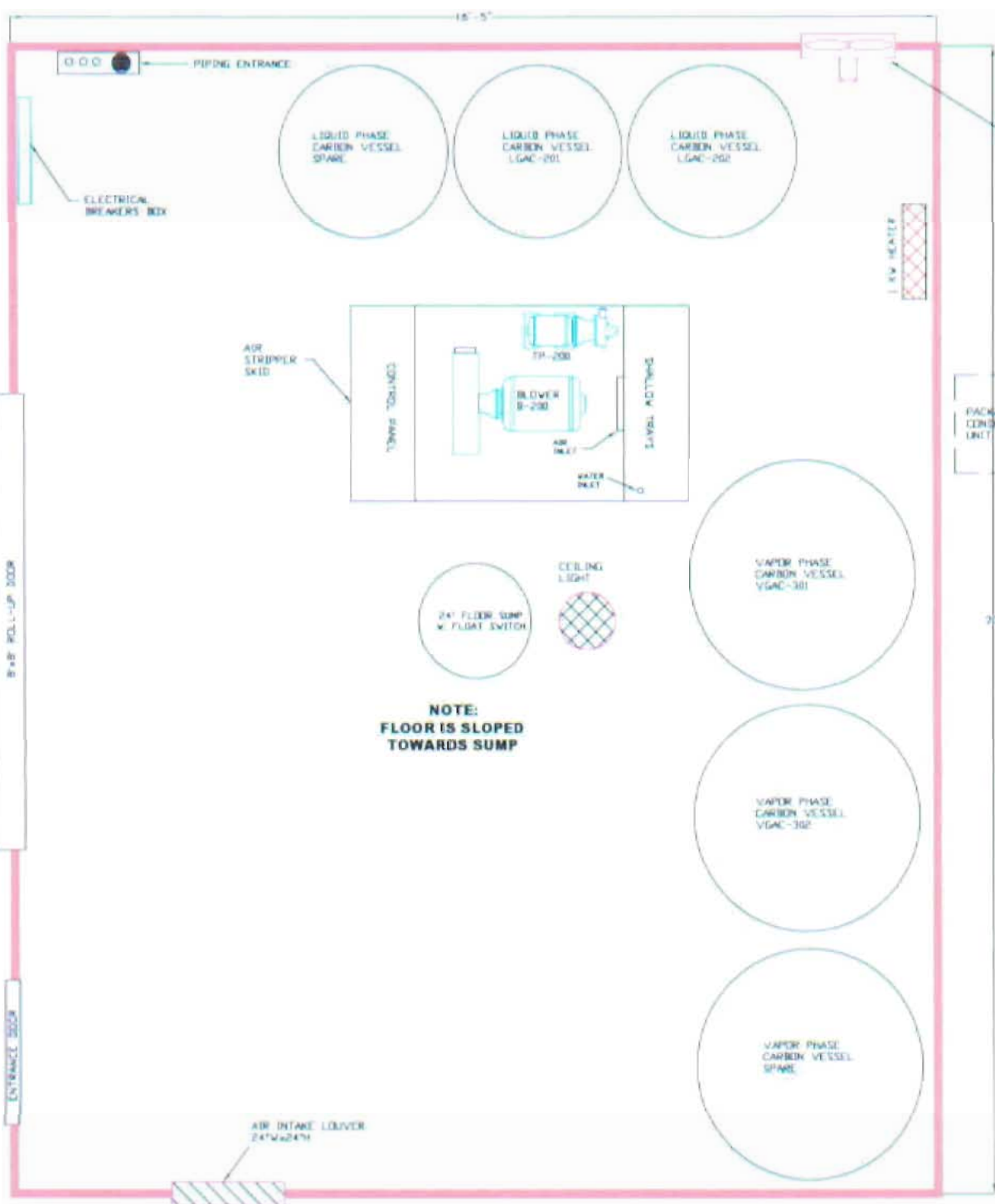
CONCRETE
 PAD

TOWN OF NORTH READING
 TOWN OF WILMINGTON

10" ACCMP

OUTLET BOT
 INV 77.90

E9202\PHV_GMM\MARCH 04\EQUIPMENT LAYOUT



**NOTE:
FLOOR IS SLOPED
TOWARDS SUMP**

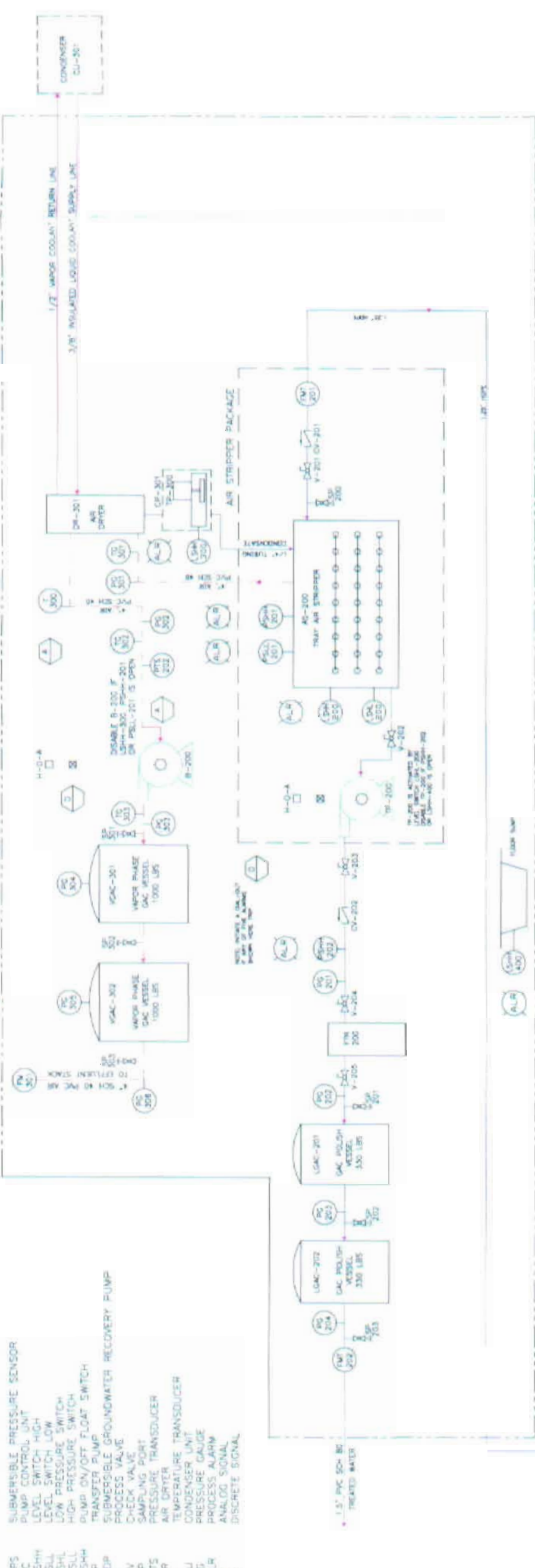
NOTE:
PLAN WAS PROVIDED BY I.E.S. ENGINEERING OF NORWOOD, MA.

TRC	Boat Mills South Foot of John Street Lowell, MA 01852 (978) 970-5600
	FORMER CE SITE WILMINGTON/NORTH READING, MASSACHUSETTS
FIGURE 3-2 REMEDIAL EQUIPMENT LAYOUT	
Date: 4/04	Project No. E9202

LEGEND

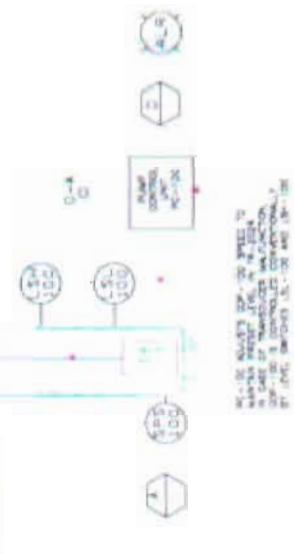
- SFS SUBMERSIBLE PRESSURE SENSOR
- PC PUMP CONTROL UNIT
- LSHH LEVEL SWITCH HIGH
- LSLL LEVEL SWITCH LOW
- PSHH PUMP ON/OFF FLOAT SWITCH
- TP TRANSFER PUMP
- GGP GROUNDWATER RECOVERY PUMP
- V VALVE
- CV CHECK VALVE
- SP SAMPLING POINT
- PTS PRESSURE TRANSDUCER
- DR DRYER
- T TEMPERATURE TRANSDUCER
- CU CONDENSER UNIT
- RIC PRESSURE GAUGE
- ALR PROCESS ALARM
- A ANALOG SIGNAL
- D DISCRETE SIGNAL

EXTENT OF REMEDIATION ENCLOSURE



NOTE:
PLAN WAS PROVIDED BY I.E.S. ENGINEERING OF NORWOOD, MA.

NOTE: SEE SHEET 3-2 FOR P&ID AND INSTRUMENTATION DATA SHEET FOR THIS SYSTEM.



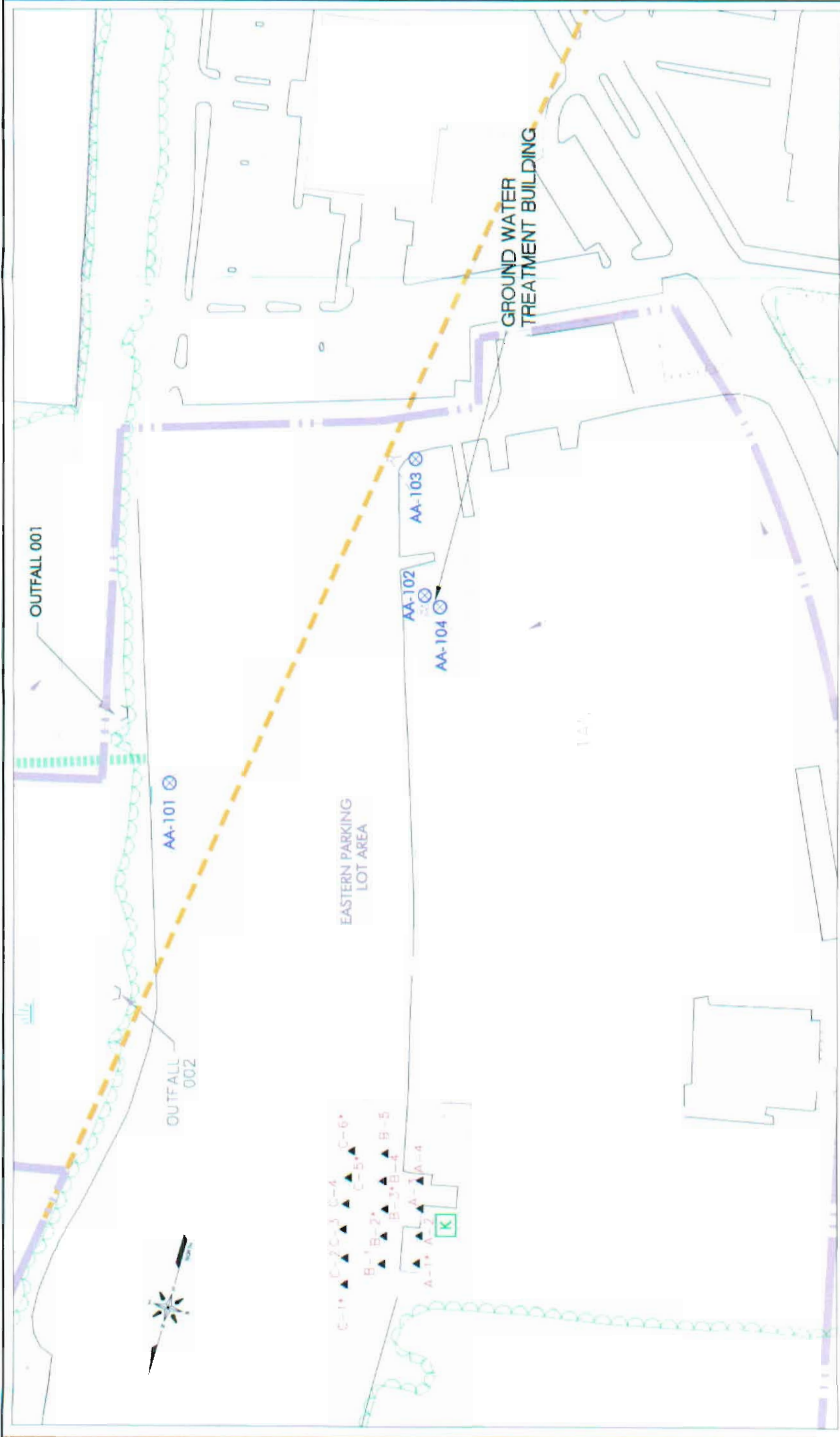
THIS PLAN IS A PART OF THE INSTRUMENTATION DATA SHEET FOR THE GROUNDWATER RECOVERY SYSTEM.

TRC
 Boot Mills South
 Foot of John Street
 Lowell, MA 01852
 (978) 970-5600

FORMER GE SITE
 WILMINGTON/NORTH READING, MASSACHUSETTS

FIGURE 3-3
GROUNDWATER RECOVERY SYSTEM
PROCESS AND INSTRUMENTATION DIAGRAM

Date: 4/04 Project No.: E9202



TRC Environmental Corporation
 Becht Mills South
 Four of John Street
 Lowell, MA 01852
 (978) 970-5600

FORMER GE SITE
 WILMINGTON/NORTH READING, MASSACHUSETTS

FIGURE 3-4
AIR SAMPLING LOCATIONS

Date: 11/04 Project No: E9202

LEGEND

-  AIR SAMPLING LOCATION
-  PROPERTY BOUNDARY

APPENDIX A

GROUNDWATER SAMPLING FIELD FORMS

TRC

Low-flow Groundwater Sampling Data Record

Project: **FORMER LOCKHEED** Project No: **ET002-4206-07202** Date/Time: **12-17-03/1225** Sheet 1 of 1TRC Personnel: **JJ CALLAHAN**Well Identification: **GZA-105R**

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Protective Casing Stick-up (from ground) **NA** ft.Well Depth **38** ft. top of riser measured top of casing historicalRiser Stick-up (from ground) **NA** ft.Water Depth **3.68** ft.WELL DIAMETER 2 inch 4 inch 6 inchHeight of Water Column _____ ft. x .16 gal/ft (2 in.) .65 gal/ft (4 in.) 1.5 gal/ft (8 in.) _____ gal/ft (____ in.)

PID SCREENING MEAS.

Background **NA**
Well Mouth **NA**

WELL MATERIAL

 PVC SS Depth of pump intake **35**

Volume of Water in Well = _____ gallon(s)

2.75 Total gallons purged[Vol. = $r^2 h(0.163)$]

FIELD WATER QUALITY MEASUREMENTS

Time	1240	1247	1255	1310	1320	1330	1340		
pH (Std. Units)									
Eh (millivolts)									SAMPLE
Conduct. (μ mhos/cm)									
Temp. (C)									
Turb. (NTU)	3.7	3.1	2.8	2.6	3.5	3.6	2.3		
DO (mg/l)									
Flow (ml/min)	130	130	130	130	130	130	130		
Depth To Water (ft)	3.68	4.81	5.88	7.35	8.79	8.80	8.80		
Time									
pH (Std. Units)									
Eh (millivolts)									
Conduct. (μ mhos/cm)									
Temp. (C)									
Turb. (NTU)									
DO (mg/l)									
Flow (ml/min)									
Depth To Water (ft)									

Pump Type

Peristaltic Pump	<input checked="" type="checkbox"/>
Submersible Pump	<input type="checkbox"/>
Bladder Pump	<input type="checkbox"/>
Other:	<input type="checkbox"/>

Purge

Sample

Description of Sampling Equipment and Flow Rate:

GEO Pump 2 PERISTALTIC Pump → TEFLON-LINED POLY TUBING, LAMOTTE 2020 TURBIDIMETER, SALUSTI H₂O LEVEL INDICATOR (Model 110)

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP 8240	N	HCl	3 x 40 ml	1340	GZA-105R	



Low-flow Groundwater Sampling Data Record

Project: Former Locused E1202 Project No.: 3-25-04/0700 Date/Time: 3-25-04/0700 Sheet 1 of 1

TRC Personnel: JJ CALLAHAN

Well Identification: GZA-105R

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input type="checkbox"/>

Protective Casing Stick-up NA ft. (from ground)

Riser Stick-up NA ft. (from ground)

WELL DIAMETER 2 inch
 4 inch
 6 inch

Well Depth 36.75 ft. top of riser measured
 top of casing historical

Water Depth 4.25 ft.

Height of Water Column 32.5 ft. x .16 gal/ft (2 in.)
 .65 gal/ft (4 in.)
 1.5 gal/ft (6 in.)
 gal/ft (in.)

PID SCREENING MEAS.

Background	
Well Mouth	

WELL MATERIAL

PVC SS

Volume of Water in Well = 3.75 gallon(s) \approx 5.2 gal.
3.75 Total gallons purged
 [Vol. = r²h(0.163)]

FIELD WATER QUALITY MEASUREMENTS

Time	0930	0935	0940	0945	0950	0955	1000		
pH (Std. Units)	8.20	7.84	7.78	7.78	7.79	7.81			
Eh (millivolts)	60.5	75.0	76.0	77.0	78.8	80.0	S		
Conduct. (µmhos/cm)	378	376	369	368	368	369	A		
Temp. (C)	8.80	8.80	8.61	8.75	8.77	8.81	M		
Turb. (NTU)	1.5	1.3	1.0	1.0	1.1	0.9	P		
DO (mg/l)	8.98	5.76	5.46	5.41	5.39	5.38	L		
Flow (ml/min)	150	150	150	150	150	150	E		
Depth To Water (ft)	5.32	5.85	6.20	6.70	2.10	7.42			
Time									
pH (Std. Units)									
Eh (millivolts)									
Conduct. (µmhos/cm)									
Temp. (C)									
Turb. (NTU)									
DO (mg/l)									
Flow (ml/min)									
Depth To Water (ft)									

Pump Type Purge Sample Description of Sampling Equipment and Flow Rate:

Peristaltic Pump
 Submersible Pump
 Bladder Pump
 Other:

• GED Pump 2 PP (#437)
 • 45I 6920 w/650 MDS (P1104MAB, 02C0985 AD)
 • SLOPE IND. W. LEVEL (#51670010)

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP 0260 (VOCs)	N	HCl	3 x 40 ml	1000	GZA-105R	

20.25
 150
 20
 2.50
 .16
 1500
 250
 2000

Signed: JJ Callahan



Project: **FARMER LOCKHEED B720C** Project No.: **3-26-04/1035** Date/Time: **3-26-04/1035** Sheet 1 of 1

Low-flow Groundwater Sampling Data Record

TRC Personnel: **J. CALLAHAN, N. CAMERON**

Well Identification: **TRC-104**

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Protective Casing Stick-up (from ground) **FLUSH** ft.

Well Depth **10** ft. top of riser top of casing measured historical

Riser Stick-up (from ground) **NA** ft.

Water Depth **2.68** ft.

WELL DIAMETER 2 inch 4 inch 6 inch **1.25"**

Height of Water Column **7.32** ft. x .16 gal/ft (2 in.) .65 gal/ft (4 in.) 1.5 gal/ft (6 in.) gal/ft (in.)

PID SCREENING MEAS.

Background	
Well Mouth	

WELL MATERIAL PVC SS

Volume of Water in Well = **1.86** gallon(s) Total gallons purged
[Vol. = $r^2 h(0.163)$]

FIELD WATER QUALITY MEASUREMENTS

Time	1055	1100	1105	1110	1115	1120	1125	1130	1135	1140
pH (Std. Units)	5.88	5.79	5.43	5.45	5.44	5.42	5.20	5.17	5.19	5.20
Eh (millivolts)	132.2	157.0	168.4	178.7	179.7	184.2	192.0	193.0	195.5	196.4
Conduct. (μ mhos/cm)	695	686	693	697	702	705	710	714	720	727
Temp. (C)	8.93	8.90	8.85	8.96	8.92	8.90	9.03°C	9.05	9.20	9.21
Turb. (NTU)	16.7	11.4	6.2	5.5	4.8	4.0	0.0	0.0	0.0	0.0
DO (mg/l)	11.05	10.26	10.34	10.28	10.27	10.22	10.19	10.20	10.24	10.14
Flow (ml/min)	100	100	100	100	100	100	100	100	100	100
Depth To Water (ft)	3.53	3.52	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55
Time	1145									
pH (Std. Units)	S									
Eh (millivolts)	A									
Conduct. (μ mhos/cm)	M									
Temp. (C)	P									
Turb. (NTU)	L									
DO (mg/l)	E									
Flow (ml/min)										
Depth To Water (ft)										

* SUN ON FLOW-THRU COL.

Pump Type: Peristaltic Pump Submersible Pump Bladder Pump Other:

Purge: Sample: Description of Sampling Equipment and Flow Rate:
 • Geo Pump 2 (#437) PP
 • YSI 6920 w/ 660 MDS (#9960414 AB, 02C0785 AD)
 • SLOTE INDICATOR W/2 WHEEL (#51670010)

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP VPH	N	HCl	3 x 40ml	1145	TRC-104	

Signed:



Low-flow Groundwater Sampling Data Record

Project: Former Lockheed Project No.: E9202 Date/Time: 3-25-04/1440 Sheet 1 of 1

TRC Personnel: J. Callahan N. Cameron (off R 1575)

Well Identification: TRC-106

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Protective Casing Stick-up (from ground) FWUSH ft.

Well Depth 12 ft. top of riser top of casing measured historical

Riser Stick-up (from ground) NA ft.

Water Depth 4.15 ft.

WELL DIAMETER 2 inch 4 inch 6 inch 1.25"

Height of Water Column 7.85 ft. x .16 gal/ft (2 in.) .65 gal/ft (4 in.) 1.5 gal/ft (6 in.) gal/ft (___ in.)

PID SCREENING MEAS.

Background	
Well Mouth	

WELL MATERIAL

PVC SS

Volume of Water in Well = _____ gallon(s)
 ≈ 2.5 Total gallons purged
 [Vol. = r²h(0.163)]

FIELD WATER QUALITY MEASUREMENTS

Time	1510	1515	1525	1535	1545	1555	1605	1612	1615	1618
pH (Std. Units)	6.74	6.77	6.85	6.85	6.92	6.94	6.89	6.90	6.94	6.94
Eh (millivolts)	39.2	-34.4	-37.9	-44.7	-50.0	-51.7	-43.6	-42.0	-42.1	-43.4
Conduct. (µmhos/cm)	128	126	126	126	125	125	125	124	124	125
Temp. (C)	9.23	8.70	8.56	8.51	8.23	8.13	7.99	7.90	7.87	7.93
Turb. (NTU)	148.2	700	226.6	136.4	68.5	40.5	12.8	5.0	4.9	5.0
DO (mg/l)	11.84	11.73	11.92	12.05	12.10	11.95	12.00	12.04	12.08	12.11
Flow (ml/min)	150	100	100	100	100	100	100	100	100	100
Depth To Water (ft)	4.00	4.15	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Time	1620									
pH (Std. Units)	S									
Eh (millivolts)	A									
Conduct. (µmhos/cm)	M									
Temp. (C)	P									
Turb. (NTU)	L									
DO (mg/l)	E									
Flow (ml/min)										
Depth To Water (ft)										

Pump Type

Peristaltic Pump
 Submersible Pump
 Bladder Pump
 Other:

Purge

Sample

Description of Sampling Equipment and Flow Rate:

• Geopump Z PP (#437)
 • YSI 6920 w/650 MDS (#9920414 AB, 02C0985 AD)
 • SCOPE INDICATOR H₂O LEVEL (#51670010), LAMORTE 2020 (0301-3777)
 • ORP READINGS = VERY ERRATIC

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP VFA	N	HCl	3 x 40ml	1620	TRC-106	



Low-flow Groundwater Sampling Data Record

Project: FORMER LOCKHEED Project No.: E9202 Date/Time: 3-26-04/0805 Sheet 1 of 1

TRC Personnel: JJ CALLAHAN

Well Identification: WE-45

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

MAX COMPLETELY FILLED w/ SEDIMENT

Protective Casing Stick-up (from ground) FLUSH ft.

Well Depth 13 ft. top of riser measured top of casing historical

Riser Stick-up (from ground) NA ft.

Water Depth 3.25 ft.

WELL DIAMETER 2 inch 4 inch 6 inch

Height of Water Column 9.75 ft. x .16 gal/ft (2 in.) .65 gal/ft (4 in.) 1.5 gal/ft (6 in.) gal/ft (in.)

PID SCREENING MEAS.

Background	
Well Mouth	

WELL MATERIAL

PVC SS

Volume of Water in Well = 21.6 gallon(s)
2 Total gallons purged
 [Vol. = r²h(0.163)]

FIELD WATER QUALITY MEASUREMENTS

Time	0822	0827	0832	0837	0842					
pH (Std. Units)	5.88	5.79	5.76	5.49	5.87					
Eh (millivolts)	89.4	82.5	60.2	49.8	29.4					
Conduct. (µmhos/cm)	468	477	477	478	480					
Temp. (C)	8.89	8.62	8.49	8.54	8.63					
Turb. (NTU)	9.2	5.8	4.5	4.8	2.7					
DO (mg/l)	3.86	0.48	0.40	0.40	0.47					
Flow (ml/min)	120	120	120	100	100					
Depth To Water (ft)	3.35	3.38	3.39	3.39	3.39					
Time	0847	0852	0857	0902	0907	0910				
pH (Std. Units)	5.83	5.45	5.90	5.82	5.89					
Eh (millivolts)	37.2	0.5	16.5	2.5	-25.0	S				
Conduct. (µmhos/cm)	479	477	475	474	472	A				
Temp. (C)	8.62	8.56	8.53	8.51	8.50	M				
Turb. (NTU)	2.4	2.5	2.3	1.9	2.0	P				
DO (mg/l)	0.34	0.33	0.32	0.30	0.30	L				
Flow (ml/min)	100	100	100	100	100	E				
Depth To Water (ft)	3.39	3.39	3.39	3.39	3.39	D				

Pump Type Purge/ Sample Description of Sampling Equipment and Flow Rate:

Peristaltic Pump
 Submersible Pump
 Bladder Pump
 Other:

• Geopump 2 PP (#437)
 • YSI 6920 w/ 650 ADS (#9910414 AB, 02C0985 AD)
 • SLOPE INDICATOR H₂O LEVEL (#51670010)
 • ORP + pH READINGS READINGS ERRATIC

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP VFA	N	HCl	3 x 40 ml	0910	WE-45	

1.75
 .16
 840
 75
 1590



Low-flow Groundwater Sampling Data Record

Project: **Palmer Lockheed** Project No.: **E9202** Date/Time: **7-26-04/0920** Sheet 1 of 1

TRC Personnel: **J. CALLAHAN, N. CAMERON**

Well Identification: **WE-7**

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINS SS DEDICATED P&S TUBING

Protective Casing Stick-up (from ground) **FWSH** ft.

Riser Stick-up (from ground) **NA** ft.

WELL DIAMETER
 2 Inch
 4 Inch
 6 Inch
 1.5"

WELL MATERIAL
 PVC SS

Well Depth **12** ft. top of riser measured top of casing historical

Water Depth **2.9** ft.

Height of Water Column **9.1** ft. x .16 gal/ft (2 in.) .65 gal/ft (4 in.) 1.5 gal/ft (6 in.) gal/ft (in.)

Volume of Water in Well = **3.3** gallon(s)
≈ 2 Total gallons purged
 [Vol. = r²h(0.163)]

PID SCREENING MEAS.

Background	
Well Mouth	

FIELD WATER QUALITY MEASUREMENTS

Time	0937	0942	0947	0952	0957	1002	1007	1012	1017	1022
pH (Std. Units)	6.13	6.07	6.19	6.15	6.19	6.16	6.19	6.19	6.19	6.10
Eh (millivolts)	10.8	45.3	59.6	82.4	85.5	81.5	85.9	82.7	86.3	74.3
Conduct. (µmhos/cm)	539	539	537	535	533	532	533	531	532	529
Temp. (C)	8.37	8.33	8.08	8.03	7.73	7.70	7.71	7.67	7.84	7.74
Turb. (NTU)	2.1	2.7	2.3	1.6	1.2	1.1	1.0	1.2	1.3	3.4
DO (mg/l)	3.71	3.17	3.17	3.13	3.07	3.06	3.07	3.12	3.16	3.20
Flow (ml/min)	100	100	100	100	100	100	100	100	100	100
Depth To Water (ft)	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Time	1025									
pH (Std. Units)	S									
Eh (millivolts)	A									
Conduct. (µmhos/cm)	M									
Temp. (C)	P									
Turb. (NTU)	L									
DO (mg/l)	E									
Flow (ml/min)	D									
Depth To Water (ft)										

Pump Type: Peristaltic Pump Submersible Pump Bladder Pump Other: _____

Purge: Sample: Description of Sampling Equipment and Flow Rate:
 • Geopump Z (#437)
 • YSI 6920 w/ 650 MDS (#7710414 AB, 02C0985 AD)
 • SLOPE INDICATOR H₂O LEVEL (51670010)

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP VPH	N	HCl	3 x 40ml	1025	WE-7	

Signed: *J. Callahan*



Low-flow Groundwater Sampling Data Record

Project: Former Lockwood Project No.: E9202 Date/Time: 3-25-04/1035 Sheet 1 of 1

TRC Personnel: J. CAULAHAN, N. CAMERON (off e 1055)

Well Identification: WE-08

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Protective Casing Stick-up (from ground) FLUSH ft.

Well Depth 17 ft. top of riser measured top of casing historical

Riser Stick-up (from ground) NA ft.

Water Depth 3.1 ft.

WELL DIAMETER 2 inch 4 inch 6 inch

Height of Water Column 13.9 ft. x .16 gal/ft (2 in.) .65 gal/ft (4 in.) 1.5 gal/ft (6 in.) gal/ft (in.)

PID SCREENING MEAS.

Background	
Well Mouth	

WELL MATERIAL

PVC SS

Volume of Water in Well = 9 gallon(s)
2.5 Total gallons purged
 [Vol. = r²h(0.163)]

FIELD WATER QUALITY MEASUREMENTS

Time	1050	1055	1100	1105	1110	1115	1120	1125	1130	1135
pH (Std. Units)	7.00	6.59	6.54	6.54	6.45	6.47	6.47	6.47	6.46	6.45
Eh (millivolts)	-100.6	-106.0	-106.8	-106.1	-107.1	-107.7	-107.8	-108.2	-109.4	-110.9
Conduct. (µmhos/cm)	521	528	532	536	541	542	540	542	544	544
Temp. (C)	9.09	8.98	8.98	9.06	9.28	9.10	9.05	9.08	9.10	9.13
Turb. (NTU)	20.6	11.9	8.7	7.6	7.0	7.0	7.2	6.4	5.8	5.3
DO (mg/l)	2.75	0.72	0.60	0.46	0.42	0.38	0.34	0.33	0.31	0.29
Flow (ml/min)	150	150	150	150	150	150	100	100	100	100
Depth To Water (ft)	3.19	3.23	3.28	3.28	3.31	3.32	3.29	3.15	3.18	3.16
Time	1140	1145								
pH (Std. Units)	6.45									
Eh (millivolts)	-107.9									
Conduct. (µmhos/cm)	546									
Temp. (C)	9.12									
Turb. (NTU)	5.8									
DO (mg/l)	0.28									
Flow (ml/min)	100									
Depth To Water (ft)	3.18									

Pump Type: Peristaltic Pump Submersible Pump Bladder Pump Other: _____

Purge: Sample: Description of Sampling Equipment and Flow Rate:
 • Geolung Z PP (#437)
 • YSI 6720 w/60 mds (#99L0414AS, 02C0985 AD)
 • SLOPE INDICATOR H₂O LEVEL (#51670010)

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP VPH	N	HCl	3x 40 ml	1145	WE-0 (PP)	

1.90
 .65
 750
 340
 10360

Signed: J. Caulahan



Low-flow Groundwater Sampling Data Record

Project: FORNER LOCKWOOD Project No.: E9202 Date/Time: 3-25-09 / 1200 Sheet 1 of 1

TRC Personnel: J. CAULAHAN, N. CAMERON

Well Identification: WE-9

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concrete Collar Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PVC Stick-up Intact	<input type="checkbox"/>	<input type="checkbox"/>
Well Cap Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security Lock Present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Protective Casing Stick-up (from ground) NA ft.

Well Depth ~12 ft. top of riser measured
 top of casing historical

Riser Stick-up (from ground) NA ft.

Water Depth 3.17 ft.

WELL DIAMETER 2 inch
 4 inch
 6 inch

Height of Water Column 0.83 ft. x .16 gal/ft (2 in.)
 .65 gal/ft (4 in.)
 1.5 gal/ft (6 in.)
 gal/ft (___ in.)

PID SCREENING MEAS.

Background	
Well Mouth	

WELL MATERIAL

PVC SS

Volume of Water in Well = $\frac{1.4}{2.5}$ gallon(s)
Total gallons purged

[Vol. = r²h(0.163)]

FIELD WATER QUALITY MEASUREMENTS

Time	1222	1227	1235	1240	1245	1250	1255	1300	1305	1310
pH (Std. Units)	6.21	6.30	6.32	6.37	6.37	6.35	6.41	6.45	6.50	6.47
Eh (millivolts)	8.1	-82.0	-122.2	-134.9	-154.2	-162.0	-174.3	-177.0	-182.5	-185.0
Conduct. (µmhos/cm)	580	597	588	583	582	579	576	544	570	566
Temp. (C)	8.73	8.00	7.91	7.93	7.99	8.08	8.13	8.16	8.10	7.91
Turb. (NTU)	74.8	63.5	43.2	27.1	19.1	13.4	8.8	6.4	5.7	4.6
DO (mg/l)	5.81	1.09	0.88	0.59	0.58	0.50	0.46	0.44	0.43	0.39
Flow (ml/min)	100	100	100	100	100	100	100	100	100	100
Depth To Water (ft)	3.25	3.27	3.25	3.26	3.26	3.26	3.27	3.27	3.27	3.27
Time	1315	1320	1325							
pH (Std. Units)	6.36	6.40								
Eh (millivolts)	-192.7	-195.1								
Conduct. (µmhos/cm)	564	562								
Temp. (C)	7.91	7.91								
Turb. (NTU)	4.1	4.4								
DO (mg/l)	0.37	0.36								
Flow (ml/min)	100	100								
Depth To Water (ft)	3.27	3.27								

Pump Type

Peristaltic Pump
 Submersible Pump
 Bladder Pump
Other: _____

Purge

Sample

Description of Sampling Equipment and Flow Rate:

• GEOPUMP 2 PP (#437)
• YSZ 6920 6120 w/CGO MDS (#99104146, 02C0985 AD)
• SLOPE INDICATOR 400 LEVEL (#51670010)
• Petrol. odor observed

Analytical Parameter	Filtered (Y/N)	Preservation	Volume	Time Collected	Sample #	Case #
MCP VPH	N	HCl	3 x 40 ml	1325	WE-9 (PP)	

8.03
.16
2.98
6.83
4.128

APPENDIX B

**LABORATORY REPORTS AND DATA
VALIDATION**

Source Control Monitoring (Samples Collected December 2003): Data Validation

TRC performed a limited validation of the volatile organic compound (VOC) analytical data associated with this sampling event. The groundwater samples included in this review are listed below.

IP-1R2	EMW-11R1
IP-2R1	EMW-11R2
IP-2R3	GZA-105R
IP-3R2	BRW-1R2
IP-4R1	BRW-1R4
IP-4R3	

The sample results were assessed using the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (10/99)*. Modification of the Functional Guidelines was done to accommodate the non-CLP methodology used by the laboratory. Qualification of sample data was not performed.

The limited validation was based upon the following parameters: holding times, cooler temperatures, instrument tunes, calibrations, blanks (laboratory method blanks and trip blanks), surrogate spike recoveries, laboratory control sample (LCS) results, internal standard performance, and an evaluation of sample quantitation limits. These parameters provide an adequate assessment of the overall accuracy and precision of the data set.

In general, the data appear to be valid as reported and may be used for decision-making purposes. Potential high bias exists for the vinyl chloride result in sample EMW-11R2 due to high recovery in the LCS.

Accuracy

All samples were received with cooler temperatures within the method-specified range. All samples were analyzed within the method-specified holding time.

All instrument tunes met the acceptance criteria and were analyzed at the proper frequency. The percent relative standard deviation (%RSD) of bromomethane in the initial calibration and the percent differences of dichlorodifluoromethane and/or 2-hexanone in the continuing calibrations were outside of the acceptance criteria. Bromomethane, dichlorodifluoromethane, and 2-hexanone were not detected in any of the groundwater samples. Potential uncertainty exists for these results in the associated samples. Since these compounds are not contaminants of concern at this site, the potential uncertainty did not affect the overall usability of the data.

Target compounds were not detected in any of the laboratory method blanks or the one trip blank submitted with these samples. It should be noted that trip blanks were not submitted with samples EMW-11R1, EMW-11R2, GZA-105R, BRW-1R2, and BRW-1R4. Data usability was not affected by the lack of a trip blank.

All samples exhibited acceptable surrogate recoveries. The LCSs associated with this data set exhibited acceptable recoveries of all target compounds with the exception of dichlorodifluoromethane (141-154%), vinyl chloride (134-143%), chloromethane (131%), and trichlorofluoromethane (137-138%). Since dichlorodifluoromethane, chloromethane, and trichlorofluoromethane were not detected in any of the groundwater samples, data were not affected by the potential high bias caused by the high LCS recoveries. The positive result for vinyl chloride in sample EMW-11R2 may be biased high due to the high LCS recovery.

The performance of the internal standards was within the acceptance criteria in all sample analyses.

Precision

Field duplicates were not submitted with this sample set. Analytical precision was demonstrated through the acceptable %RSDs in the initial calibration and internal standard stability between analyses.

Quantitation Limits

Due to the levels of target compounds which would have exceeded the calibration range if analyzed undiluted, all samples were analyzed on dilution. Quantitation limits for all samples were elevated accordingly due to the dilutions and exceed GW-1 standards for select compounds.

Samples GZA-105R and BRW-1R2 were analyzed at additional dilutions due to the concentrations of trichloroethene which exceeded the calibration range in the initial diluted analyses. The results of both diluted analyses were combined in order to report the lowest possible quantitation limits and all results within the calibration range.



ANALYTICAL REPORT

Prepared for:
TRC Environmental
Boott Mills South
Foot of John Street
Lowell, MA 01852

Project: Former GE Site
ETR: 0312056
Report Date: December 18, 2003

Certifications and Accreditations

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090
Army Corps of Engineers
Department of the Navy
Florida E87814

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MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Woods Hole Group Environmental Laboratories

Project Number: 0312056

Project Location: Wilmington, MA MCP RTN #¹:

This Form provides certifications for the following data set: [Laboratory Sample ID Number(s)]:

0312056-01 through 0312056-07

Sample Matrices: Groundwater Soil/Sediment Drinking Water Other:

MCP SW-846 Methods used (as specified in MADEP Compendium of Analytical Methods)

Check all that apply:

8260B (✓)	8151A ()	8330 ()	6010B ()	7470A/1A ()
8270C ()	8081A ()	VPH ()	6020 ()	9014M ² ()
8082 ()	8021B ()	EPH ()	7000 S ³ ()	Other:

¹ - List Release Tracking Number (RTN), if known.

²M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method.

³S - SW-846 Methods 7000 Series. List individual method and analyte.

An affirmative response to question A, B, C and D is required for "Presumptive Certainty" status.

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	<input type="checkbox"/> Yes	<input type="checkbox"/> No ¹

A response to questions E and F below is required for "Presumptive Certainty" status.

E	Were all QC performance standards and recommendations for the specified methods achieved?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ¹
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Edith Hutchinson Position: Senior Project Manager

Printed Name: Edith Hutchinson Date: 12/18/2003

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 0312056

Project: Former GE Site

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

Volatile Organics by 8260B

1. The initial calibration had compounds outside of the 15% RSD QC acceptance limit. Refer to the Form VI Initial Calibration Summary report for specific outliers. This initial calibration meets the acceptability criteria.
2. Continuing calibration verification standards C1121701 and C1121801 had values for Dichlorodifluoromethane above the 30% D QC acceptance limit at 32.0%. These calibration verifications meet the acceptability criteria. Dichlorodifluoromethane was not detected in any of the associated samples.
3. Laboratory control sample, VW121703L08, had recoveries above the 130% QC acceptance limit for Dichlorodifluoromethane and Vinyl chloride at 144% and 134%, respectively. These compounds were not detected in any of the associated samples.
4. Laboratory control sample, VW121803L01, had recoveries above the 130% QC acceptance limit for Dichlorodifluoromethane, Chloromethane, Vinyl chloride and Trichlorofluoromethane at 154%, 131%, 142% and 138%, respectively. These compounds were not detected in any of the associated samples.
5. All samples except TB01-121703 (0312056-07) were analyzed at dilution based on historical and screening information. Refer to the individual report forms for dilution requirements.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: *Felita Hutchings* Title: *Senior Project Manager* *12/18/03*

VOLATILE ORGANICS



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-1R2-121703**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **0312056-01**
 Associated Blank: **VW121703B14**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/17/03	5	5	200	MLR

Parameter	Result
Dichlorodifluoromethane	400 U
Chloromethane	400 U
Vinyl chloride	400 U
Bromomethane	1000 U
Chloroethane	400 U
Trichlorofluoromethane	400 U
Diethyl ether	400 U
Acetone	1000 U
1,1-Dichloroethene	400 U
Carbon disulfide	400 U
Methylene chloride	1000 U
Methyl tert-butyl ether (MTBE)	400 U
trans-1,2-Dichloroethene	400 U
Diisopropyl Ether (DIPE)	400 U
1,1-Dichloroethane	400 U
Methyl Tertiary Butyl Ether (ETBE)	400 U
Butanone (MEK)	400 U
cis-1,2-Dichloroethene	400 U
2,2-Dichloropropane	400 U
Bromochloromethane	400 U
Chloroform	400 U
1,1,1-Trichloroethane	400 U
1,1-Dichloropropene	400 U
Carbon tetrachloride	400 U
Benzene	400 U
Tertiary Amyl Methyl Ether (TAME)	400 U
Tetrahydrofuran	400 U
1,2-Dichloroethane	400 U
Trichloroethene	15000
1,2-Dichloropropane	400 U
Dibromomethane	400 U
1,4-Dioxane	10000 U
Bromodichloromethane	400 U
Methyl isobutyl ketone (MIBK)	400 U

Parameter	Result
1,3-Dichloropropene, Total	400 U
Toluene	400 U
1,1,2-Trichloroethane	400 U
2-Hexanone	400 U
Tetrachloroethene	3100
1,3-Dichloropropene	400 U
Dibromochloromethane	400 U
1,2-Dibromoethane	400 U
Chlorobenzene	400 U
1,1,1,2-Tetrachloroethane	400 U
Ethylbenzene	400 U
Xylenes, Total	1200 U
Styrene	400 U
Bromoform	400 U
Isopropylbenzene	400 U
1,1,2,2-Tetrachloroethane	400 U
Bromobenzene	400 U
1,2,3-Trichloropropane	400 U
n-Propylbenzene	400 U
2-Chlorotoluene	400 U
1,3,5-Trimethylbenzene	400 U
4-Chlorotoluene	400 U
tert-Butylbenzene	400 U
1,2,4-Trimethylbenzene	400 U
sec-Butylbenzene	400 U
1,3-Dichlorobenzene	400 U
p-Isopropyltoluene	400 U
1,4-Dichlorobenzene	400 U
n-Butylbenzene	400 U
1,2-Dibromo-3-chloropropane	1000 U
1,2-Dichlorobenzene	400 U
1,2,4-Trichlorobenzene	400 U
Hexachlorobutadiene	1000 U
Naphthalene	400 U
1,2,3-Trichlorobenzene	400 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	99	70-130
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

Form I Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-2R1-121703**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **0312056-02**
 Associated Blank: **VW121703B14**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/17/03	5	5	20	MLR

Parameter	Result
Dichlorodifluoromethane	40 U
Chloromethane	40 U
Vinyl chloride	40 U
Bromomethane	100 U
Chloroethane	40 U
Trichlorofluoromethane	40 U
Diethyl ether	40 U
Acetone	100 U
1,1-Dichloroethene	40 U
Carbon disulfide	40 U
Methylene chloride	100 U
Methyl tert-butyl ether (MTBE)	40 U
trans-1,2-Dichloroethene	40 U
Diisopropyl Ether (DIPE)	40 U
1,1-Dichloroethane	80
Ethyl Tertiary Butyl Ether (ETBE)	40 U
2-Butanone (MEK)	40 U
cis-1,2-Dichloroethene	41
2,2-Dichloropropane	40 U
Bromochloromethane	40 U
Chloroform	40 U
1,1,1-Trichloroethane	40 U
1,1-Dichloropropene	40 U
Carbon tetrachloride	40 U
Benzene	40 U
Tertiary Amyl Methyl Ether (TAME)	40 U
Tetrahydrofuran	40 U
1,2-Dichloroethane	40 U
Trichloroethene	2100
1,2-Dichloropropane	40 U
Dibromomethane	40 U
1,4-Dioxane	1000 U
Bromodichloromethane	40 U
Methyl isobutyl ketone (MIBK)	40 U

Parameter	Result
1,3-Dichloropropene, Total	40 U
Toluene	40 U
1,1,2-Trichloroethane	40 U
2-Hexanone	40 U
Tetrachloroethene	660
1,3-Dichloropropane	40 U
Dibromochloromethane	40 U
1,2-Dibromoethane	40 U
Chlorobenzene	40 U
1,1,1,2-Tetrachloroethane	40 U
Ethylbenzene	40 U
Xylenes, Total	120 U
Styrene	40 U
Bromoform	40 U
Isopropylbenzene	40 U
1,1,2,2-Tetrachloroethane	40 U
Bromobenzene	40 U
1,2,3-Trichloropropane	40 U
n-Propylbenzene	40 U
2-Chlorotoluene	40 U
1,3,5-Trimethylbenzene	40 U
4-Chlorotoluene	40 U
tert-Butylbenzene	40 U
1,2,4-Trimethylbenzene	40 U
sec-Butylbenzene	40 U
1,3-Dichlorobenzene	40 U
p-Isopropyltoluene	40 U
1,4-Dichlorobenzene	40 U
n-Butylbenzene	40 U
1,2-Dibromo-3-chloropropane	100 U
1,2-Dichlorobenzene	40 U
1,2,4-Trichlorobenzene	40 U
Hexachlorobutadiene	100 U
Naphthalene	40 U
1,2,3-Trichlorobenzene	40 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	99	70-130
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-2R3-121703**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **0312056-03**
 Associated Blank: **VW121803B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/18/03	5	5	20	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	40 U	1,3-Dichloropropene, Total	40 U
Chloromethane	40 U	Toluene	40 U
Vinyl chloride	40 U	1,1,2-Trichloroethane	40 U
Bromomethane	100 U	2-Hexanone	40 U
Chloroethane	40 U	Tetrachloroethene	380
Trichlorofluoromethane	40 U	1,3-Dichloropropane	40 U
Diethyl ether	40 U	Dibromochloromethane	40 U
Acetone	100 U	1,2-Dibromoethane	40 U
1,1-Dichloroethene	40 U	Chlorobenzene	40 U
Carbon disulfide	40 U	1,1,1,2-Tetrachloroethane	40 U
Methylene chloride	100 U	Ethylbenzene	40 U
Methyl tert-butyl ether (MTBE)	40 U	Xylenes, Total	120 U
trans-1,2-Dichloroethene	40 U	Styrene	40 U
Diisopropyl Ether (DIPE)	40 U	Bromoform	40 U
1,1-Dichloroethane	110	Isopropylbenzene	40 U
Ethyl Tertiary Butyl Ether (ETBE)	40 U	1,1,2,2-Tetrachloroethane	40 U
Butanone (MEK)	40 U	Bromobenzene	40 U
cis-1,2-Dichloroethene	56	1,2,3-Trichloropropane	40 U
2,2-Dichloropropane	40 U	n-Propylbenzene	40 U
Bromochloromethane	40 U	2-Chlorotoluene	40 U
Chloroform	40 U	1,3,5-Trimethylbenzene	40 U
1,1,1-Trichloroethane	40 U	4-Chlorotoluene	40 U
1,1-Dichloropropene	40 U	tert-Butylbenzene	40 U
Carbon tetrachloride	40 U	1,2,4-Trimethylbenzene	40 U
Benzene	40 U	sec-Butylbenzene	40 U
Tertiary Amyl Methyl Ether (TAME)	40 U	1,3-Dichlorobenzene	40 U
Tetrahydrofuran	40 U	p-Isopropyltoluene	40 U
1,2-Dichloroethane	40 U	1,4-Dichlorobenzene	40 U
Trichloroethene	2500	n-Butylbenzene	40 U
1,2-Dichloropropane	40 U	1,2-Dibromo-3-chloropropane	100 U
Dibromomethane	40 U	1,2-Dichlorobenzene	40 U
1,4-Dioxane	1000 U	1,2,4-Trichlorobenzene	40 U
Bromodichloromethane	40 U	Hexachlorobutadiene	100 U
Methyl isobutyl ketone (MIBK)	40 U	Naphthalene	40 U
		1,2,3-Trichlorobenzene	40 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	102	70-130
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	100	70-130
Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/18/03 11:55



Form I

Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-3R2-121703**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **0312056-04**
 Associated Blank: **VW121703B14**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/17/03	5	5	50	MLR

Parameter	Result
Dichlorodifluoromethane	100 U
Chloromethane	100 U
Vinyl chloride	100 U
Bromomethane	250 U
Chloroethane	100 U
Trichlorofluoromethane	100 U
Diethyl ether	100 U
Acetone	250 U
1,1-Dichloroethene	100 U
Carbon disulfide	100 U
Methylene chloride	250 U
Methyl tert-butyl ether (MTBE)	100 U
trans-1,2-Dichloroethene	100 U
Diisopropyl Ether (DIPE)	100 U
1,1-Dichloroethane	110
Ethyl Tertiary Butyl Ether (ETBE)	100 U
2-Butanone (MEK)	100 U
cis-1,2-Dichloroethene	100 U
2,2-Dichloropropane	100 U
Bromochloromethane	100 U
Chloroform	100 U
1,1,1-Trichloroethane	100 U
1,1-Dichloropropene	100 U
Carbon tetrachloride	100 U
Benzene	100 U
Tertiary Amyl Methyl Ether (TAME)	100 U
Tetrahydrofuran	100 U
1,2-Dichloroethane	100 U
Trichloroethene	4000
1,2-Dichloropropane	100 U
Dibromomethane	100 U
1,4-Dioxane	2500 U
Bromodichloromethane	100 U
Methyl isobutyl ketone (MIBK)	100 U

Parameter	Result
1,3-Dichloropropene, Total	100 U
Toluene	100 U
1,1,2-Trichloroethane	100 U
2-Hexanone	100 U
Tetrachloroethene	940
1,3-Dichloropropane	100 U
Dibromochloromethane	100 U
1,2-Dibromoethane	100 U
Chlorobenzene	100 U
1,1,1,2-Tetrachloroethane	100 U
Ethylbenzene	100 U
Xylenes, Total	300 U
Styrene	100 U
Bromoform	100 U
Isopropylbenzene	100 U
1,1,2,2-Tetrachloroethane	100 U
Bromobenzene	100 U
1,2,3-Trichloropropane	100 U
n-Propylbenzene	100 U
2-Chlorotoluene	100 U
1,3,5-Trimethylbenzene	100 U
4-Chlorotoluene	100 U
tert-Butylbenzene	100 U
1,2,4-Trimethylbenzene	100 U
sec-Butylbenzene	100 U
1,3-Dichlorobenzene	100 U
p-Isopropyltoluene	100 U
1,4-Dichlorobenzene	100 U
n-Butylbenzene	100 U
1,2-Dibromo-3-chloropropane	250 U
1,2-Dichlorobenzene	100 U
1,2,4-Trichlorobenzene	100 U
Hexachlorobutadiene	250 U
Naphthalene	100 U
1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	101	70-130
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/18/03 11:54



Form I Volatile Organics by 8260B

Client: TRC Environmental
 Project: Former GE Site
 Client ID: IP-4R1-121703
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0312056
 Lab ID: 0312056-05
 Associated Blank: VW121803B01
 Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/18/03	5	5	20	MLB

Parameter	Result
Dichlorodifluoromethane	40 U
Chloromethane	40 U
Vinyl chloride	40 U
Bromomethane	100 U
Chloroethane	40 U
Trichlorofluoromethane	40 U
Diethyl ether	40 U
Acetone	100 U
1,1-Dichloroethene	40 U
Carbon disulfide	40 U
Methylene chloride	100 U
Methyl tert-butyl ether (MTBE)	40 U
trans-1,2-Dichloroethene	40 U
Diisopropyl Ether (DIPE)	40 U
1,1-Dichloroethane	100
Ethyl Tertiary Butyl Ether (ETBE)	40 U
Butanone (MEK)	40 U
cis-1,2-Dichloroethene	61
2,2-Dichloropropane	40 U
Bromochloromethane	40 U
Chloroform	40 U
1,1,1-Trichloroethane	40 U
1,1-Dichloropropene	40 U
Carbon tetrachloride	40 U
Benzene	40 U
Tertiary Amyl Methyl Ether (TAME)	40 U
Tetrahydrofuran	40 U
1,2-Dichloroethane	40 U
Trichloroethene	2200
1,2-Dichloropropane	40 U
Dibromomethane	40 U
1,4-Dioxane	1000 U
Bromodichloromethane	40 U
Methyl isobutyl ketone (MIBK)	40 U

Parameter	Result
1,3-Dichloropropene, Total	40 U
Toluene	40 U
1,1,2-Trichloroethane	40 U
2-Hexanone	40 U
Tetrachloroethene	250
1,3-Dichloropropane	40 U
Dibromochloromethane	40 U
1,2-Dibromoethane	40 U
Chlorobenzene	40 U
1,1,1,2-Tetrachloroethane	40 U
Ethylbenzene	40 U
Xylenes, Total	120 U
Styrene	40 U
Bromoform	40 U
Isopropylbenzene	40 U
1,1,2,2-Tetrachloroethane	40 U
Bromobenzene	40 U
1,2,3-Trichloropropane	40 U
n-Propylbenzene	40 U
2-Chlorotoluene	40 U
1,3,5-Trimethylbenzene	40 U
4-Chlorotoluene	40 U
tert-Butylbenzene	40 U
1,2,4-Trimethylbenzene	40 U
sec-Butylbenzene	40 U
1,3-Dichlorobenzene	40 U
p-Isopropyltoluene	40 U
1,4-Dichlorobenzene	40 U
n-Butylbenzene	40 U
1,2-Dibromo-3-chloropropane	100 U
1,2-Dichlorobenzene	40 U
1,2,4-Trichlorobenzene	40 U
Hexachlorobutadiene	100 U
Naphthalene	40 U
1,2,3-Trichlorobenzene	40 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	102	70-130
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/18/03 11:55



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-4R3-121703**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **0312056-06**
 Associated Blank: **VW121703B14**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/17/03	5	5	50	MLR

Parameter	Result
Dichlorodifluoromethane	100 U
Chloromethane	100 U
Vinyl chloride	100 U
Bromomethane	250 U
Chloroethane	100 U
Trichlorofluoromethane	100 U
Diethyl ether	100 U
Acetone	250 U
1,1-Dichloroethene	100 U
Carbon disulfide	100 U
Methylene chloride	250 U
Methyl tert-butyl ether (MTBE)	100 U
trans-1,2-Dichloroethene	100 U
Diisopropyl Ether (DIPE)	100 U
1,1-Dichloroethane	110
Ethyl Tertiary Butyl Ether (ETBE)	100 U
2-Butanone (MEK)	100 U
cis-1,2-Dichloroethene	100 U
2,2-Dichloropropane	100 U
Bromochloromethane	100 U
Chloroform	100 U
1,1,1-Trichloroethane	100 U
1,1-Dichloropropene	100 U
Carbon tetrachloride	100 U
Benzene	100 U
Tertiary Amyl Methyl Ether (TAME)	100 U
Tetrahydrofuran	100 U
1,2-Dichloroethane	100 U
Trichloroethene	4000
1,2-Dichloropropane	100 U
Dibromomethane	100 U
1,4-Dioxane	2500 U
Bromodichloromethane	100 U
Methyl isobutyl ketone (MIBK)	100 U

Parameter	Result
1,3-Dichloropropene, Total	100 U
Toluene	100 U
1,1,2-Trichloroethane	100 U
2-Hexanone	100 U
Tetrachloroethene	860
1,3-Dichloropropane	100 U
Dibromochloromethane	100 U
1,2-Dibromoethane	100 U
Chlorobenzene	100 U
1,1,1,2-Tetrachloroethane	100 U
Ethylbenzene	100 U
Xylenes, Total	300 U
Styrene	100 U
Bromoform	100 U
Isopropylbenzene	100 U
1,1,2,2-Tetrachloroethane	100 U
Bromobenzene	100 U
1,2,3-Trichloropropane	100 U
n-Propylbenzene	100 U
2-Chlorotoluene	100 U
1,3,5-Trimethylbenzene	100 U
4-Chlorotoluene	100 U
tert-Butylbenzene	100 U
1,2,4-Trimethylbenzene	100 U
sec-Butylbenzene	100 U
1,3-Dichlorobenzene	100 U
p-Isopropyltoluene	100 U
1,4-Dichlorobenzene	100 U
n-Butylbenzene	100 U
1,2-Dibromo-3-chloropropane	250 U
1,2-Dichlorobenzene	100 U
1,2,4-Trichlorobenzene	100 U
Hexachlorobutadiene	250 U
Naphthalene	100 U
1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	102	70-130
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/18/03 11:55

Form I

Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **TB01-121703**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **0312056-07**
 Associated Blank: **VW121703B14**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/17/03	12/17/03	5	5	1	MLR

Parameter	Result
Dichlorodifluoromethane	2.0 U
Chloromethane	2.0 U
Vinyl chloride	2.0 U
Bromomethane	5.0 U
Chloroethane	2.0 U
Trichlorofluoromethane	2.0 U
Diethyl ether	2.0 U
Acetone	5.0 U
1,1-Dichloroethene	2.0 U
Carbon disulfide	2.0 U
Methylene chloride	5.0 U
Methyl tert-butyl ether (MTBE)	2.0 U
trans-1,2-Dichloroethene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U
1,1-Dichloroethane	2.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U
Butanone (MEK)	2.0 U
cis-1,2-Dichloroethene	2.0 U
2,2-Dichloropropane	2.0 U
Bromochloromethane	2.0 U
Chloroform	2.0 U
1,1,1-Trichloroethane	2.0 U
1,1-Dichloropropene	2.0 U
Carbon tetrachloride	2.0 U
Benzene	2.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U
Tetrahydrofuran	2.0 U
1,2-Dichloroethane	2.0 U
Trichloroethene	2.0 U
1,2-Dichloropropane	2.0 U
Dibromomethane	2.0 U
1,4-Dioxane	5.0 U
Bromodichloromethane	2.0 U
Methyl isobutyl ketone (MIBK)	2.0 U

Parameter	Result
1,3-Dichloropropene, Total	2.0 U
Toluene	2.0 U
1,1,2-Trichloroethane	2.0 U
2-Hexanone	2.0 U
Tetrachloroethene	2.0 U
1,3-Dichloropropane	2.0 U
Dibromochloromethane	2.0 U
1,2-Dibromoethane	2.0 U
Chlorobenzene	2.0 U
1,1,1,2-Tetrachloroethane	2.0 U
Ethylbenzene	2.0 U
Xylenes, Total	6.0 U
Styrene	2.0 U
Bromoform	2.0 U
Isopropylbenzene	2.0 U
1,1,2,2-Tetrachloroethane	2.0 U
Bromobenzene	2.0 U
1,2,3-Trichloropropane	2.0 U
n-Propylbenzene	2.0 U
2-Chlorotoluene	2.0 U
1,3,5-Trimethylbenzene	2.0 U
4-Chlorotoluene	2.0 U
tert-Butylbenzene	2.0 U
1,2,4-Trimethylbenzene	2.0 U
sec-Butylbenzene	2.0 U
1,3-Dichlorobenzene	2.0 U
p-Isopropyltoluene	2.0 U
1,4-Dichlorobenzene	2.0 U
n-Butylbenzene	2.0 U
1,2-Dibromo-3-chloropropane	5.0 U
1,2-Dichlorobenzene	2.0 U
1,2,4-Trichlorobenzene	2.0 U
Hexachlorobutadiene	5.0 U
Naphthalene	2.0 U
1,2,3-Trichlorobenzene	2.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	98	70-130
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/18/03 11:54



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **VW121703B14**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/17/03	5	5	1	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	5.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	2.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
2-Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	2.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	2.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	2.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	2.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	5.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	50 U	1,2,4-Trichlorobenzene	2.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	5.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	2.0 U
		1,2,3-Trichlorobenzene	2.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	98	70-130
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

Form I

Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **VW121803B01**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/18/03	5	5	1	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	5.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	2.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	2.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	2.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	2.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	2.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	5.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	5.0 U	1,2,4-Trichlorobenzene	2.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	5.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	2.0 U
		1,2,3-Trichlorobenzene	2.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	101	70-130
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/18/03 11:55



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: TRC Environmental
 Project: Former GE Site
 Client ID: Laboratory Control Sample
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0312056
 Lab ID: VW121703L08
 Associated Blank: VW121703B14
 Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/17/03	5	5	1	MLR

Parameter	Conc.	% Recovery	% Recovery Limits
Dichlorodifluoromethane	29	144 ^a	70-130
Chloromethane	24	120	70-130
Vinyl chloride	27	134 ^a	70-130
Bromomethane	23	115	70-130
Chloroethane	24	120	70-130
Trichlorofluoromethane	25	126	70-130
Diethyl ether	23	117	70-130
Acetone	23	115	70-130
1,1-Dichloroethene	20	101	70-130
Carbon disulfide	20	98	70-130
Methylene chloride	19	97	70-130
Methyl tert-butyl ether (MTBE)	20	99	70-130
trans-1,2-Dichloroethene	19	97	70-130
Diisopropyl Ether (DIPE)	20	102	70-130
1,1-Dichloroethane	21	103	70-130
Ethyl Tertiary Butyl Ether (ETBE)	21	107	70-130
2-Butanone (MEK)	21	104	70-130
cis-1,2-Dichloroethene	21	103	70-130
2,2-Dichloropropane	21	105	70-130
Bromochloromethane	21	104	70-130
Chloroform	20	102	70-130
1,1,1-Trichloroethane	20	102	70-130
1,1-Dichloropropene	21	103	70-130
Carbon tetrachloride	20	102	70-130
Benzene	21	107	70-130
Tertiary Amyl Methyl Ether (TAME)	22	112	70-130
Tetrahydrofuran	21	105	70-130
1,2-Dichloroethane	19	96	70-130
Trichloroethene	22	107	70-130
1,2-Dichloropropane	21	104	70-130
Dibromomethane	21	104	70-130
1,4-Dioxane	240	119	70-130
Bromodichloromethane	21	103	70-130

12/18/03 11:55



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: TRC Environmental
 Project: Former GE Site
 Client ID: Laboratory Control Sample
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0312056
 Lab ID: VW121703L08
 Associated Blank: VW121703B14
 Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/17/03	5	5	1	MLR

Parameter	Conc.	% Recovery	% Recovery Limits
Methyl isobutyl ketone (MIBK)	20	97	70-130
1,3-Dichloropropene, Total	41	102	70-130
Toluene	21	104	70-130
1,1,2-Trichloroethane	22	108	70-130
2-Hexanone	22	109	70-130
Tetrachloroethene	21	106	70-130
1,3-Dichloropropane	21	105	70-130
Dibromochloromethane	21	105	70-130
1,2-Dibromoethane	22	108	70-130
Chlorobenzene	20	100	70-130
1,1,1,2-Tetrachloroethane	20	100	70-130
Ethylbenzene	20	100	70-130
Xylenes, Total	61	102	70-130
Benzene	19	96	70-130
Bromoform	20	101	70-130
Isopropylbenzene	20	101	70-130
1,1,2,2-Tetrachloroethane	21	107	70-130
Bromobenzene	20	98	70-130
1,2,3-Trichloropropane	21	103	70-130
n-Propylbenzene	20	101	70-130
2-Chlorotoluene	19	96	70-130
1,3,5-Trimethylbenzene	20	100	70-130
4-Chlorotoluene	19	96	70-130
tert-Butylbenzene	20	100	70-130
1,2,4-Trimethylbenzene	20	99	70-130
sec-Butylbenzene	20	102	70-130
1,3-Dichlorobenzene	20	100	70-130
p-Isopropyltoluene	20	99	70-130
1,4-Dichlorobenzene	20	98	70-130
n-Butylbenzene	20	100	70-130
1,2-Dibromo-3-chloropropane	20	103	70-130
1,2-Dichlorobenzene	19	97	70-130
1,2,4-Trichlorobenzene	20	100	70-130



Form III
Spike Recovery Summary
Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **VW121703L08**
 Associated Blank: **VW121703B14**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/17/03	5	5	1	MLR

Parameter	Conc.	% Recovery	% Recovery Limits
Hexachlorobutadiene	19	97	70-130
Naphthalene	22	110	70-130
1,2,3-Trichlorobenzene	20	101	70-130

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	98	70-130
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

° - Value outside of QC Limits.
 N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

12/18/03 11:55

Form III

Spike Recovery Summary

Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **VW121803L01**
 Associated Blank: **VW121803B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/18/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Dichlorodifluoromethane	31	154 ^a	70-130
Chloromethane	26	131 ^a	70-130
Vinyl chloride	28	142 ^a	70-130
Bromomethane	25	124	70-130
Chloroethane	26	130	70-130
Trichlorofluoromethane	28	138 ^a	70-130
Diethyl ether	24	120	70-130
Acetone	24	118	70-130
1,1-Dichloroethene	21	103	70-130
Carbon disulfide	20	101	70-130
Methylene chloride	20	98	70-130
Methyl tert-butyl ether (MTBE)	20	101	70-130
trans-1,2-Dichloroethene	20	102	70-130
Isopropyl Ether (DIPE)	21	103	70-130
1,1-Dichloroethane	20	102	70-130
Ethyl Tertiary Butyl Ether (ETBE)	21	106	70-130
2-Butanone (MEK)	21	107	70-130
cis-1,2-Dichloroethene	18	92	70-130
2,2-Dichloropropane	20	102	70-130
Bromochloromethane	21	106	70-130
Chloroform	20	102	70-130
1,1,1-Trichloroethane	21	104	70-130
1,1-Dichloropropene	21	103	70-130
Carbon tetrachloride	21	104	70-130
Benzene	21	104	70-130
Tertiary Amyl Methyl Ether (TAME)	22	109	70-130
Tetrahydrofuran	20	102	70-130
1,2-Dichloroethane	20	98	70-130
Trichloroethene	21	104	70-130
1,2-Dichloropropane	20	102	70-130
Dibromomethane	21	105	70-130
1,4-Dioxane	230	114	70-130
Bromodichloromethane	21	103	70-130

12/18/03 11:55



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **VW121803L01**
 Associated Blank: **VW121803B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/18/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Methyl isobutyl ketone (MIBK)	19	96	70-130
1,3-Dichloropropene, Total	39	98	70-130
Toluene	20	101	70-130
1,1,2-Trichloroethane	21	105	70-130
2-Hexanone	21	103	70-130
Tetrachloroethene	21	104	70-130
1,3-Dichloropropane	20	101	70-130
Dibromochloromethane	21	103	70-130
1,2-Dibromoethane	21	104	70-130
Chlorobenzene	19	97	70-130
1,1,1,2-Tetrachloroethane	20	98	70-130
Ethylbenzene	20	98	70-130
Xylenes, Total	59	98	70-130
Styrene	18	92	70-130
Bromoform	20	99	70-130
Isopropylbenzene	20	99	70-130
1,1,2,2-Tetrachloroethane	21	106	70-130
Bromobenzene	19	95	70-130
1,2,3-Trichloropropane	20	102	70-130
n-Propylbenzene	20	99	70-130
2-Chlorotoluene	19	96	70-130
1,3,5-Trimethylbenzene	20	99	70-130
4-Chlorotoluene	20	99	70-130
tert-Butylbenzene	19	97	70-130
1,2,4-Trimethylbenzene	19	97	70-130
sec-Butylbenzene	20	99	70-130
1,3-Dichlorobenzene	20	98	70-130
p-Isopropyltoluene	20	98	70-130
1,4-Dichlorobenzene	19	96	70-130
n-Butylbenzene	20	99	70-130
1,2-Dibromo-3-chloropropane	20	102	70-130
1,2-Dichlorobenzene	19	95	70-130
1,2,4-Trichlorobenzene	20	99	70-130



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312056**
 Lab ID: **VW121803L01**
 Associated Blank: **VW121803B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/18/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Hexachlorobutadiene	19	96	70-130
Naphthalene	21	106	70-130
1,2,3-Trichlorobenzene	20	100	70-130

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	101	70-130
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	102	70-130
Bromofluorobenzene	100	70-130

* - Value outside of QC Limits.
 N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

12/18/03 11:55

*Supporting Quality
Control Results*



**Form II
Surrogate Recovery
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**
Matrix: **Water**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Laboratory Control Sample	VW121703L08	98	93	101	97
Blank	VW121703B14	98	94	100	95
TB01-121703	0312056-07	98	95	99	94
IP-1R2-121703	0312056-01	99	95	100	95
IP-2R1-121703	0312056-02	99	97	101	95
IP-3R2-121703	0312056-04	101	97	101	95
IP-4R3-121703	0312056-06	102	99	101	95
Laboratory Control Sample	VW121803L01	101	98	102	100
Blank	VW121803B01	101	98	100	95
IP-2R3-121703	0312056-03	102	99	100	94
IP-4R1-121703	0312056-05	102	101	101	95

N/A - Not Applicable

Surrogate	QC Limit
Dibromofluoromethane	70-130
1,2-Dichloroethane-d4	70-130
Toluene-d8	70-130
4-Bromofluorobenzene	70-130



Form IV
Method Blank Summary
Volatile Organics by 8260B

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030

ETR: 0312056

Lab ID: VW121703B14

Case: N/A SDG: N/A

Date Analyzed: 12/17/03 17:13

Client ID	Lab ID	Date/Time Analyzed
Laboratory Control Sample	VW121703L08	12/17/03 16:44
TB01-121703	0312056-07	12/17/03 17:41
IP-1R2-121703	0312056-01	12/17/03 18:10
IP-2R1-121703	0312056-02	12/17/03 18:39
IP-3R2-121703	0312056-04	12/17/03 19:37
IP-4R3-121703	0312056-06	12/17/03 20:34

N/A - Not Applicable

12/18/03 11:57



Form IV
Method Blank Summary
Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0312056**

Lab ID: **VW121803B01**

Date Analyzed: **12/18/03 09:41**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Date/Time Analyzed
Laboratory Control Sample	VW121803L01	12/18/03 09:12
IP-2R3-121703	0312056-03	12/18/03 10:39
IP-4R1-121703	0312056-05	12/18/03 11:07

N/A - Not Applicable

12/18/03 11:57



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312056
Lab ID: T1120802

Case: N/A SDG: N/A

Date Analyzed: 12/08/03 16:29

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	24.4	33584	Pass
75	95	30	60	48.1	66325	Pass
95	95	100	100	100	137792	Pass
96	95	5	9	6.8	9304	Pass
173	174	0	2	0	0	Pass
174	95	50	100	80.5	110931	Pass
175	174	5	9	7.3	8043	Pass
176	174	95	101	97.8	108491	Pass
177	176	5	9	6.9	7480	Pass

Client ID	Lab ID	Date/Time Analyzed
Initial Calibration	I1120801	12/08/03 16:57
Initial Calibration	I1120803	12/08/03 17:55
Initial Calibration	I1120804	12/08/03 18:23
Initial Calibration	I1120805	12/08/03 18:52
Initial Calibration	I1120806	12/08/03 19:20
Initial Calibration	I1120807	12/08/03 19:49

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**
Lab ID: **T1121701**

Case: **N/A** SDG: **N/A**

Date Analyzed: **12/17/03 15:46**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	23	33299	Pass
75	95	30	60	46	66656	Pass
95	95	100	100	100	144939	Pass
96	95	5	9	6.7	9754	Pass
173	174	0	2	0	0	Pass
174	95	50	100	82.2	119104	Pass
175	174	5	9	7.4	8871	Pass
176	174	95	101	97.3	115888	Pass
177	176	5	9	6.8	7852	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1121701	12/17/03 16:15
Laboratory Control Sample	VW121703L08	12/17/03 16:44
Blank	VW121703B14	12/17/03 17:13
TB01-121703	0312056-07	12/17/03 17:41
IP-IR2-121703	0312056-01	12/17/03 18:10
IP-2R1-121703	0312056-02	12/17/03 18:39
IP-3R2-121703	0312056-04	12/17/03 19:37
IP-4R3-121703	0312056-06	12/17/03 20:34

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**
Lab ID: **T1121801**

Case: **N/A** SDG: **N/A**

Date Analyzed: **12/18/03 08:15**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	23.1	31883	Pass
75	95	30	60	46.7	64488	Pass
95	95	100	100	100	138091	Pass
96	95	5	9	6.9	9540	Pass
173	174	0	2	0	0	Pass
174	95	50	100	82.1	113397	Pass
175	174	5	9	7.7	8710	Pass
176	174	95	101	96.7	109701	Pass
177	176	5	9	6.7	7357	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1121801	12/18/03 08:44
Laboratory Control Sample	VW121803L01	12/18/03 09:12
Blank	VW121803B01	12/18/03 09:41
IP-2R3-121703	0312056-03	12/18/03 10:39
IP-4R1-121703	0312056-05	12/18/03 11:07

N/A - Not Applicable



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312056

Case: N/A SDG: N/A

Lab ID	Date/Time Analyzed
11120801	12/08/03 16:57
11120803	12/08/03 17:55
11120804	12/08/03 18:23
11120805	12/08/03 18:52
11120806	12/08/03 19:20
11120807	12/08/03 19:49

Response Factors

Parameter	1	5	20	50	100	200	Mean	% RSD
Dichlorodifluoromethane	0.39	0.44	0.59	0.58	0.56	0.56	0.52	16.2*
Chloromethane	0.45	0.46	0.49	0.53	0.56	0.56	0.51	9.6
Vinyl chloride	0.31	0.34	0.38	0.39	0.41	0.43	0.37	11.7
Bromomethane		0.40	0.36	0.16	0.12	0.11	0.23	60.7*
Chloroethane	0.17	0.17	0.19	0.19	0.18		0.18	6.0
Trichlorofluoromethane	0.49	0.54	0.62	0.60	0.58	0.55	0.56	8.7
Diethyl ether	0.20	0.23	0.25	0.26	0.27	0.27	0.25	10.5
Acetone		0.21	0.19	0.18	0.17	0.16	0.18	11.5
1,1-Dichloroethene	0.47	0.45	0.54	0.53	0.52	0.54	0.51	7.8
Carbon disulfide	0.86	0.86	0.97	0.95	0.95	0.97	0.93	5.7
Methylene chloride		0.31	0.30	0.30	0.29	0.28	0.30	4.3
Methyl tert-butyl ether (MTBE)	0.87	0.85	0.89	0.91	0.90	0.87	0.88	2.4
1,2-Dichloroethene	0.43	0.44	0.49	0.48	0.47	0.47	0.47	4.8
Isopropyl Ether (DIPE)	1.73	1.62	1.75	1.81	1.74	1.69	1.72	3.6
1,1-Dichloroethane	0.80	0.79	0.85	0.84	0.80	0.79	0.81	3.4
Ethyl Tertiary Butyl Ether (ETBE)	1.40	1.41	1.55	1.61	1.60	1.56	1.52	6.1
2-Butanone (MEK)	0.47	0.37	0.38	0.39	0.36	0.34	0.39	12.1
cis-1,2-Dichloroethene	0.63	0.74	0.81	0.83	0.81	0.81	0.77	9.6
2,2-Dichloropropane	0.62	0.62	0.70	0.70	0.67	0.67	0.66	5.3
Bromochloromethane	0.26	0.27	0.29	0.30	0.29	0.27	0.28	5.4
Chloroform	0.86	0.82	0.91	0.91	0.89	0.88	0.88	3.8
1,1,1-Trichloroethane	0.66	0.65	0.77	0.76	0.74	0.75	0.72	7.2
1,1-Dichloropropene	0.60	0.56	0.62	0.60	0.59	0.60	0.60	3.0
Carbon tetrachloride	0.56	0.56	0.65	0.64	0.62	0.63	0.61	6.6
Benzene	1.35	1.37	1.49	1.50	1.48	1.47	1.44	4.6
Tertiary Amyl Methyl Ether (TAME)	1.15	1.11	1.26	1.30	1.27	1.25	1.22	6.3
Tetrahydrofuran	0.21	0.17	0.18	0.18	0.17	0.16	0.18	9.8
1,2-Dichloroethane	0.94	0.85	0.89	0.92	0.89	0.85	0.89	3.8
Trichloroethene	0.22	0.23	0.25	0.25	0.25	0.26	0.24	6.7
1,2-Dichloropropane	0.23	0.23	0.24	0.25	0.24	0.24	0.24	3.2
Dibromomethane	0.19	0.20	0.20	0.22	0.21	0.21	0.21	4.9
1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.003	0.002	8.3

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312056

Case: N/A SDG: N/A

Lab ID	Date/Time Analyzed
I1120801	12/08/03 16:57
I1120803	12/08/03 17:55
I1120804	12/08/03 18:23
I1120805	12/08/03 18:52
I1120806	12/08/03 19:20
I1120807	12/08/03 19:49

Parameter	Response Factors						Mean	% RSD
	1	5	20	50	100	200		
Bromodichloromethane	0.31	0.30	0.33	0.35	0.35	0.34	0.33	6.0
Methyl isobutyl ketone (MIBK)	0.40	0.38	0.39	0.42	0.41	0.37	0.39	4.0
cis-1,3-Dichloropropene	0.34	0.33	0.36	0.39	0.38	0.38	0.36	6.7
Toluene	0.46	0.45	0.50	0.53	0.53	0.54	0.50	7.7
trans-1,3-Dichloropropene	0.35	0.34	0.37	0.40	0.40	0.39	0.37	7.2
1,1,2-Trichloroethane	0.17	0.19	0.20	0.21	0.21	0.20	0.20	8.8
2-Hexanone	0.25	0.26	0.28	0.30	0.29	0.27	0.28	7.3
Tetrachloroethene	0.21	0.20	0.24	0.25	0.25	0.26	0.23	9.7
1,3-Dichloropropane	0.38	0.38	0.40	0.43	0.42	0.41	0.40	5.2
Dibromochloromethane	0.25	0.26	0.29	0.32	0.33	0.31	0.29	11.7
1,2-Dibromoethane	0.26	0.28	0.30	0.32	0.32	0.31	0.30	7.6
Chlorobenzene	0.75	0.70	0.77	0.79	0.79	0.80	0.77	5.0
1,1,1,2-Tetrachloroethane	0.26	0.26	0.30	0.31	0.31	0.30	0.29	8.2
Ethylbenzene	1.00	1.00	1.15	1.20	1.20	1.23	1.13	9.0
p/m-Xylene	0.37	0.37	0.44	0.46	0.46	0.47	0.43	10.7
o-Xylene	0.33	0.36	0.43	0.46	0.46	0.47	0.42	13.9
Styrene	0.53	0.64	0.78	0.84	0.86	0.87	0.75	18.0*
Bromoform	0.25	0.23	0.26	0.28	0.28	0.27	0.26	7.6
Isopropylbenzene	0.79	0.84	1.06	1.13	1.15	1.18	1.03	16.3*
1,1,2,2-Tetrachloroethane	0.39	0.38	0.42	0.44	0.43	0.40	0.41	6.0
Bromobenzene	0.30	0.28	0.32	0.35	0.35	0.35	0.32	9.7
1,2,3-Trichloropropane	0.34	0.32	0.34	0.35	0.34	0.31	0.33	4.4
n-Propylbenzene	0.87	0.97	1.19	1.27	1.29	1.33	1.15	16.4*
2-Chlorotoluene	0.68	0.68	0.78	0.84	0.85	0.85	0.78	10.6
1,3,5-Trimethylbenzene	0.60	0.67	0.83	0.91	0.92	0.93	0.81	17.6*
4-Chlorotoluene	0.65	0.72	0.84	0.88	0.91	0.90	0.82	13.1
tert-Butylbenzene	0.44	0.50	0.64	0.69	0.70	0.72	0.62	18.9*
1,2,4-Trimethylbenzene	0.64	0.69	0.86	0.96	0.96	0.98	0.85	17.4*
sec-Butylbenzene	0.61	0.71	0.92	1.01	1.03	1.07	0.89	21.2*
1,3-Dichlorobenzene	0.38	0.44	0.53	0.57	0.60	0.58	0.52	17.1*
p-Isopropyltoluene	0.51	0.57	0.76	0.84	0.88	0.87	0.74	21.7*
1,4-Dichlorobenzene	0.45	0.46	0.55	0.60	0.63	0.62	0.55	14.7

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
11120801	12/08/03 16:57
11120803	12/08/03 17:55
11120804	12/08/03 18:23
11120805	12/08/03 18:52
11120806	12/08/03 19:20
11120807	12/08/03 19:49

Parameter	Response Factors						Mean	% RSD
	1	5	20	50	100	200		
n-Butylbenzene	0.39	0.43	0.61	0.71	0.75	0.78	0.61	27.2*
1,2-Dibromo-3-chloropropane		0.064	0.074	0.085	0.084	0.081	0.078	11.4
1,2-Dichlorobenzene	0.42	0.45	0.53	0.58	0.60	0.59	0.53	14.9
1,2,4-Trichlorobenzene	0.19	0.23	0.29	0.35	0.37	0.38	0.30	25.5*
Hexachlorobutadiene		0.083	0.097	0.11	0.11	0.12	0.10	14.3
Naphthalene	0.59	0.66	0.82	1.03	1.08	1.09	0.88	24.8*
1,2,3-Trichlorobenzene	0.20	0.23	0.28	0.34	0.35	0.36	0.29	23.1*
Dibromofluoromethane	0.69	0.69	0.69	0.69	0.67	0.65	0.68	2.7
1,2-Dichloroethane-d4	0.91	0.91	0.90	0.89	0.87	0.84	0.89	3.2
Toluene-d8	0.96	0.98	0.98	1.01	1.01	1.01	0.99	2.2
4-Bromofluorobenzene	0.49	0.50	0.51	0.52	0.53	0.52	0.51	3.0
Average RSD								10.5

N/A - Not Applicable

* - Value outside of QC advisory limits.



**Form VII
Calibration Verification
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**
Lab ID: **C1121701**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	0.52	0.69	32.0*	30
Chloromethane	0.51	0.50	2.3	30
Vinyl chloride	0.37	0.40	6.3	20
Bromomethane	0.23	0.19	16.9	30
Chloroethane	0.18	0.19	4.2	30
Trichlorofluoromethane	0.56	0.60	5.8	30
Diethyl ether	0.25	0.26	6.6	30
Acetone	0.18	0.18	1.2	30
1,1-Dichloroethene	0.51	0.53	4.9	20
Carbon disulfide	0.93	1.00	7.7	30
Methylene chloride	0.30	0.29	3.4	30
Methyl tert-butyl ether (MTBE)	0.88	0.90	2.4	30
trans-1,2-Dichloroethene	0.47	0.47	1.4	30
Diisopropyl Ether (DIPE)	1.72	1.76	2.0	30
1,1-Dichloroethane	0.81	0.84	3.6	30
Ethyl Tertiary Butyl Ether (ETBE)	1.52	1.62	6.0	30
2-Butanone (MEK)	0.39	0.41	5.2	30
cis-1,2-Dichloroethene	0.77	0.84	8.4	30
2,2-Dichloropropane	0.66	0.74	11.0	30
Bromochloromethane	0.28	0.31	9.2	30
Chloroform	0.88	0.93	5.5	20
1,1,1-Trichloroethane	0.72	0.78	7.9	30
1,1-Dichloropropene	0.60	0.62	4.6	30
Carbon tetrachloride	0.61	0.66	8.3	30
Benzene	1.44	1.56	8.2	30
Tertiary Amyl Methyl Ether (TAME)	1.22	1.34	9.8	30
Tetrahydrofuran	0.18	0.19	7.3	30
1,2-Dichloroethane	0.89	0.91	1.9	30
Trichloroethene	0.24	0.27	12.6	30
1,2-Dichloropropane	0.24	0.25	6.1	20
Dibromomethane	0.21	0.23	11.1	30
1,4-Dioxane	0.002	0.003	18.3	30
Bromodichloromethane	0.33	0.36	8.7	30
Methyl isobutyl ketone (MIBK)	0.39	0.44	12.7	30
cis-1,3-Dichloropropene	0.36	0.40	10.6	30
Toluene	0.50	0.57	12.7	20
trans-1,3-Dichloropropene	0.37	0.41	10.7	30
1,1,2-Trichloroethane	0.20	0.22	13.7	30

N/A - Not Applicable.

* - Value outside of QC advisory limits.



Form VII Calibration Verification Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**
Lab ID: **C1121701**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
2-Hexanone	0.28	0.33	21.4	30
Tetrachloroethene	0.23	0.27	16.5	30
1,3-Dichloropropane	0.40	0.44	9.6	30
Dibromochloromethane	0.29	0.34	16.9	30
1,2-Dibromoethane	0.30	0.34	14.8	30
Chlorobenzene	0.77	0.81	5.1	30
1,1,1,2-Tetrachloroethane	0.29	0.31	7.8	30
Ethylbenzene	1.13	1.21	7.5	20
p/m-Xylene	0.43	0.47	9.0	30
o-Xylene	0.42	0.46	10.3	30
Styrene	0.75	0.84	12.1	30
Bromoform	0.26	0.30	13.4	30
Isopropylbenzene	1.03	1.14	11.3	30
1,1,1,2-Tetrachloroethane	0.41	0.46	11.4	30
Bromobenzene	0.32	0.34	5.6	30
1,2,3-Trichloropropane	0.33	0.36	8.6	30
n-Propylbenzene	1.15	1.27	10.2	30
2-Chlorotoluene	0.78	0.83	6.0	30
1,3,5-Trimethylbenzene	0.81	0.90	11.3	30
2-Chlorotoluene	0.82	0.88	7.2	30
tert-Butylbenzene	0.62	0.68	10.8	30
1,2,4-Trimethylbenzene	0.85	0.94	10.9	30
sec-Butylbenzene	0.89	1.01	13.4	30
1,3-Dichlorobenzene	0.52	0.56	8.4	30
p-Isopropyltoluene	0.74	0.83	12.3	30
1,4-Dichlorobenzene	0.55	0.59	7.3	30
n-Butylbenzene	0.61	0.68	11.8	30
1,2-Dibromo-3-chloropropane	0.078	0.085	9.7	30
1,2-Dichlorobenzene	0.53	0.56	6.1	30
1,2,4-Trichlorobenzene	0.30	0.33	10.3	30
Hexachlorobutadiene	0.10	0.10	1.3	30
Naphthalene	0.88	1.01	14.9	30
1,2,3-Trichlorobenzene	0.29	0.32	9.8	30
Dibromofluoromethane	0.68	0.67	1.8	30
1,2-Dichloroethane-d4	0.89	0.84	5.5	30
Toluene-d8	0.99	1.02	3.0	30
4-Bromofluorobenzene	0.51	0.52	0.5	30
Average % D			8.9	

N/A - Not Applicable



Form VII Calibration Verification Volatile Organics by 8260B

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312056
Lab ID: C1121801

Case: N/A SDG: N/A

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	0.52	0.69	32.0*	30
Chloromethane	0.51	0.50	2.5	30
Vinyl chloride	0.37	0.40	6.3	20
Bromomethane	0.23	0.20	12.1	30
Chloroethane	0.18	0.19	5.6	30
Trichlorofluoromethane	0.56	0.62	9.0	30
Diethyl ether	0.25	0.27	8.6	30
Acetone	0.18	0.19	7.9	30
1,1-Dichloroethene	0.51	0.55	7.7	20
Carbon disulfide	0.93	1.04	12.2	30
Methylene chloride	0.30	0.29	2.0	30
Methyl tert-butyl ether (MTBE)	0.88	0.92	4.1	30
trans-1,2-Dichloroethene	0.47	0.49	4.3	30
Diisopropyl Ether (DIPE)	1.72	1.78	3.0	30
1,1-Dichloroethane	0.81	0.84	3.5	30
Ethyl Tertiary Butyl Ether (ETBE)	1.52	1.60	4.7	30
2-Butanone (MEK)	0.39	0.42	8.8	30
cis-1,2-Dichloroethene	0.77	0.82	6.3	30
2,2-Dichloropropane	0.66	0.72	8.6	30
Bromochloromethane	0.28	0.30	7.1	30
Chloroform	0.88	0.92	5.1	20
1,1,1-Trichloroethane	0.72	0.78	8.8	30
1,1-Dichloropropene	0.60	0.62	4.3	30
Carbon tetrachloride	0.61	0.67	9.9	30
Benzene	1.44	1.52	5.6	30
Tertiary Amyl Methyl Ether (TAME)	1.22	1.31	7.1	30
Tetrahydrofuran	0.18	0.19	6.4	30
1,2-Dichloroethane	0.89	0.92	3.5	30
Trichloroethene	0.24	0.27	10.5	30
1,2-Dichloropropane	0.24	0.25	4.8	20
Dibromomethane	0.21	0.23	11.1	30
1,4-Dioxane	0.002	0.003	5.6	30
Bromodichloromethane	0.33	0.36	8.7	30
Methyl isobutyl ketone (MIBK)	0.39	0.46	17.8	30
cis-1,3-Dichloropropene	0.36	0.39	7.9	30
Toluene	0.50	0.55	9.9	20
trans-1,3-Dichloropropene	0.37	0.40	8.6	30
1,1,2-Trichloroethane	0.20	0.22	12.7	30

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VII Calibration Verification Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312056**
Lab ID: **C1121801**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
2-Hexanone	0.28	0.35	26.2	30
Tetrachloroethene	0.23	0.27	13.8	30
1,3-Dichloropropane	0.40	0.44	9.2	30
Dibromochloromethane	0.29	0.34	15.5	30
1,2-Dibromoethane	0.30	0.34	12.8	30
Chlorobenzene	0.77	0.78	2.1	30
1,1,1,2-Tetrachloroethane	0.29	0.31	6.8	30
Ethylbenzene	1.13	1.19	5.0	20
p/m-Xylene	0.43	0.46	6.3	30
o-Xylene	0.42	0.44	6.0	30
Styrene	0.75	0.82	9.1	30
Bromoform	0.26	0.29	10.2	30
Isopropylbenzene	1.03	1.11	8.3	30
1,1,2,2-Tetrachloroethane	0.41	0.46	11.6	30
Bromobenzene	0.32	0.34	3.7	30
1,2,3-Trichloropropane	0.33	0.36	7.4	30
n-Propylbenzene	1.15	1.25	8.0	30
2-Chlorotoluene	0.78	0.82	5.2	30
1,3,5-Trimethylbenzene	0.81	0.89	9.7	30
2-Chlorotoluene	0.82	0.86	5.9	30
tert-Butylbenzene	0.62	0.67	9.0	30
1,2,4-Trimethylbenzene	0.85	0.93	9.6	30
sec-Butylbenzene	0.89	0.99	10.6	30
1,3-Dichlorobenzene	0.52	0.55	6.7	30
p-Isopropyltoluene	0.74	0.81	10.0	30
1,4-Dichlorobenzene	0.55	0.57	4.5	30
n-Butylbenzene	0.61	0.67	10.5	30
1,2-Dibromo-3-chloropropane	0.078	0.087	12.2	30
1,2-Dichlorobenzene	0.53	0.55	3.6	30
1,2,4-Trichlorobenzene	0.30	0.32	7.1	30
Hexachlorobutadiene	0.10	0.10	4.0	30
Naphthalene	0.88	0.99	13.4	30
1,2,3-Trichlorobenzene	0.29	0.32	8.3	30
Dibromofluoromethane	0.68	0.68	0.4	30
1,2-Dichloroethane-d4	0.89	0.88	0.6	30
Toluene-d8	0.99	1.05	5.5	30
4-Bromofluorobenzene	0.51	0.52	2.3	30
Average % D			8.1	

N/A - Not Applicable



**Form VIII
Internal Standard Summary
Volatile Organics by 8260B**

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312056
Lab ID: C1121701

Case: N/A SDG: N/A

	Lab ID	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5	
		Area	RT	Area	RT	Area	RT
Standard:		532423	6.41	1028009	7.21	899220	11.57
Upper Limit:		1064846	6.91	2056018	7.71	1798440	12.07
Lower Limit:		266212	5.91	514004	6.71	449610	11.07
Laboratory Control Sample	VW121703L08	554279	6.41	1090757	7.21	929489	11.57
Blank	VW121703B14	541219	6.42	1059855	7.21	894428	11.57
TB01-121703	0312056-07	537682	6.42	1059698	7.22	886580	11.58
IP-1R2-121703	0312056-01	532930	6.42	1044791	7.22	881743	11.58
IP-2R1-121703	0312056-02	522978	6.43	1023934	7.22	867770	11.59
IP-3R2-121703	0312056-04	514802	6.43	1006075	7.23	850371	11.59
IP-4R3-121703	0312056-06	502284	6.44	995164	7.23	834499	11.60

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
 Area Lower Limit = -50% of internal standard.
 RT = Retention Time.
 RT Upper Limit = +0.5 minutes of internal standard RT.
 RT Lower Limit = -0.5 minutes of internal standard RT.



Form VIII Internal Standard Summary Volatile Organics by 8260B

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312056
Lab ID: C1121801

Case: N/A SDG: N/A

	Lab ID	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5	
		Area	RT	Area	RT	Area	RT
Standard:		497771	6.41	958365	7.21	845130	11.57
Upper Limit:		995542	6.91	1916730	7.71	1690260	12.07
Lower Limit:		248886	5.91	479182	6.71	422565	11.07
Laboratory Control Sample	VW121803L01	518979	6.42	1025145	7.21	876761	11.57
Blank	VW121803B01	506939	6.42	1002728	7.21	848522	11.57
IP-2R3-121703	0312056-03	493773	6.41	969560	7.21	825413	11.57
IP-4R1-121703	0312056-05	488668	6.42	965713	7.21	816171	11.58

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.

Area Lower Limit = -50% of internal standard.

RT = Retention Time.

Upper Limit = +0.5 minutes of internal standard RT.

Lower Limit = -0.5 minutes of internal standard RT.

12/18/03 12:13

Sample Receipt Checklist

Client: <u>TRC</u>	Receipt Date: <u>12-17-03</u>
Site: <u>Former GE site</u>	Log-in Date: <u>✓</u>
ETR #: <u>0312056</u>	Inspection by: <u>EB</u> Login by: <u>EAM</u>

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ No, <u>WHG Courier pick-up</u> / Hand delivered	Sample storage refrigerator #: <u>VOA</u>
Is bill of lading retained? Yes, Tracking #: _____ No, Unavailable <u>NA</u>	Sample storage freezer #: _____
Number of coolers received for this project delivery: <u>1</u>	Cooler 2: _____ Cooler 3: _____ Cooler 4: _____ Cooler 5: _____ Cooler 6: _____ Cooler 7: _____ More: _____
Indicate cooler temperature upon opening (if multiple coolers, record <u>all</u> temps): Note: If <u>all</u> coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note <u>all</u> samples received <u>above</u> 6°C. Cooler 1: Temperature(s) taken from: <u>02°</u> IR Gun, <u>04°</u> Temp. Blank, / NA	Trip Blank received, not on COC. 12/17/03 <u>EM</u> Analyze TB per KC @ TRC. 12/17/03 <u>EM</u>
Were samples received on ice? <u>Yes</u> / No	
Chain-of-Custody present? <u>Yes</u> / No Complete? <u>Yes</u> / No	
Custody seals present on Cooler? Yes / <u>No</u> on Bottles? Yes / <u>No</u> Intact? Yes / No / <u>NA</u> Note: Affix custody seals to back of this page.	
Were sample containers intact? <u>Yes</u> / No If No, list samples: →	
Did VOA/VPH waters contain headspace (>5mm)? Yes / No / <u>NA</u> If Yes, list samples: →	
Were 5035 VOA soils, or VPH soils, covered with MeOH? Yes / No / <u>NA</u> If No, list samples: →	
Was a sufficient amount of sample received for each test indicated on the COC? <u>Yes</u> / No If No, list samples: →	
If chemical preservation is appropriate - Were samples field preserved? <u>Yes</u> / No / NA <input checked="" type="checkbox"/> C=HCl <input type="checkbox"/> M=MeOH <input type="checkbox"/> S=H ₂ SO ₄ <input type="checkbox"/> H=NaOH <input type="checkbox"/> N=HNO ₃ <input type="checkbox"/> Other: _____ <input type="checkbox"/> U=Unknown	Chemical preservation OK for ALL samples? Yes / No / <u>NA</u> If No, list samples below:
Preservation (pH) verified at lab for <u>EVERY</u> bottle? (<u>Not</u> VOA / VPH / Sulfide) YES: <2 or >12 (CN) or NO NA If No, why?:	
Were samples received within hold time? <u>Yes</u> / No If No, list samples: →	
Discrepancy between samples rec'd & COC? <u>Yes</u> / <u>NA</u> If Yes, list samples: →	
Was the Project Manager notified of any other problems? Yes / No / NA	
Project Manager Acknowledgement: _____ Date: _____	Please use back for any additional notes!



ANALYTICAL REPORT

Prepared for:

**TRC Environmental
Boott Mills South
Foot of John Street
Lowell, MA 01852**

Project: Former GE Site
ETR: 0312073
Report Date: December 24, 2003

Certifications and Accreditations

**Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090
Army Corps of Engineers
Department of the Navy
Florida E87814**

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MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Woods Hole Group Environmental Laboratories

Project Number: 0312073

Project Location: Wilmington, MA **MCP RTN #¹:** _____

This Form provides certifications for the following data set: [Laboratory Sample ID Number(s)]:

0312073-01 through 0312073-02

Sample Matrices: **Groundwater** **Soil/Sediment** **Drinking Water** **Other:**

MCP SW-846 Methods used (as specified in MADEP Compendium of Analytical Methods)

Check all that apply:

8260B <input checked="" type="checkbox"/>	8151A <input type="checkbox"/>	8330 <input type="checkbox"/>	6010B <input type="checkbox"/>	7470A/1A <input type="checkbox"/>
8270C <input type="checkbox"/>	8081A <input type="checkbox"/>	VPH <input type="checkbox"/>	6020 <input type="checkbox"/>	9014M ² <input type="checkbox"/>
8082 <input type="checkbox"/>	8021B <input type="checkbox"/>	EPH <input type="checkbox"/>	7000 S ³ <input type="checkbox"/>	Other: _____

- ¹ - List Release Tracking Number (RTN), if known.
²M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method.
³S - SW-846 Methods 7000 Series. List individual method and analyte.

An affirmative response to question A, B, C and D is required for "Presumptive Certainty" status.

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes		No ¹
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes		No ¹
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes		No ¹
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	Yes		No ¹

A response to questions E and F below is required for "Presumptive Certainty" status.

E	Were all QC performance standards and recommendations for the specified methods achieved?	<input checked="" type="checkbox"/> Yes		No ¹
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input checked="" type="checkbox"/> Yes		No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Edith Hutchinson **Position:** Senior Project Manager
Printed Name: Edith Hutchinson **Date:** 12/24/2003

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 0312073

Project: Former GE Site

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

Volatile Organics by 8260B

1. The initial calibration had compounds outside of the 15% RSD QC acceptance limit. Refer to the Form VI Initial Calibration Summary report for specific outliers. This initial calibration meets the acceptability criteria.
2. Both samples were analyzed at dilution based on historical information. Refer to the individual report forms for dilution requirements. Additionally, the initial analysis of sample BRW-1R2 (0312073-01) had a concentration that exceeded the calibration range of the instrument. This sample was reanalyzed at a further dilution (0312073-01E) and both analyses are reported.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: *Jill Hatcher* Title: *Senior Project Manager* Date: *12/24/03*

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VOLATILE ORGANICS



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **BRW-1R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312073**
 Lab ID: **0312073-01**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/19/03	12/19/03	12/22/03	5	5	5	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	10 U	1,3-Dichloropropene, Total	10 U
Chloromethane	10 U	Toluene	10 U
Vinyl chloride	10 U	1,1,2-Trichloroethane	10 U
Bromomethane	25 U	2-Hexanone	10 U
Chloroethane	10 U	Tetrachloroethene	390
Trichlorofluoromethane	10 U	1,3-Dichloropropane	10 U
Diethyl ether	10 U	Dibromochloromethane	10 U
Acetone	32	1,2-Dibromoethane	10 U
1,1-Dichloroethene	10 U	Chlorobenzene	10 U
Carbon disulfide	10 U	1,1,1,2-Tetrachloroethane	10 U
Methylene chloride	25 U	Ethylbenzene	10 U
Methyl tert-butyl ether (MTBE)	10 U	Xylenes, Total	30 U
trans-1,2-Dichloroethene	10 U	Styrene	10 U
Diisopropyl Ether (DIPE)	10 U	Bromoform	10 U
1,1-Dichloroethane	25	Isopropylbenzene	10 U
Methyl Tertiary Butyl Ether (ETBE)	10 U	1,1,2,2-Tetrachloroethane	10 U
Butanone (MEK)	10 U	Bromobenzene	10 U
cis-1,2-Dichloroethene	65	1,2,3-Trichloropropane	10 U
2,2-Dichloropropane	10 U	n-Propylbenzene	10 U
Bromochloromethane	10 U	2-Chlorotoluene	10 U
Chloroform	10 U	1,3,5-Trimethylbenzene	10 U
1,1,1-Trichloroethane	10 U	4-Chlorotoluene	10 U
1,1-Dichloropropene	10 U	tert-Butylbenzene	10 U
Carbon tetrachloride	10 U	1,2,4-Trimethylbenzene	10 U
Benzene	10 U	sec-Butylbenzene	10 U
Tertiary Amyl Methyl Ether (TAME)	10 U	1,3-Dichlorobenzene	10 U
Tetrahydrofuran	10 U	p-Isopropyltoluene	10 U
1,2-Dichloroethane	10 U	1,4-Dichlorobenzene	10 U
Trichloroethene	1100 E	n-Butylbenzene	10 U
1,2-Dichloropropane	10 U	1,2-Dibromo-3-chloropropane	25 U
Dibromomethane	10 U	1,2-Dichlorobenzene	10 U
1,4-Dioxane	250 U	1,2,4-Trichlorobenzene	10 U
Bromodichloromethane	10 U	Hexachlorobutadiene	25 U
Methyl isobutyl ketone (MIBK)	10 U	Naphthalene	10 U
		1,2,3-Trichlorobenzene	10 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	103	70-130
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	94	70-130

E - Estimated value, exceeds the upper limit of calibration.
 U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **BRW-1R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312073**
 Lab ID: **0312073-01E**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/19/03	12/19/03	12/22/03	5	5	10	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	20 U	1,3-Dichloropropene, Total	20 U
Chloromethane	20 U	Toluene	20 U
Vinyl chloride	20 U	1,1,2-Trichloroethane	20 U
Bromomethane	50 U	2-Hexanone	20 U
Chloroethane	20 U	Tetrachloroethene	370
Trichlorofluoromethane	20 U	1,3-Dichloropropane	20 U
Diethyl ether	20 U	Dibromochloromethane	20 U
Acetone	50 U	1,2-Dibromoethane	20 U
1,1-Dichloroethene	20 U	Chlorobenzene	20 U
Carbon disulfide	20 U	1,1,1,2-Tetrachloroethane	20 U
Methylene chloride	50 U	Ethylbenzene	20 U
Methyl tert-butyl ether (MTBE)	20 U	Xylenes, Total	60 U
trans-1,2-Dichloroethene	20 U	Styrene	20 U
Diisopropyl Ether (DIPE)	20 U	Bromoform	20 U
1,1-Dichloroethane	25	Isopropylbenzene	20 U
Ethyl Tertiary Butyl Ether (ETBE)	20 U	1,1,2,2-Tetrachloroethane	20 U
2-Butanone (MEK)	20 U	Bromobenzene	20 U
cis-1,2-Dichloroethene	64	1,2,3-Trichloropropane	20 U
2,2-Dichloropropane	20 U	n-Propylbenzene	20 U
Bromochloromethane	20 U	2-Chlorotoluene	20 U
Chloroform	20 U	1,3,5-Trimethylbenzene	20 U
1,1,1-Trichloroethane	20 U	4-Chlorotoluene	20 U
1,1-Dichloropropene	20 U	tert-Butylbenzene	20 U
Carbon tetrachloride	20 U	1,2,4-Trimethylbenzene	20 U
Benzene	20 U	sec-Butylbenzene	20 U
Tertiary Amyl Methyl Ether (TAME)	20 U	1,3-Dichlorobenzene	20 U
Tetrahydrofuran	20 U	p-Isopropyltoluene	20 U
1,2-Dichloroethane	20 U	1,4-Dichlorobenzene	20 U
Trichloroethene	1100	n-Butylbenzene	20 U
1,2-Dichloropropane	20 U	1,2-Dibromo-3-chloropropane	50 U
Dibromomethane	20 U	1,2-Dichlorobenzene	20 U
1,4-Dioxane	500 U	1,2,4-Trichlorobenzene	20 U
Bromodichloromethane	20 U	Hexachlorobutadiene	50 U
Methyl isobutyl ketone (MIBK)	20 U	Naphthalene	20 U
		1,2,3-Trichlorobenzene	20 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	103	70-130
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **BRW-1R4**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312073**
 Lab ID: **0312073-02**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/19/03	12/19/03	12/22/03	5	5	10	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	20 U	1,3-Dichloropropene, Total	20 U
Chloromethane	20 U	Toluene	20 U
Vinyl chloride	20 U	1,1,2-Trichloroethane	20 U
Bromomethane	50 U	2-Hexanone	20 U
Chloroethane	20 U	Tetrachloroethene	450
Trichlorofluoromethane	20 U	1,3-Dichloropropane	20 U
Diethyl ether	20 U	Dibromochloromethane	20 U
Acetone	50 U	1,2-Dibromoethane	20 U
1,1-Dichloroethene	20 U	Chlorobenzene	20 U
Carbon disulfide	20 U	1,1,1,2-Tetrachloroethane	20 U
Methylene chloride	50 U	Ethylbenzene	20 U
Methyl tert-butyl ether (MTBE)	20 U	Xylenes, Total	60 U
trans-1,2-Dichloroethene	20 U	Styrene	20 U
Diisopropyl Ether (DIPE)	20 U	Bromoform	20 U
1,1-Dichloroethane	26	Isopropylbenzene	20 U
tert-Butyl Tertiary Butyl Ether (ETBE)	20 U	1,1,2,2-Tetrachloroethane	20 U
Butanone (MEK)	20 U	Bromobenzene	20 U
cis-1,2-Dichloroethene	60	1,2,3-Trichloropropane	20 U
2,2-Dichloropropane	20 U	n-Propylbenzene	20 U
Bromochloromethane	20 U	2-Chlorotoluene	20 U
Chloroform	20 U	1,3,5-Trimethylbenzene	20 U
1,1,1-Trichloroethane	20 U	4-Chlorotoluene	20 U
1,1-Dichloropropene	20 U	tert-Butylbenzene	20 U
Carbon tetrachloride	20 U	1,2,4-Trimethylbenzene	20 U
Benzene	20 U	sec-Butylbenzene	20 U
Tertiary Amyl Methyl Ether (TAME)	20 U	1,3-Dichlorobenzene	20 U
Tetrahydrofuran	20 U	p-Isopropyltoluene	20 U
1,2-Dichloroethane	20 U	1,4-Dichlorobenzene	20 U
Trichloroethene	1200	n-Butylbenzene	20 U
1,2-Dichloropropane	20 U	1,2-Dibromo-3-chloropropane	50 U
Dibromomethane	20 U	1,2-Dichlorobenzene	20 U
1,4-Dioxane	500 U	1,2,4-Trichlorobenzene	20 U
Bromodichloromethane	20 U	Hexachlorobutadiene	50 U
Methyl isobutyl ketone (MIBK)	20 U	Naphthalene	20 U
		1,2,3-Trichlorobenzene	20 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	98	70-130
Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312073**
 Lab ID: **VW122203B01**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	5.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	2.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
2-Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	2.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	2.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	2.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	2.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	5.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	50 U	1,2,4-Trichlorobenzene	2.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	5.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	2.0 U
		1,2,3-Trichlorobenzene	2.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	100	70-130
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable

Form III Spike Recovery Summary Volatile Organics by 8260B



Client: TRC Environmental
 Project: Former GE Site
 Client ID: Laboratory Control Sample
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0312073
 Lab ID: VW122203L01
 Associated Blank: VW122203B01
 Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Dichlorodifluoromethane	26	130	70-130
Chloromethane	23	116	70-130
Vinyl chloride	26	129	70-130
Bromomethane	23	114	70-130
Chloroethane	24	118	70-130
Trichlorofluoromethane	26	130	70-130
Diethyl ether	24	122	70-130
Acetone	24	120	70-130
1,1-Dichloroethene	21	105	70-130
Carbon disulfide	21	103	70-130
Methylene chloride	19	97	70-130
Methyl tert-butyl ether (MTBE)	20	99	70-130
trans-1,2-Dichloroethene	20	102	70-130
Isopropyl Ether (DIPE)	20	101	70-130
1,1-Dichloroethane	20	101	70-130
Ethyl Tertiary Butyl Ether (ETBE)	21	105	70-130
2-Butanone (MEK)	20	101	70-130
cis-1,2-Dichloroethene	21	103	70-130
2,2-Dichloropropane	20	102	70-130
Bromochloromethane	21	103	70-130
Chloroform	20	101	70-130
1,1,1-Trichloroethane	21	103	70-130
1,1-Dichloropropene	20	100	70-130
Carbon tetrachloride	21	105	70-130
Benzene	20	101	70-130
Tertiary Amyl Methyl Ether (TAME)	21	105	70-130
Tetrahydrofuran	20	100	70-130
1,2-Dichloroethane	20	100	70-130
Trichloroethene	21	104	70-130
1,2-Dichloropropane	20	99	70-130
Dibromomethane	21	103	70-130
1,4-Dioxane	220	109	70-130
Bromodichloromethane	21	103	70-130



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: TRC Environmental
 Project: Former GE Site
 Client ID: Laboratory Control Sample
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0312073
 Lab ID: VW122203L01
 Associated Blank: VW122203B01
 Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Methyl isobutyl ketone (MIBK)	19	96	70-130
1,3-Dichloropropene, Total	38	96	70-130
Toluene	20	100	70-130
1,1,2-Trichloroethane	20	102	70-130
2-Hexanone	20	101	70-130
Tetrachloroethene	21	104	70-130
1,3-Dichloropropane	20	99	70-130
Dibromochloromethane	21	103	70-130
1,2-Dibromoethane	20	102	70-130
Chlorobenzene	20	100	70-130
1,1,1,2-Tetrachloroethane	21	103	70-130
Ethylbenzene	20	102	70-130
Xylenes, Total	61	101	70-130
Styrene	19	96	70-130
Bromoform	21	104	70-130
Isopropylbenzene	20	102	70-130
1,1,2,2-Tetrachloroethane	22	108	70-130
Bromobenzene	20	100	70-130
1,2,3-Trichloropropane	21	107	70-130
n-Propylbenzene	20	103	70-130
2-Chlorotoluene	20	101	70-130
1,3,5-Trimethylbenzene	20	102	70-130
4-Chlorotoluene	21	104	70-130
tert-Butylbenzene	20	101	70-130
1,2,4-Trimethylbenzene	20	102	70-130
sec-Butylbenzene	21	103	70-130
1,3-Dichlorobenzene	21	103	70-130
p-Isopropyltoluene	20	102	70-130
1,4-Dichlorobenzene	20	100	70-130
n-Butylbenzene	20	100	70-130
1,2-Dibromo-3-chloropropane	20	101	70-130
1,2-Dichlorobenzene	20	99	70-130
1,2,4-Trichlorobenzene	21	104	70-130

Form III Spike Recovery Summary Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312073**
 Lab ID: **VW122203L01**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Hexachlorobutadiene	20	102	70-130
Naphthalene	22	109	70-130
1,2,3-Trichlorobenzene	21	105	70-130

Surrogate	% Recovery	Acceptance Range (%)	N/A - Not Applicable
Dibromofluoromethane	101	70-130	
1,2-Dichloroethane-d4	100	70-130	
Toluene-d8	100	70-130	
Bromofluorobenzene	97	70-130	

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

12/23/03 10:46

*Supporting Quality
Control Results*

Form II
Surrogate Recovery
Volatile Organics by 8260B



Client: TRC Environmental
 Project: Former GE Site

Lab Code: MA00030
 ETR: 0312073
 Matrix: Water

Case: N/A SDG: N/A

Client ID	Lab ID	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Laboratory Control Sample	VW122203L01	101	100	100	97
Blank	VW122203B01	100	101	98	94
BRW-1R2	0312073-01	103	102	99	94
BRW-1R4	0312073-02	104	105	98	93
BRW-1R2	0312073-01E	103	104	98	92

N/A - Not Applicable

Surrogate	QC Limit
Dibromofluoromethane	70-130
1,2-Dichloroethane-d4	70-130
Toluene-d8	70-130
4-Bromofluorobenzene	70-130

12/23/03 10:48



Form IV
Method Blank Summary
Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0312073**

Lab ID: **VW122203B01**

Date Analyzed: **12/22/03 10:20**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Date/Time Analyzed
Laboratory Control Sample	VW122203L01	12/22/03 09:51
BRW-1R2	0312073-01	12/22/03 11:49
BRW-1R4	0312073-02	12/22/03 12:21
BRW-1R2	0312073-01E	12/22/03 12:52

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0312073**

Lab ID: **T1120802**

Case: **N/A** SDG: **N/A**

Date Analyzed: **12/08/03 16:29**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	24.4	33584	Pass
75	95	30	60	48.1	66325	Pass
95	95	100	100	100	137792	Pass
96	95	5	9	6.8	9304	Pass
173	174	0	2	0	0	Pass
174	95	50	100	80.5	110931	Pass
175	174	5	9	7.3	8043	Pass
176	174	95	101	97.8	108491	Pass
177	176	5	9	6.9	7480	Pass

Client ID	Lab ID	Date/Time Analyzed
Initial Calibration	I1120801	12/08/03 16:57
Initial Calibration	I1120803	12/08/03 17:55
Initial Calibration	I1120804	12/08/03 18:23
Initial Calibration	I1120805	12/08/03 18:52
Initial Calibration	I1120806	12/08/03 19:20
Initial Calibration	I1120807	12/08/03 19:49

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312073**
Lab ID: **T1122201**

Case: **N/A** SDG: **N/A**

Date Analyzed: **12/22/03 08:54**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	23.7	30965	Pass
75	95	30	60	48.5	63307	Pass
95	95	100	100	100	130560	Pass
96	95	5	9	6.8	8888	Pass
173	174	0	2	0	0	Pass
174	95	50	100	82.6	107869	Pass
175	174	5	9	7.3	7861	Pass
176	174	95	101	97.3	104963	Pass
177	176	5	9	6.9	7227	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1122201	12/22/03 09:23
Laboratory Control Sample	VW122203L01	12/22/03 09:51
Blank	VW122203B01	12/22/03 10:20
BRW-1R2	0312073-01	12/22/03 11:49
BRW-1R4	0312073-02	12/22/03 12:21
BRW-1R2	0312073-01E	12/22/03 12:52

N/A - Not Applicable



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312073**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
I1120801	12/08/03 16:57
I1120803	12/08/03 17:55
I1120804	12/08/03 18:23
I1120805	12/08/03 18:52
I1120806	12/08/03 19:20
I1120807	12/08/03 19:49

Response Factors

Parameter	1	5	20	50	100	200	Mean	% RSD
Dichlorodifluoromethane	0.39	0.44	0.59	0.58	0.56	0.56	0.52	16.2*
Chloromethane	0.45	0.46	0.49	0.53	0.56	0.56	0.51	9.6
Vinyl chloride	0.31	0.34	0.38	0.39	0.41	0.43	0.37	11.7
Bromomethane		0.40	0.36	0.16	0.12	0.11	0.23	60.7*
Chloroethane	0.17	0.17	0.19	0.19	0.18		0.18	6.0
Trichlorofluoromethane	0.49	0.54	0.62	0.60	0.58	0.55	0.56	8.7
Diethyl ether	0.20	0.23	0.25	0.26	0.27	0.27	0.25	10.5
Acetone		0.21	0.19	0.18	0.17	0.16	0.18	11.5
1,1-Dichloroethene	0.47	0.45	0.54	0.53	0.52	0.54	0.51	7.8
Carbon disulfide	0.86	0.86	0.97	0.95	0.95	0.97	0.93	5.7
Methylene chloride		0.31	0.30	0.30	0.29	0.28	0.30	4.3
Methyl tert-butyl ether (MTBE)	0.87	0.85	0.89	0.91	0.90	0.87	0.88	2.4
trans-1,2-Dichloroethene	0.43	0.44	0.49	0.48	0.47	0.47	0.47	4.8
Diisopropyl Ether (DIPE)	1.73	1.62	1.75	1.81	1.74	1.69	1.72	3.6
1,1-Dichloroethane	0.80	0.79	0.85	0.84	0.80	0.79	0.81	3.4
Ethyl Tertiary Butyl Ether (ETBE)	1.40	1.41	1.55	1.61	1.60	1.56	1.52	6.1
2-Butanone (MEK)	0.47	0.37	0.38	0.39	0.36	0.34	0.39	12.1
cis-1,2-Dichloroethene	0.63	0.74	0.81	0.83	0.81	0.81	0.77	9.6
2,2-Dichloropropane	0.62	0.62	0.70	0.70	0.67	0.67	0.66	5.3
Bromochloromethane	0.26	0.27	0.29	0.30	0.29	0.27	0.28	5.4
Chloroform	0.86	0.82	0.91	0.91	0.89	0.88	0.88	3.8
1,1,1-Trichloroethane	0.66	0.65	0.77	0.76	0.74	0.75	0.72	7.2
1,1-Dichloropropene	0.60	0.56	0.62	0.60	0.59	0.60	0.60	3.0
Carbon tetrachloride	0.56	0.56	0.65	0.64	0.62	0.63	0.61	6.6
Benzene	1.35	1.37	1.49	1.50	1.48	1.47	1.44	4.6
Tertiary Amyl Methyl Ether (TAME)	1.15	1.11	1.26	1.30	1.27	1.25	1.22	6.3
Tetrahydrofuran	0.21	0.17	0.18	0.18	0.17	0.16	0.18	9.8
1,2-Dichloroethane	0.94	0.85	0.89	0.92	0.89	0.85	0.89	3.8
Trichloroethene	0.22	0.23	0.25	0.25	0.25	0.26	0.24	6.7
1,2-Dichloropropane	0.23	0.23	0.24	0.25	0.24	0.24	0.24	3.2
Dibromomethane	0.19	0.20	0.20	0.22	0.21	0.21	0.21	4.9
1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.003	0.002	8.3

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312073**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
11120801	12/08/03 16:57
11120803	12/08/03 17:55
11120804	12/08/03 18:23
11120805	12/08/03 18:52
11120806	12/08/03 19:20
11120807	12/08/03 19:49

Parameter	Response Factors						Mean	% RSD
	1	5	20	50	100	200		
Bromodichloromethane	0.31	0.30	0.33	0.35	0.35	0.34	0.33	6.0
Methyl isobutyl ketone (MIBK)	0.40	0.38	0.39	0.42	0.41	0.37	0.39	4.0
cis-1,3-Dichloropropene	0.34	0.33	0.36	0.39	0.38	0.38	0.36	6.7
Toluene	0.46	0.45	0.50	0.53	0.53	0.54	0.50	7.7
trans-1,3-Dichloropropene	0.35	0.34	0.37	0.40	0.40	0.39	0.37	7.2
1,1,2-Trichloroethane	0.17	0.19	0.20	0.21	0.21	0.20	0.20	8.8
2-Hexanone	0.25	0.26	0.28	0.30	0.29	0.27	0.28	7.3
Tetrachloroethene	0.21	0.20	0.24	0.25	0.25	0.26	0.23	9.7
1,3-Dichloropropane	0.38	0.38	0.40	0.43	0.42	0.41	0.40	5.2
Dibromochloromethane	0.25	0.26	0.29	0.32	0.33	0.31	0.29	11.7
1,2-Dibromoethane	0.26	0.28	0.30	0.32	0.32	0.31	0.30	7.6
Chlorobenzene	0.75	0.70	0.77	0.79	0.79	0.80	0.77	5.0
1,1,1,2-Tetrachloroethane	0.26	0.26	0.30	0.31	0.31	0.30	0.29	8.2
Ethylbenzene	1.00	1.00	1.15	1.20	1.20	1.23	1.13	9.0
p/m-Xylene	0.37	0.37	0.44	0.46	0.46	0.47	0.43	10.7
o-Xylene	0.33	0.36	0.43	0.46	0.46	0.47	0.42	13.9
Styrene	0.53	0.64	0.78	0.84	0.86	0.87	0.75	18.0 ^a
Bromoform	0.25	0.23	0.26	0.28	0.28	0.27	0.26	7.6
Isopropylbenzene	0.79	0.84	1.06	1.13	1.15	1.18	1.03	16.3 ^a
1,1,2,2-Tetrachloroethane	0.39	0.38	0.42	0.44	0.43	0.40	0.41	6.0
Bromobenzene	0.30	0.28	0.32	0.35	0.35	0.35	0.32	9.7
1,2,3-Trichloropropane	0.34	0.32	0.34	0.35	0.34	0.31	0.33	4.4
n-Propylbenzene	0.87	0.97	1.19	1.27	1.29	1.33	1.15	16.4 ^a
2-Chlorotoluene	0.68	0.68	0.78	0.84	0.85	0.85	0.78	10.6
1,3,5-Trimethylbenzene	0.60	0.67	0.83	0.91	0.92	0.93	0.81	17.6 ^a
4-Chlorotoluene	0.65	0.72	0.84	0.88	0.91	0.90	0.82	13.1
tert-Butylbenzene	0.44	0.50	0.64	0.69	0.70	0.72	0.62	18.9 ^a
1,2,4-Trimethylbenzene	0.64	0.69	0.86	0.96	0.96	0.98	0.85	17.4 ^a
sec-Butylbenzene	0.61	0.71	0.92	1.01	1.03	1.07	0.89	21.2 ^a
1,3-Dichlorobenzene	0.38	0.44	0.53	0.57	0.60	0.58	0.52	17.1 ^a
p-Isopropyltoluene	0.51	0.57	0.76	0.84	0.88	0.87	0.74	21.7 ^a
1,4-Dichlorobenzene	0.45	0.46	0.55	0.60	0.63	0.62	0.55	14.7

N/A - Not Applicable

^a - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312073**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
I1120801	12/08/03 16:57
I1120803	12/08/03 17:55
I1120804	12/08/03 18:23
I1120805	12/08/03 18:52
I1120806	12/08/03 19:20
I1120807	12/08/03 19:49

Response Factors

Parameter	1	5	20	50	100	200	Mean	% RSD
n-Butylbenzene	0.39	0.43	0.61	0.71	0.75	0.78	0.61	27.2*
1,2-Dibromo-3-chloropropane		0.064	0.074	0.085	0.084	0.081	0.078	11.4
1,2-Dichlorobenzene	0.42	0.45	0.53	0.58	0.60	0.59	0.53	14.9
1,2,4-Trichlorobenzene	0.19	0.23	0.29	0.35	0.37	0.38	0.30	25.5*
Hexachlorobutadiene		0.083	0.097	0.11	0.11	0.12	0.10	14.3
Naphthalene	0.59	0.66	0.82	1.03	1.08	1.09	0.88	24.8*
1,2,3-Trichlorobenzene	0.20	0.23	0.28	0.34	0.35	0.36	0.29	23.1*
Dibromofluoromethane	0.69	0.69	0.69	0.69	0.67	0.65	0.68	2.7
1,2-Dichloroethane-d4	0.91	0.91	0.90	0.89	0.87	0.84	0.89	3.2
Toluene-d8	0.96	0.98	0.98	1.01	1.01	1.01	0.99	2.2
4-Bromofluorobenzene	0.49	0.50	0.51	0.52	0.53	0.52	0.51	3.0
Average RSD								10.5

N/A - Not Applicable

* - Value outside of QC advisory limits.



**Form VII
Calibration Verification
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312073**
Lab ID: **C1122201**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	0.52	0.63	21.1	30
Chloromethane	0.51	0.49	4.5	30
Vinyl chloride	0.37	0.39	4.8	20
Bromomethane	0.23	0.21	11.1	30
Chloroethane	0.18	0.19	3.8	30
Trichlorofluoromethane	0.56	0.62	10.6	30
Diethyl ether	0.25	0.27	8.4	30
Acetone	0.18	0.19	7.6	30
1,1-Dichloroethene	0.51	0.55	7.6	20
Carbon disulfide	0.93	0.99	7.0	30
Methylene chloride	0.30	0.30	1.4	30
Methyl tert-butyl ether (MTBE)	0.88	0.92	4.9	30
trans-1,2-Dichloroethene	0.47	0.49	4.5	30
Diisopropyl Ether (DIPE)	1.72	1.73	0.5	30
1,1-Dichloroethane	0.81	0.83	2.2	30
Ethyl Tertiary Butyl Ether (ETBE)	1.52	1.56	2.5	30
2-Butanone (MEK)	0.39	0.40	2.8	30
cis-1,2-Dichloroethene	0.77	0.72	7.0	30
2,2-Dichloropropane	0.66	0.71	7.2	30
Bromochloromethane	0.28	0.30	6.3	30
Chloroform	0.88	0.92	4.8	20
1,1,1-Trichloroethane	0.72	0.78	8.2	30
1,1-Dichloropropene	0.60	0.62	4.2	30
Carbon tetrachloride	0.61	0.67	9.7	30
Benzene	1.44	1.48	2.5	30
Tertiary Amyl Methyl Ether (TAME)	1.22	1.26	3.2	30
Tetrahydrofuran	0.18	0.18	3.6	30
1,2-Dichloroethane	0.89	0.92	3.3	30
Trichloroethene	0.24	0.26	6.8	30
1,2-Dichloropropane	0.24	0.24	0.4	20
Dibromomethane	0.21	0.22	6.7	30
1,4-Dioxane	0.002	0.003	5.6	30
Bromodichloromethane	0.33	0.35	6.6	30
Methyl isobutyl ketone (MIBK)	0.39	0.43	8.8	30
cis-1,3-Dichloropropene	0.36	0.37	2.8	30
Toluene	0.50	0.52	4.6	20
trans-1,3-Dichloropropene	0.37	0.40	6.6	30
1,1,2-Trichloroethane	0.20	0.21	8.6	30

N/A - Not Applicable



Form VII Calibration Verification Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312073**
Lab ID: **C1122201**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
2-Hexanone	0.28	0.32	15.1	30
Tetrachloroethene	0.23	0.26	9.6	30
1,3-Dichloropropane	0.40	0.42	3.6	30
Dibromochloromethane	0.29	0.33	13.7	30
1,2-Dibromoethane	0.30	0.33	9.7	30
Chlorobenzene	0.77	0.79	2.9	30
1,1,1,2-Tetrachloroethane	0.29	0.31	7.1	30
Ethylbenzene	1.13	1.18	4.4	20
p/m-Xylene	0.43	0.45	5.7	30
o-Xylene	0.42	0.45	7.7	30
Styrene	0.75	0.82	9.6	30
Bromoform	0.26	0.30	13.3	30
Isopropylbenzene	1.03	1.12	9.0	30
1,1,2,2-Tetrachloroethane	0.41	0.46	11.5	30
Bromobenzene	0.32	0.34	6.2	30
1,2,3-Trichloropropane	0.33	0.36	8.1	30
n-Propylbenzene	1.15	1.27	9.7	30
2-Chlorotoluene	0.78	0.83	6.2	30
1,3,5-Trimethylbenzene	0.81	0.90	11.1	30
1-Chlorotoluene	0.82	0.88	7.6	30
tert-Butylbenzene	0.62	0.67	9.5	30
1,2,4-Trimethylbenzene	0.85	0.94	10.3	30
sec-Butylbenzene	0.89	1.00	11.8	30
1,3-Dichlorobenzene	0.52	0.56	8.8	30
p-Isopropyltoluene	0.74	0.83	11.9	30
1,4-Dichlorobenzene	0.55	0.59	7.3	30
n-Butylbenzene	0.61	0.68	11.6	30
1,2-Dibromo-3-chloropropane	0.078	0.087	11.5	30
1,2-Dichlorobenzene	0.53	0.56	6.4	30
1,2,4-Trichlorobenzene	0.30	0.33	9.1	30
Hexachlorobutadiene	0.10	0.10	0.5	30
Naphthalene	0.88	0.99	13.5	30
1,2,3-Trichlorobenzene	0.29	0.33	10.3	30
Dibromofluoromethane	0.68	0.69	1.2	30
1,2-Dichloroethane-d4	0.89	0.92	3.7	30
Toluene-d8	0.99	1.01	1.9	30
4-Bromofluorobenzene	0.51	0.52	1.2	30
Average % D			7.0	

N/A - Not Applicable



**Form VIII
Internal Standard Summary
Volatile Organics by 8260B**

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312073
Lab ID: C1122201

Case: N/A SDG: N/A

	Client ID	Lab ID	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5	
			Area	RT	Area	RT	Area	RT
Standard:			499068	6.36	976229	7.16	819868	11.52
Upper Limit:			998136	6.86	1952458	7.66	1639736	12.02
Lower Limit:			249534	5.86	488114	6.66	409934	11.02
Laboratory Control Sample	VW122203L01		516156	6.36	1009994	7.16	826055	11.52
Blank	VW122203B01		522342	6.37	1029036	7.16	822742	11.52
BRW-1R2	0312073-01		503880	6.38	994472	7.16	798416	11.52
BRW-1R4	0312073-02		490300	6.37	984979	7.16	793271	11.52
BRW-1R2	0312073-01E		493557	6.37	976298	7.17	787491	11.52

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.

Area Lower Limit = -50% of internal standard.

RT = Retention Time.

RT Upper Limit = +0.5 minutes of internal standard RT.

RT Lower Limit = -0.5 minutes of internal standard RT.

Sample Receipt Checklist

Client: <u>TRC</u>	Receipt Date: <u>12-19-03</u>
Project: <u>Formu GE</u>	Log-in Date: <u>↓</u>
ETR #: <u>0312073</u>	Inspection by: <u>EB</u> Login by: <u>UC</u>

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ No, <u>WHG Courier pick-up</u> / Hand delivered	Sample storage refrigerator #: <u>U04</u>
Is bill of lading retained? Yes, Tracking #: _____ No, Unavailable <u>NA</u>	Sample storage freezer #: _____
Number of coolers received for this project delivery: <u>1</u>	Cooler 2: _____ Cooler 3: _____ Cooler 4: _____ Cooler 5: _____ Cooler 6: _____ Cooler 7: _____ More: _____
Indicate cooler temperature upon opening (if multiple coolers, record <u>all</u> temps): Note: If <u>all</u> coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note <u>all</u> samples received <u>above</u> 6°C. Cooler 1: Temperature(s) taken from: <u>04</u> ^o IR Gun, _____ Temp. Blank, / NA	
Were samples received on ice? <u>Yes</u> / No	
Chain-of-Custody present? <u>Yes</u> / No Complete? <u>Yes</u> / No	
Custody seals present on Cooler? Yes / <u>No</u> on Bottles? Yes / <u>No</u> Intact? Yes / No / NA	
Note: Affix custody seals to back of this page.	
Were sample containers intact? <u>Yes</u> / No If No, list samples: →	
Did VOA/VPH waters contain headspace (>5mm)? Yes / <u>No</u> / NA If Yes, list samples: →	
Were 5035 VOA soils, or VPH soils, covered with MeOH? Yes / No / <u>NA</u> If No, list samples: →	
Was a sufficient amount of sample received for each test indicated on the COC? <u>Yes</u> / No If No, list samples: →	
If chemical preservation is appropriate - Were samples field preserved? <u>Yes</u> / No / NA <input checked="" type="checkbox"/> C=HCl <input type="checkbox"/> M=MeOH <input type="checkbox"/> S=H ₂ SO ₄ <input type="checkbox"/> H=NaOH <input type="checkbox"/> N=HNO ₃ <input type="checkbox"/> Other: _____ <input type="checkbox"/> U= Unknown	Chemical preservation OK for ALL samples? Yes / No / <u>NA</u> If No, list samples below:
Preservation (pH) verified at lab for EVERY bottle? (Not: VOA / VPH / Sulfide) YES: <2 or >12 (CN) or NO <u>NA</u> If No, why?:	
Were samples received within hold time? <u>Yes</u> / No If No, list samples: →	
Discrepancy between samples rec'd & COC? Yes / <u>No</u> If Yes, list samples: →	
Was the Project Manager notified of any other problems? Yes / No / NA	
Project Manager Acknowledgement: _____ Date: _____	Please use back for any additional notes!



ANALYTICAL REPORT

Prepared for:
TRC Environmental
Boott Mills South
Foot of John Street
Lowell, MA 01852

Project: Former GE Site
ETR: 0312067
Report Date: December 24, 2003

Certifications and Accreditations

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090
Army Corps of Engineers
Department of the Navy
Florida E87814

This report shall not be reproduced except in full, without written approval from the laboratory.



MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Woods Hole Group Environmental Laboratories

Project Number: 0312067

Project Location: Wilmington, MA **MCP RTN #¹:** _____

This Form provides certifications for the following data set: [Laboratory Sample ID Number(s)]:

0312067-01 through 0312067-03

Sample Matrices: **Groundwater** **Soil/Sediment** **Drinking Water** **Other:**

MCP SW-846 Methods used (as specified in MADEP Compendium of Analytical Methods)

Check all that apply:

8260B <input checked="" type="checkbox"/>	8151A <input type="checkbox"/>	8330 <input type="checkbox"/>	6010B <input type="checkbox"/>	7470A/1A <input type="checkbox"/>
8270C <input type="checkbox"/>	8081A <input type="checkbox"/>	VPH <input type="checkbox"/>	6020 <input type="checkbox"/>	9014M ² <input type="checkbox"/>
8082 <input type="checkbox"/>	8021B <input type="checkbox"/>	EPH <input type="checkbox"/>	7000 S ³ <input type="checkbox"/>	Other:

¹ – List Release Tracking Number (RTN), if known.
²M – SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method.
³S – SW-846 Methods 7000 Series. List individual method and analyte.

An affirmative response to question A, B, C and D is required for "Presumptive Certainty" status.

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No¹
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No¹
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No¹
D	<i>VPH and EPH methods only:</i> Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No¹

A response to questions E and F below is required for "Presumptive Certainty" status.

E	Were all QC performance standards and recommendations for the specified methods achieved?	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No¹
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Edith Hutchinson **Position:** Senior Project Manager

Printed Name: Edith Hutchinson **Date:** 12/24/2003

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 0312067

Project: Former GE Site

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

Volatile Organics by 8260B

1. The initial calibration had compounds outside of the 15% RSD QC acceptance limit. Refer to the Form VI Initial Calibration Summary report for specific outliers. This initial calibration meets the acceptability criteria.
2. Laboratory control sample, VW121903L01, had recoveries above the 130% QC acceptance limit for Dichlorodifluoromethane, Vinyl chloride and Trichlorofluoromethane at 141%, 143% and 137%, respectively. With the exception of Vinyl chloride detected in sample EMW-11R2 (0312067-02), these compounds were not detected in any of the associated samples.
3. All samples were analyzed at dilution based on historical and screening information. Refer to the individual report forms for dilution requirements. Additionally, the initial analysis of sample GZA-105R (0312067-03) had a concentration that exceeded the calibration range of the instrument. This sample was reanalyzed at a further dilution (0312067-03E) and both analyses are reported.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: *Felix Hutchinson* Title: *Senior Project Manager* Date: *12/24/03*

VOLATILE ORGANICS



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **EMW-11R1**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **0312067-01**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/18/03	12/22/03	5	5	20	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	40 U	1,3-Dichloropropene, Total	40 U
Chloromethane	40 U	Toluene	40 U
Vinyl chloride	40 U	1,1,2-Trichloroethane	40 U
Bromomethane	100 U	2-Hexanone	40 U
Chloroethane	40 U	Tetrachloroethene	1600
Trichlorofluoromethane	40 U	1,3-Dichloropropane	40 U
Diethyl ether	40 U	Dibromochloromethane	40 U
Acetone	100 U	1,2-Dibromoethane	40 U
1,1-Dichloroethene	40 U	Chlorobenzene	40 U
Carbon disulfide	40 U	1,1,1,2-Tetrachloroethane	40 U
Methylene chloride	100 U	Ethylbenzene	40 U
Methyl tert-butyl ether (MTBE)	40 U	Xylenes, Total	120 U
trans-1,2-Dichloroethene	40 U	Styrene	40 U
Diisopropyl Ether (DIPE)	40 U	Bromoform	40 U
1,1-Dichloroethane	45	Isopropylbenzene	40 U
Ethyl Tertiary Butyl Ether (ETBE)	40 U	1,1,2,2-Tetrachloroethane	40 U
Butanone (MEK)	40 U	Bromobenzene	40 U
cis-1,2-Dichloroethene	54	1,2,3-Trichloropropane	40 U
2,2-Dichloropropane	40 U	n-Propylbenzene	40 U
Bromochloromethane	40 U	2-Chlorotoluene	40 U
Chloroform	40 U	1,3,5-Trimethylbenzene	40 U
1,1,1-Trichloroethane	40 U	4-Chlorotoluene	40 U
1,1-Dichloropropene	40 U	tert-Butylbenzene	40 U
Carbon tetrachloride	40 U	1,2,4-Trimethylbenzene	40 U
Benzene	40 U	sec-Butylbenzene	40 U
Tertiary Amyl Methyl Ether (TAME)	40 U	1,3-Dichlorobenzene	40 U
Tetrahydrofuran	40 U	p-Isopropyltoluene	40 U
1,2-Dichloroethane	40 U	1,4-Dichlorobenzene	40 U
Trichloroethene	2400	n-Butylbenzene	40 U
1,2-Dichloropropane	40 U	1,2-Dibromo-3-chloropropane	100 U
Dibromomethane	40 U	1,2-Dichlorobenzene	40 U
1,4-Dioxane	1000 U	1,2,4-Trichlorobenzene	40 U
Bromodichloromethane	40 U	Hexachlorobutadiene	100 U
Methyl isobutyl ketone (MIBK)	40 U	Naphthalene	40 U
		1,2,3-Trichlorobenzene	40 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	105	70-130
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **EMW-11R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **0312067-02**
 Associated Blank: **VW121903B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/18/03	12/19/03	5	5	50	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	100 U	1,3-Dichloropropene, Total	100 U
Chloromethane	100 U	Toluene	100 U
Vinyl chloride	120	1,1,2-Trichloroethane	100 U
Bromomethane	250 U	2-Hexanone	100 U
Chloroethane	100 U	Tetrachloroethene	120
Trichlorofluoromethane	100 U	1,3-Dichloropropane	100 U
Diethyl ether	100 U	Dibromochloromethane	100 U
Acetone	250 U	1,2-Dibromoethane	100 U
1,1-Dichloroethene	100 U	Chlorobenzene	100 U
Carbon disulfide	100 U	1,1,1,2-Tetrachloroethane	100 U
Methylene chloride	250 U	Ethylbenzene	100 U
Methyl tert-butyl ether (MTBE)	100 U	Xylenes, Total	300 U
trans-1,2-Dichloroethene	100 U	Styrene	100 U
Diisopropyl Ether (DIPE)	100 U	Bromoform	100 U
1,1-Dichloroethane	100 U	Isopropylbenzene	100 U
Ethyl Tertiary Butyl Ether (ETBE)	100 U	1,1,2,2-Tetrachloroethane	100 U
2-Butanone (MEK)	100 U	Bromobenzene	100 U
cis-1,2-Dichloroethene	840	1,2,3-Trichloropropane	100 U
2,2-Dichloropropane	100 U	n-Propylbenzene	100 U
Bromochloromethane	100 U	2-Chlorotoluene	100 U
Chloroform	100 U	1,3,5-Trimethylbenzene	100 U
1,1,1-Trichloroethane	100 U	4-Chlorotoluene	100 U
1,1-Dichloropropene	100 U	tert-Butylbenzene	100 U
Carbon tetrachloride	100 U	1,2,4-Trimethylbenzene	100 U
Benzene	100 U	sec-Butylbenzene	100 U
Tertiary Amyl Methyl Ether (TAME)	100 U	1,3-Dichlorobenzene	100 U
Tetrahydrofuran	100 U	p-Isopropyltoluene	100 U
1,2-Dichloroethane	100 U	1,4-Dichlorobenzene	100 U
Trichloroethene	3900	n-Butylbenzene	100 U
1,2-Dichloropropane	100 U	1,2-Dibromo-3-chloropropane	250 U
Dibromomethane	100 U	1,2-Dichlorobenzene	100 U
1,4-Dioxane	2500 U	1,2,4-Trichlorobenzene	100 U
Bromodichloromethane	100 U	Hexachlorobutadiene	250 U
Methyl isobutyl ketone (MIBK)	100 U	Naphthalene	100 U
		1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

Form I Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **GZA-105R**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **0312067-03**
 Associated Blank: **VW121903B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/18/03	12/19/03	5	5	20	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	40 U	I,3-Dichloropropene, Total	40 U
Chloromethane	40 U	Toluene	40 U
Vinyl chloride	40 U	1,1,2-Trichloroethane	40 U
Bromomethane	100 U	2-Hexanone	40 U
Chloroethane	40 U	Tetrachloroethene	3200
Trichlorofluoromethane	40 U	1,3-Dichloropropane	40 U
Diethyl ether	40 U	Dibromochloromethane	40 U
Acetone	100 U	1,2-Dibromoethane	40 U
1,1-Dichloroethene	40 U	Chlorobenzene	40 U
Carbon disulfide	40 U	1,1,1,2-Tetrachloroethane	40 U
Methylene chloride	100 U	Ethylbenzene	40 U
Methyl tert-butyl ether (MTBE)	40 U	Xylenes, Total	120 U
trans-1,2-Dichloroethene	40 U	Styrene	40 U
Diisopropyl Ether (DIPE)	40 U	Bromoform	40 U
1,1-Dichloroethane	97	Isopropylbenzene	40 U
Ethyl Tertiary Butyl Ether (ETBE)	40 U	1,1,2,2-Tetrachloroethane	40 U
Butanone (MEK)	40 U	Bromobenzene	40 U
cis-1,2-Dichloroethene	51	1,2,3-Trichloropropane	40 U
2,2-Dichloropropane	40 U	n-Propylbenzene	40 U
Bromochloromethane	40 U	2-Chlorotoluene	40 U
Chloroform	40 U	1,3,5-Trimethylbenzene	40 U
1,1,1-Trichloroethane	40 U	4-Chlorotoluene	40 U
1,1-Dichloropropene	40 U	tert-Butylbenzene	40 U
Carbon tetrachloride	40 U	1,2,4-Trimethylbenzene	40 U
Benzene	40 U	sec-Butylbenzene	40 U
Tertiary Amyl Methyl Ether (TAME)	40 U	1,3-Dichlorobenzene	40 U
Tetrahydrofuran	40 U	p-Isopropyltoluene	40 U
1,2-Dichloroethane	40 U	1,4-Dichlorobenzene	40 U
Trichloroethene	4300 E	n-Butylbenzene	40 U
1,2-Dichloropropane	40 U	1,2-Dibromo-3-chloropropane	100 U
Dibromomethane	40 U	1,2-Dichlorobenzene	40 U
1,4-Dioxane	1000 U	1,2,4-Trichlorobenzene	40 U
Bromodichloromethane	40 U	Hexachlorobutadiene	100 U
Methyl isobutyl ketone (MIBK)	40 U	Naphthalene	40 U
		1,2,3-Trichlorobenzene	40 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	105	70-130
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	97	70-130
Bromofluorobenzene	93	70-130

E - Estimated value, exceeds the upper limit of calibration.
 U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **GZA-105R**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **0312067-03E**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
12/17/03	12/18/03	12/22/03	5	5	50	MLB

Parameter	Result
Dichlorodifluoromethane	100 U
Chloromethane	100 U
Vinyl chloride	100 U
Bromomethane	250 U
Chloroethane	100 U
Trichlorofluoromethane	100 U
Diethyl ether	100 U
Acetone	250 U
1,1-Dichloroethene	100 U
Carbon disulfide	100 U
Methylene chloride	250 U
Methyl tert-butyl ether (MTBE)	100 U
trans-1,2-Dichloroethene	100 U
Diisopropyl Ether (DIPE)	100 U
1,1-Dichloroethane	120
Ethyl Tertiary Butyl Ether (ETBE)	100 U
2-Butanone (MEK)	100 U
cis-1,2-Dichloroethene	100 U
2,2-Dichloropropane	100 U
Bromochloromethane	100 U
Chloroform	100 U
1,1,1-Trichloroethane	100 U
1,1-Dichloropropene	100 U
Carbon tetrachloride	100 U
Benzene	100 U
Tertiary Amyl Methyl Ether (TAME)	100 U
Tetrahydrofuran	100 U
1,2-Dichloroethane	100 U
Trichloroethene	5300
1,2-Dichloropropane	100 U
Dibromomethane	100 U
1,4-Dioxane	2500 U
Bromodichloromethane	100 U
Methyl isobutyl ketone (MIBK)	100 U

Parameter	Result
1,3-Dichloropropene, Total	100 U
Toluene	100 U
1,1,2-Trichloroethane	100 U
2-Hexanone	100 U
Tetrachloroethene	3900
1,3-Dichloropropane	100 U
Dibromochloromethane	100 U
1,2-Dibromoethane	100 U
Chlorobenzene	100 U
1,1,1,2-Tetrachloroethane	100 U
Ethylbenzene	100 U
Xylenes, Total	300 U
Styrene	100 U
Bromoform	100 U
Isopropylbenzene	100 U
1,1,2,2-Tetrachloroethane	100 U
Bromobenzene	100 U
1,2,3-Trichloropropane	100 U
n-Propylbenzene	100 U
2-Chlorotoluene	100 U
1,3,5-Trimethylbenzene	100 U
4-Chlorotoluene	100 U
tert-Butylbenzene	100 U
1,2,4-Trimethylbenzene	100 U
sec-Butylbenzene	100 U
1,3-Dichlorobenzene	100 U
p-Isopropyltoluene	100 U
1,4-Dichlorobenzene	100 U
n-Butylbenzene	100 U
1,2-Dibromo-3-chloropropane	250 U
1,2-Dichlorobenzene	100 U
1,2,4-Trichlorobenzene	100 U
Hexachlorobutadiene	250 U
Naphthalene	100 U
1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW121903B01**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/19/03	5	5	1	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	5.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	2.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	2.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	2.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	2.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	2.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	5.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	50 U	1,2,4-Trichlorobenzene	2.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	5.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	2.0 U
		1,2,3-Trichlorobenzene	2.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	100	70-130
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130
Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW122203B01**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	5.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	2.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
2-Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	2.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	2.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	2.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	2.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	5.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	50 U	1,2,4-Trichlorobenzene	2.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	5.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	2.0 U
		1,2,3-Trichlorobenzene	2.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	100	70-130
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

12/23/03 10:00



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW121903L01**
 Associated Blank: **VW121903B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/19/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Dichlorodifluoromethane	28	141 ^a	70-130
Chloromethane	26	129	70-130
Vinyl chloride	29	143 ^a	70-130
Bromomethane	25	127	70-130
Chloroethane	25	127	70-130
Trichlorofluoromethane	27	137 ^a	70-130
Diethyl ether	24	117	70-130
Acetone	23	114	70-130
1,1-Dichloroethene	21	103	70-130
Carbon disulfide	20	100	70-130
Methylene chloride	20	101	70-130
Methyl tert-butyl ether (MTBE)	20	99	70-130
trans-1,2-Dichloroethene	20	99	70-130
Isopropyl Ether (DIPE)	20	102	70-130
1,1-Dichloroethane	20	100	70-130
Ethyl Tertiary Butyl Ether (ETBE)	21	103	70-130
2-Butanone (MEK)	20	99	70-130
cis-1,2-Dichloroethene	20	101	70-130
2,2-Dichloropropane	20	101	70-130
Bromochloromethane	20	101	70-130
Chloroform	20	100	70-130
1,1,1-Trichloroethane	20	99	70-130
1,1-Dichloropropene	20	101	70-130
Carbon tetrachloride	20	101	70-130
Benzene	21	103	70-130
Tertiary Amyl Methyl Ether (TAME)	21	106	70-130
Tetrahydrofuran	19	97	70-130
1,2-Dichloroethane	19	96	70-130
Trichloroethene	20	101	70-130
1,2-Dichloropropane	19	97	70-130
Dibromomethane	20	100	70-130
1,4-Dioxane	190	96	70-130
Bromodichloromethane	20	99	70-130

12/23/03 10:00



**Form III
Spike Recovery Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW121903L01**
 Associated Blank: **VW121903B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/19/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Methyl isobutyl ketone (MIBK)	18	90	70-130
1,3-Dichloropropene, Total	38	95	70-130
Toluene	20	98	70-130
1,1,2-Trichloroethane	20	101	70-130
2-Hexanone	19	95	70-130
Tetrachloroethene	20	101	70-130
1,3-Dichloropropane	20	99	70-130
Dibromochloromethane	20	101	70-130
1,2-Dibromoethane	20	99	70-130
Chlorobenzene	20	100	70-130
1,1,1,2-Tetrachloroethane	20	101	70-130
Ethylbenzene	20	102	70-130
Xylenes, Total	62	103	70-130
Styrene	20	98	70-130
Bromoform	20	102	70-130
Isopropylbenzene	21	103	70-130
1,1,2,2-Tetrachloroethane	21	106	70-130
Bromobenzene	20	101	70-130
1,2,3-Trichloropropane	20	102	70-130
n-Propylbenzene	21	105	70-130
2-Chlorotoluene	20	100	70-130
1,3,5-Trimethylbenzene	21	105	70-130
4-Chlorotoluene	20	102	70-130
tert-Butylbenzene	20	102	70-130
1,2,4-Trimethylbenzene	20	102	70-130
sec-Butylbenzene	20	103	70-130
1,3-Dichlorobenzene	21	104	70-130
p-Isopropyltoluene	20	102	70-130
1,4-Dichlorobenzene	20	101	70-130
n-Butylbenzene	21	103	70-130
1,2-Dibromo-3-chloropropane	19	97	70-130
1,2-Dichlorobenzene	20	100	70-130
1,2,4-Trichlorobenzene	21	104	70-130

12/23/03 10:00



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW121903L01**
 Associated Blank: **VW121903B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/19/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Hexachlorobutadiene	20	100	70-130
Naphthalene	22	107	70-130
1,2,3-Trichlorobenzene	21	104	70-130

Surrogate	% Recovery	Acceptance Range (%)	* - Value outside of QC Limits. N/A - Not Applicable
Dibromofluoromethane	100	70-130	
1,2-Dichloroethane-d4	97	70-130	
Toluene-d8	98	70-130	
Bromofluorobenzene	100	70-130	

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

12/23/03 10:00



Form III Spike Recovery Summary Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW122203L01**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Dichlorodifluoromethane	26	130	70-130
Chloromethane	23	116	70-130
Vinyl chloride	26	129	70-130
Bromomethane	23	114	70-130
Chloroethane	24	118	70-130
Trichlorofluoromethane	26	130	70-130
Diethyl ether	24	122	70-130
Acetone	24	120	70-130
1,1-Dichloroethene	21	105	70-130
Carbon disulfide	21	103	70-130
Methylene chloride	19	97	70-130
Methyl tert-butyl ether (MTBE)	20	99	70-130
trans-1,2-Dichloroethene	20	102	70-130
Diisopropyl Ether (DIPE)	20	101	70-130
1,1-Dichloroethane	20	101	70-130
Ethyl Tertiary Butyl Ether (ETBE)	21	105	70-130
2-Butanone (MEK)	20	101	70-130
cis-1,2-Dichloroethene	21	103	70-130
2,2-Dichloropropane	20	102	70-130
Bromochloromethane	21	103	70-130
Chloroform	20	101	70-130
1,1,1-Trichloroethane	21	103	70-130
1,1-Dichloropropene	20	100	70-130
Carbon tetrachloride	21	105	70-130
Benzene	20	101	70-130
Tertiary Amyl Methyl Ether (TAME)	21	105	70-130
Tetrahydrofuran	20	100	70-130
1,2-Dichloroethane	20	100	70-130
Trichloroethene	21	104	70-130
1,2-Dichloropropane	20	99	70-130
Dibromomethane	21	103	70-130
1,4-Dioxane	220	109	70-130
Bromodichloromethane	21	103	70-130

12/23/03 10:00

Form III
Spike Recovery Summary
Volatile Organics by 8260B



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **VW122203L01**
 Associated Blank: **VW122203B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Methyl isobutyl ketone (MIBK)	19	96	70-130
1,3-Dichloropropene, Total	38	96	70-130
Toluene	20	100	70-130
1,1,2-Trichloroethane	20	102	70-130
2-Hexanone	20	101	70-130
Tetrachloroethene	21	104	70-130
1,3-Dichloropropane	20	99	70-130
Dibromochloromethane	21	103	70-130
1,2-Dibromoethane	20	102	70-130
Chlorobenzene	20	100	70-130
1,1,1,2-Tetrachloroethane	21	103	70-130
Ethylbenzene	20	102	70-130
Xylenes, Total	61	101	70-130
p-xylene	19	96	70-130
m-xylene	21	104	70-130
o-xylene	20	102	70-130
Isopropylbenzene	20	102	70-130
1,1,2,2-Tetrachloroethane	22	108	70-130
Bromobenzene	20	100	70-130
1,2,3-Trichloropropane	21	107	70-130
n-Propylbenzene	20	103	70-130
2-Chlorotoluene	20	101	70-130
1,3,5-Trimethylbenzene	20	102	70-130
4-Chlorotoluene	21	104	70-130
tert-Butylbenzene	20	101	70-130
1,2,4-Trimethylbenzene	20	102	70-130
sec-Butylbenzene	21	103	70-130
1,3-Dichlorobenzene	21	103	70-130
p-Isopropyltoluene	20	102	70-130
1,4-Dichlorobenzene	20	100	70-130
n-Butylbenzene	20	100	70-130
1,2-Dibromo-3-chloropropane	20	101	70-130
1,2-Dichlorobenzene	20	99	70-130
1,2,4-Trichlorobenzene	21	104	70-130

12/23/03 10:00



**Form III
Spike Recovery Summary
Volatile Organics by 8260B**

Client: TRC Environmental
 Project: Former GE Site
 Client ID: Laboratory Control Sample
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0312067
 Lab ID: VW122203L01
 Associated Blank: VW122203B01
 Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	12/22/03	5	5	1	MLB

Parameter	Conc.	% Recovery	% Recovery Limits
Hexachlorobutadiene	20	102	70-130
Naphthalene	22	109	70-130
1,2,3-Trichlorobenzene	21	105	70-130

Surrogate	% Recovery	Acceptance Range (%)	N/A - Not Applicable
Dibromofluoromethane	101	70-130	
1,2-Dichloroethane-d4	100	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	97	70-130	

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

12/23/03 10:00

*Supporting Quality
Control Results*



Form II
Surrogate Recovery
Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**

Lab Code: **MA00030**
 ETR: **0312067**
 Matrix: **Water**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Laboratory Control Sample	VW121903L01	100	97	98	100
Blank	VW121903B01	100	98	96	93
EMW-11R2	0312067-02	104	106	97	93
GZA-105R	0312067-03	105	107	97	93
Laboratory Control Sample	VW122203L01	101	100	100	97
Blank	VW122203B01	100	101	98	94
EMW-11R1	0312067-01	105	108	98	93
GZA-105R	0312067-03E	104	108	98	93

N/A - Not Applicable

Surrogate	QC Limit
Dibromofluoromethane	70-130
1,2-Dichloroethane-d4	70-130
Toluene-d8	70-130
4-Bromofluorobenzene	70-130



**Form IV
Method Blank Summary
Volatile Organics by 8260B**

Client: TRC Environmental
Project: Former GE Site
Case: N/A SDG: N/A

Lab Code: MA00030
ETR: 0312067
Lab ID: VW121903B01
Date Analyzed: 12/19/03 09:46

Client ID	Lab ID	Date/Time Analyzed
Laboratory Control Sample	VW121903L01	12/19/03 09:17
EMW-11R2	0312067-02	12/19/03 19:13
GZA-105R	0312067-03	12/19/03 19:44

N/A - Not Applicable



**Form IV
Method Blank Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0312067**

Lab ID: **VW122203B01**

Case: **N/A** SDG: **N/A**

Date Analyzed: **12/22/03 10:20**

Client ID	Lab ID	Date/Time Analyzed
Laboratory Control Sample	VW122203L01	12/22/03 09:51
EMW-11R1	0312067-01	12/22/03 16:50
GZA-105R	0312067-03E	12/22/03 17:22

N/A - Not Applicable

12/23/03 10:02



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0312067**

Lab ID: **T1120802**

Date Analyzed: **12/08/03 16:29**

Case: **N/A** SDG: **N/A**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	24.4	33584	Pass
75	95	30	60	48.1	66325	Pass
95	95	100	100	100	137792	Pass
96	95	5	9	6.8	9304	Pass
173	174	0	2	0	0	Pass
174	95	50	100	80.5	110931	Pass
175	174	5	9	7.3	8043	Pass
176	174	95	101	97.8	108491	Pass
177	176	5	9	6.9	7480	Pass

Client ID	Lab ID	Date/Time Analyzed
Initial Calibration	I1120801	12/08/03 16:57
Initial Calibration	I1120803	12/08/03 17:55
Initial Calibration	I1120804	12/08/03 18:23
Initial Calibration	I1120805	12/08/03 18:52
Initial Calibration	I1120806	12/08/03 19:20
Initial Calibration	I1120807	12/08/03 19:49

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0312067**
Lab ID: **T1121901**
Date Analyzed: **12/19/03 08:20**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	23	31333	Pass
75	95	30	60	48.2	65603	Pass
95	95	100	100	100	136021	Pass
96	95	5	9	6.6	8974	Pass
173	174	0	2	0	0	Pass
174	95	50	100	80.9	110011	Pass
175	174	5	9	7.4	8119	Pass
176	174	95	101	97.8	107579	Pass
177	176	5	9	6.8	7281	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1121901	12/19/03 08:49
Laboratory Control Sample	VW121903L01	12/19/03 09:17
Blank	VW121903B01	12/19/03 09:46
EMW-11R2	0312067-02	12/19/03 19:13
GZA-105R	0312067-03	12/19/03 19:44

N/A - Not Applicable

12/23/03 10:08



**Form V
Tune Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312067**
Lab ID: **T1122201**

Case: **N/A** SDG: **N/A**

Date Analyzed: **12/22/03 08:54**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	23.7	30965	Pass
75	95	30	60	48.5	63307	Pass
95	95	100	100	100	130560	Pass
96	95	5	9	6.8	8888	Pass
173	174	0	2	0	0	Pass
174	95	50	100	82.6	107869	Pass
175	174	5	9	7.3	7861	Pass
176	174	95	101	97.3	104963	Pass
177	176	5	9	6.9	7227	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1122201	12/22/03 09:23
Laboratory Control Sample	VW122203L01	12/22/03 09:51
Blank	VW122203B01	12/22/03 10:20
EMW-11R1	0312067-01	12/22/03 16:50
GZA-105R	0312067-03E	12/22/03 17:22

N/A - Not Applicable



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312067

Case: N/A SDG: N/A

Lab ID	Date/Time Analyzed
11120801	12/08/03 16:57
11120803	12/08/03 17:55
11120804	12/08/03 18:23
11120805	12/08/03 18:52
11120806	12/08/03 19:20
11120807	12/08/03 19:49

Response Factors

Parameter	1	5	20	50	100	200	Mean	% RSD
Dichlorodifluoromethane	0.39	0.44	0.59	0.58	0.56	0.56	0.52	16.2*
Chloromethane	0.45	0.46	0.49	0.53	0.56	0.56	0.51	9.6
Vinyl chloride	0.31	0.34	0.38	0.39	0.41	0.43	0.37	11.7
Bromomethane		0.40	0.36	0.16	0.12	0.11	0.23	60.7*
Chloroethane	0.17	0.17	0.19	0.19	0.18		0.18	6.0
Trichlorofluoromethane	0.49	0.54	0.62	0.60	0.58	0.55	0.56	8.7
Diethyl ether	0.20	0.23	0.25	0.26	0.27	0.27	0.25	10.5
Acetone		0.21	0.19	0.18	0.17	0.16	0.18	11.5
1,1-Dichloroethene	0.47	0.45	0.54	0.53	0.52	0.54	0.51	7.8
Carbon disulfide	0.86	0.86	0.97	0.95	0.95	0.97	0.93	5.7
Methylene chloride		0.31	0.30	0.30	0.29	0.28	0.30	4.3
Methyl tert-butyl ether (MTBE)	0.87	0.85	0.89	0.91	0.90	0.87	0.88	2.4
trans-1,2-Dichloroethene	0.43	0.44	0.49	0.48	0.47	0.47	0.47	4.8
Diisopropyl Ether (DIPE)	1.73	1.62	1.75	1.81	1.74	1.69	1.72	3.6
1,1-Dichloroethane	0.80	0.79	0.85	0.84	0.80	0.79	0.81	3.4
Ethyl Tertiary Butyl Ether (ETBE)	1.40	1.41	1.55	1.61	1.60	1.56	1.52	6.1
2-Butanone (MEK)	0.47	0.37	0.38	0.39	0.36	0.34	0.39	12.1
cis-1,2-Dichloroethene	0.63	0.74	0.81	0.83	0.81	0.81	0.77	9.6
2,2-Dichloropropane	0.62	0.62	0.70	0.70	0.67	0.67	0.66	5.3
Bromochloromethane	0.26	0.27	0.29	0.30	0.29	0.27	0.28	5.4
Chloroform	0.86	0.82	0.91	0.91	0.89	0.88	0.88	3.8
1,1,1-Trichloroethane	0.66	0.65	0.77	0.76	0.74	0.75	0.72	7.2
1,1-Dichloropropene	0.60	0.56	0.62	0.60	0.59	0.60	0.60	3.0
Carbon tetrachloride	0.56	0.56	0.65	0.64	0.62	0.63	0.61	6.6
Benzene	1.35	1.37	1.49	1.50	1.48	1.47	1.44	4.6
Tertiary Amyl Methyl Ether (TAME)	1.15	1.11	1.26	1.30	1.27	1.25	1.22	6.3
Tetrahydrofuran	0.21	0.17	0.18	0.18	0.17	0.16	0.18	9.8
1,2-Dichloroethane	0.94	0.85	0.89	0.92	0.89	0.85	0.89	3.8
Trichloroethene	0.22	0.23	0.25	0.25	0.25	0.26	0.24	6.7
1,2-Dichloropropane	0.23	0.23	0.24	0.25	0.24	0.24	0.24	3.2
Dibromomethane	0.19	0.20	0.20	0.22	0.21	0.21	0.21	4.9
1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.003	0.002	8.3

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312067**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
I1120801	12/08/03 16:57
I1120803	12/08/03 17:55
I1120804	12/08/03 18:23
I1120805	12/08/03 18:52
I1120806	12/08/03 19:20
I1120807	12/08/03 19:49

Parameter	Response Factors						Mean	% RSD
	1	5	20	50	100	200		
Bromodichloromethane	0.31	0.30	0.33	0.35	0.35	0.34	0.33	6.0
Methyl isobutyl ketone (MIBK)	0.40	0.38	0.39	0.42	0.41	0.37	0.39	4.0
cis-1,3-Dichloropropene	0.34	0.33	0.36	0.39	0.38	0.38	0.36	6.7
Toluene	0.46	0.45	0.50	0.53	0.53	0.54	0.50	7.7
trans-1,3-Dichloropropene	0.35	0.34	0.37	0.40	0.40	0.39	0.37	7.2
1,1,2-Trichloroethane	0.17	0.19	0.20	0.21	0.21	0.20	0.20	8.8
2-Hexanone	0.25	0.26	0.28	0.30	0.29	0.27	0.28	7.3
Tetrachloroethene	0.21	0.20	0.24	0.25	0.25	0.26	0.23	9.7
1,3-Dichloropropane	0.38	0.38	0.40	0.43	0.42	0.41	0.40	5.2
Dibromochloromethane	0.25	0.26	0.29	0.32	0.33	0.31	0.29	11.7
1,2-Dibromoethane	0.26	0.28	0.30	0.32	0.32	0.31	0.30	7.6
Chlorobenzene	0.75	0.70	0.77	0.79	0.79	0.80	0.77	5.0
1,1,1,2-Tetrachloroethane	0.26	0.26	0.30	0.31	0.31	0.30	0.29	8.2
Ethylbenzene	1.00	1.00	1.15	1.20	1.20	1.23	1.13	9.0
p/m-Xylene	0.37	0.37	0.44	0.46	0.46	0.47	0.43	10.7
o-Xylene	0.33	0.36	0.43	0.46	0.46	0.47	0.42	13.9
Styrene	0.53	0.64	0.78	0.84	0.86	0.87	0.75	18.0*
Bromoform	0.25	0.23	0.26	0.28	0.28	0.27	0.26	7.6
Isopropylbenzene	0.79	0.84	1.06	1.13	1.15	1.18	1.03	16.3*
1,1,2,2-Tetrachloroethane	0.39	0.38	0.42	0.44	0.43	0.40	0.41	6.0
Bromobenzene	0.30	0.28	0.32	0.35	0.35	0.35	0.32	9.7
1,2,3-Trichloropropane	0.34	0.32	0.34	0.35	0.34	0.31	0.33	4.4
n-Propylbenzene	0.87	0.97	1.19	1.27	1.29	1.33	1.15	16.4*
2-Chlorotoluene	0.68	0.68	0.78	0.84	0.85	0.85	0.78	10.6
1,3,5-Trimethylbenzene	0.60	0.67	0.83	0.91	0.92	0.93	0.81	17.6*
4-Chlorotoluene	0.65	0.72	0.84	0.88	0.91	0.90	0.82	13.1
tert-Butylbenzene	0.44	0.50	0.64	0.69	0.70	0.72	0.62	18.9*
1,2,4-Trimethylbenzene	0.64	0.69	0.86	0.96	0.96	0.98	0.85	17.4*
sec-Butylbenzene	0.61	0.71	0.92	1.01	1.03	1.07	0.89	21.2*
1,3-Dichlorobenzene	0.38	0.44	0.53	0.57	0.60	0.58	0.52	17.1*
p-Isopropyltoluene	0.51	0.57	0.76	0.84	0.88	0.87	0.74	21.7*
1,4-Dichlorobenzene	0.45	0.46	0.55	0.60	0.63	0.62	0.55	14.7

N/A - Not Applicable

* - Value outside of QC advisory limits.



**Form VI
Initial Calibration Summary
Volatile Organics by 8260B**

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030
ETR: 0312067

Case: N/A SDG: N/A

Lab ID	Date/Time Analyzed
I1120801	12/08/03 16:57
I1120803	12/08/03 17:55
I1120804	12/08/03 18:23
I1120805	12/08/03 18:52
I1120806	12/08/03 19:20
I1120807	12/08/03 19:49

Parameter	Response Factors						Mean	% RSD
	1	5	20	50	100	200		
n-Butylbenzene	0.39	0.43	0.61	0.71	0.75	0.78	0.61	27.2*
1,2-Dibromo-3-chloropropane		0.064	0.074	0.085	0.084	0.081	0.078	11.4
1,2-Dichlorobenzene	0.42	0.45	0.53	0.58	0.60	0.59	0.53	14.9
1,2,4-Trichlorobenzene	0.19	0.23	0.29	0.35	0.37	0.38	0.30	25.5*
Hexachlorobutadiene		0.083	0.097	0.11	0.11	0.12	0.10	14.3
Naphthalene	0.59	0.66	0.82	1.03	1.08	1.09	0.88	24.8*
1,2,3-Trichlorobenzene	0.20	0.23	0.28	0.34	0.35	0.36	0.29	23.1*
Dibromofluoromethane	0.69	0.69	0.69	0.69	0.67	0.65	0.68	2.7
1,2-Dichloroethane-d4	0.91	0.91	0.90	0.89	0.87	0.84	0.89	3.2
Toluene-d8	0.96	0.98	0.98	1.01	1.01	1.01	0.99	2.2
4-Bromofluorobenzene	0.49	0.50	0.51	0.52	0.53	0.52	0.51	3.0
Average RSD								10.5

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VII Calibration Verification Volatile Organics by 8260B

Client: **TRC Environmental**

Lab Code: **MA00030**

Project: **Former GE Site**

ETR: **0312067**

Case: **N/A** SDG: **N/A**

Lab ID: **C1121901**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	0.52	0.63	22.1	30
Chloromethane	0.51	0.49	4.3	30
Vinyl chloride	0.37	0.38	1.7	20
Bromomethane	0.23	0.20	14.7	30
Chloroethane	0.18	0.19	3.7	30
Trichlorofluoromethane	0.56	0.59	4.5	30
Diethyl ether	0.25	0.26	6.6	30
Acetone	0.18	0.18	0.8	30
1,1-Dichloroethene	0.51	0.53	5.0	20
Carbon disulfide	0.93	0.97	4.3	30
Methylene chloride	0.30	0.29	1.6	30
Methyl tert-butyl ether (MTBE)	0.88	0.89	0.7	30
trans-1,2-Dichloroethene	0.47	0.48	2.3	30
Diisopropyl Ether (DIPE)	1.72	1.74	1.0	30
1,1-Dichloroethane	0.81	0.81	0.5	30
Ethyl Tertiary Butyl Ether (ETBE)	1.52	1.55	1.7	30
2-Butanone (MEK)	0.39	0.39	1.3	30
cis-1,2-Dichloroethene	0.77	0.80	3.4	30
2,2-Dichloropropane	0.66	0.69	4.3	30
Bromochloromethane	0.28	0.29	4.8	30
Chloroform	0.88	0.89	0.9	20
1,1,1-Trichloroethane	0.72	0.74	2.7	30
1,1-Dichloropropene	0.60	0.61	1.8	30
Carbon tetrachloride	0.61	0.63	3.9	30
Benzene	1.44	1.47	2.0	30
Tertiary Amyl Methyl Ether (TAME)	1.22	1.27	4.1	30
Tetrahydrofuran	0.18	0.18	0.3	30
1,2-Dichloroethane	0.89	0.88	0.7	30
Trichloroethene	0.24	0.25	4.7	30
1,2-Dichloropropane	0.24	0.24	0.9	20
Dibromomethane	0.21	0.22	5.2	30
1,4-Dioxane	0.002	0.002	1.4	30
Bromodichloromethane	0.33	0.34	2.9	30
Methyl isobutyl ketone (MIBK)	0.39	0.42	6.3	30
cis-1,3-Dichloropropene	0.36	0.37	2.6	30
Toluene	0.50	0.52	3.8	20
trans-1,3-Dichloropropene	0.37	0.38	2.8	30
1,1,2-Trichloroethane	0.20	0.21	7.1	30

N/A - Not Applicable



Form VII Calibration Verification Volatile Organics by 8260B

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312067**
Lab ID: **C1121901**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
2-Hexanone	0.28	0.31	11.9	30
Tetrachloroethene	0.23	0.25	6.4	30
1,3-Dichloropropane	0.40	0.41	2.3	30
Dibromochloromethane	0.29	0.32	7.5	30
1,2-Dibromoethane	0.30	0.32	6.3	30
Chlorobenzene	0.77	0.80	4.5	30
1,1,1,2-Tetrachloroethane	0.29	0.31	8.5	30
Ethylbenzene	1.13	1.20	6.3	20
p/m-Xylene	0.43	0.46	8.0	30
o-Xylene	0.42	0.45	6.8	30
Styrene	0.75	0.83	9.9	30
Bromoform	0.26	0.30	12.4	30
Isopropylbenzene	1.03	1.13	9.8	30
1,1,2,2-Tetrachloroethane	0.41	0.45	9.0	30
Bromobenzene	0.32	0.34	5.3	30
1,2,3-Trichloropropane	0.33	0.36	7.2	30
n-Propylbenzene	1.15	1.26	9.2	30
2-Chlorotoluene	0.78	0.83	5.8	30
1,3,5-Trimethylbenzene	0.81	0.89	10.5	30
1-Chlorotoluene	0.82	0.87	7.1	30
tert-Butylbenzene	0.62	0.68	10.2	30
1,2,4-Trimethylbenzene	0.85	0.94	11.2	30
sec-Butylbenzene	0.89	0.99	11.2	30
1,3-Dichlorobenzene	0.52	0.56	8.0	30
p-Isopropyltoluene	0.74	0.82	10.8	30
1,4-Dichlorobenzene	0.55	0.59	7.5	30
n-Butylbenzene	0.61	0.68	12.0	30
1,2-Dibromo-3-chloropropane	0.078	0.081	4.8	30
1,2-Dichlorobenzene	0.53	0.56	5.2	30
1,2,4-Trichlorobenzene	0.30	0.33	10.7	30
Hexachlorobutadiene	0.10	0.10	2.4	30
Naphthalene	0.88	0.99	13.1	30
1,2,3-Trichlorobenzene	0.29	0.32	9.2	30
Dibromofluoromethane	0.68	0.67	1.0	30
1,2-Dichloroethane-d4	0.89	0.88	1.3	30
Toluene-d8	0.99	1.00	0.9	30
4-Bromofluorobenzene	0.51	0.51	0.5	30
Average % D			5.6	

N/A - Not Applicable



Form VII
Calibration Verification
Volatile Organics by 8260B

Client: TRC Environmental

Lab Code: MA00030

Project: Former GE Site

ETR: 0312067

Case: N/A SDG: N/A

Lab ID: C1122201

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	0.52	0.63	21.1	30
Chloromethane	0.51	0.49	4.5	30
Vinyl chloride	0.37	0.39	4.8	20
Bromomethane	0.23	0.21	11.1	30
Chloroethane	0.18	0.19	3.8	30
Trichlorofluoromethane	0.56	0.62	10.6	30
Diethyl ether	0.25	0.27	8.4	30
Acetone	0.18	0.19	7.6	30
1,1-Dichloroethene	0.51	0.55	7.6	20
Carbon disulfide	0.93	0.99	7.0	30
Methylene chloride	0.30	0.30	1.4	30
Methyl tert-butyl ether (MTBE)	0.88	0.92	4.9	30
trans-1,2-Dichloroethene	0.47	0.49	4.5	30
Diisopropyl Ether (DIPE)	1.72	1.73	0.5	30
1,1-Dichloroethane	0.81	0.83	2.2	30
Ethyl Tertiary Butyl Ether (ETBE)	1.52	1.56	2.5	30
2-Butanone (MEK)	0.39	0.40	2.8	30
cis-1,2-Dichloroethene	0.77	0.72	7.0	30
2,2-Dichloropropane	0.66	0.71	7.2	30
Bromochloromethane	0.28	0.30	6.3	30
Chloroform	0.88	0.92	4.8	20
1,1,1-Trichloroethane	0.72	0.78	8.2	30
1,1-Dichloropropene	0.60	0.62	4.2	30
Carbon tetrachloride	0.61	0.67	9.7	30
Benzene	1.44	1.48	2.5	30
Tertiary Amyl Methyl Ether (TAME)	1.22	1.26	3.2	30
Tetrahydrofuran	0.18	0.18	3.6	30
1,2-Dichloroethane	0.89	0.92	3.3	30
Trichloroethene	0.24	0.26	6.8	30
1,2-Dichloropropane	0.24	0.24	0.4	20
Dibromomethane	0.21	0.22	6.7	30
1,4-Dioxane	0.002	0.003	5.6	30
Bromodichloromethane	0.33	0.35	6.6	30
Methyl isobutyl ketone (MIBK)	0.39	0.43	8.8	30
cis-1,3-Dichloropropene	0.36	0.37	2.8	30
Toluene	0.50	0.52	4.6	20
trans-1,3-Dichloropropene	0.37	0.40	6.6	30
1,1,2-Trichloroethane	0.20	0.21	8.6	30

N/A - Not Applicable

12/23/03 10:20



Form VII Calibration Verification Volatile Organics by 8260B

Client: **TRC Environmental**
 Project: **Former GE Site**
 Case: N/A SDG: N/A

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **C1122201**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
2-Hexanone	0.28	0.32	15.1	30
Tetrachloroethene	0.23	0.26	9.6	30
1,3-Dichloropropane	0.40	0.42	3.6	30
Dibromochloromethane	0.29	0.33	13.7	30
1,2-Dibromoethane	0.30	0.33	9.7	30
Chlorobenzene	0.77	0.79	2.9	30
1,1,1,2-Tetrachloroethane	0.29	0.31	7.1	30
Ethylbenzene	1.13	1.18	4.4	20
p/m-Xylene	0.43	0.45	5.7	30
o-Xylene	0.42	0.45	7.7	30
Styrene	0.75	0.82	9.6	30
Bromoform	0.26	0.30	13.3	30
Isopropylbenzene	1.03	1.12	9.0	30
1,1,1,2-Tetrachloroethane	0.41	0.46	11.5	30
Bromobenzene	0.32	0.34	6.2	30
1,2,3-Trichloropropane	0.33	0.36	8.1	30
n-Propylbenzene	1.15	1.27	9.7	30
2-Chlorotoluene	0.78	0.83	6.2	30
1,3,5-Trimethylbenzene	0.81	0.90	11.1	30
Chlorotoluene	0.82	0.88	7.6	30
tert-Butylbenzene	0.62	0.67	9.5	30
1,2,4-Trimethylbenzene	0.85	0.94	10.3	30
sec-Butylbenzene	0.89	1.00	11.8	30
1,3-Dichlorobenzene	0.52	0.56	8.8	30
p-Isopropyltoluene	0.74	0.83	11.9	30
1,4-Dichlorobenzene	0.55	0.59	7.3	30
n-Butylbenzene	0.61	0.68	11.6	30
1,2-Dibromo-3-chloropropane	0.078	0.087	11.5	30
1,2-Dichlorobenzene	0.53	0.56	6.4	30
1,2,4-Trichlorobenzene	0.30	0.33	9.1	30
Hexachlorobutadiene	0.10	0.10	0.5	30
Naphthalene	0.88	0.99	13.5	30
1,2,3-Trichlorobenzene	0.29	0.33	10.3	30
Dibromofluoromethane	0.68	0.69	1.2	30
1,2-Dichloroethane-d4	0.89	0.92	3.7	30
Toluene-d8	0.99	1.01	1.9	30
4-Bromofluorobenzene	0.51	0.52	1.2	30
Average % D			7.0	

N/A - Not Applicable



**Form VIII
Internal Standard Summary
Volatile Organics by 8260B**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0312067**
Lab ID: **C1121901**

Case: **N/A** SDG: **N/A**

	Client ID	Lab ID	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5	
			Area	RT	Area	RT	Area	RT
Standard:			532520	6.39	1045935	7.19	851059	11.55
Upper Limit:			1065040	6.89	2091870	7.69	1702118	12.05
Lower Limit:			266260	5.89	522968	6.69	425530	11.05
Laboratory Control Sample	VW121903L01		548518	6.40	1096928	7.19	867025	11.55
Blank	VW121903B01		542163	6.40	1082437	7.19	844700	11.55
EMW-11R2	0312067-02		478571	6.40	965117	7.20	759760	11.56
GZA-105R	0312067-03		478314	6.40	963787	7.20	760499	11.55

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

12/23/03 10:20

**Form VIII
Internal Standard Summary
Volatile Organics by 8260B**



Client: **TRC Environmental**
 Project: **Former GE Site**
 Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
 ETR: **0312067**
 Lab ID: **C1122201**

	Client ID	Lab ID	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5	
			Area	RT	Area	RT	Area	RT
Standard:			499068	6.36	976229	7.16	819868	11.52
Upper Limit:			998136	6.86	1952458	7.66	1639736	12.02
Lower Limit:			249534	5.86	488114	6.66	409934	11.02
Laboratory Control Sample	VW122203L01		516156	6.36	1009994	7.16	826055	11.52
Blank	VW122203B01		522342	6.37	1029036	7.16	822742	11.52
EMW-11R1	0312067-01		474937	6.37	956682	7.16	765903	11.52
GZA-105R	0312067-03E		476940	6.37	948239	7.16	759307	11.52

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
 Area Lower Limit = -50% of internal standard.
 RT = Retention Time.
 RT Upper Limit = +0.5 minutes of internal standard RT.
 RT Lower Limit = -0.5 minutes of internal standard RT.

12/23/03 10:21

Sample Receipt Checklist

Client: <u>TRC</u>	Receipt Date: <u>12-18-03</u>
Project: <u>FORNER GE</u>	Log-in Date: <u>12/19/03</u>
ETR #: <u>0512067</u>	Inspection by: <u>JB</u> Login by: <u>WR</u>

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ No, <u>WHG Courier pick-up</u> / Hand delivered	Sample storage refrigerator #: <u>VOA</u>
Is bill of lading retained? Yes, Tracking #: _____ No, Unavailable / <u>NA</u>	Sample storage freezer #: _____
Number of coolers received for this project delivery: <u>1</u>	Cooler 2: _____ Cooler 3: _____ Cooler 4: _____ Cooler 5: _____ Cooler 6: _____ Cooler 7: _____ More: _____
Indicate cooler temperature upon opening (if multiple coolers, record <u>all</u> temps): Note: If <u>all</u> coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note <u>all</u> samples received <u>above</u> 6°C. Cooler 1: Temperature(s) taken from: <u>03</u> IR Gun, _____ Temp. Blank, / NA	
Were samples received on ice? <u>Yes</u> / No	
Chain-of-Custody present? <u>Yes</u> / No Complete? <u>Yes</u> / No	
Custody seals present on Cooler? Yes / <u>No</u> on Bottles? Yes / <u>No</u> Intact? Yes / No / NA	
Note: Affix custody seals to back of this page.	
Were sample containers intact? <u>Yes</u> / No If No, list samples: →	
Did VOA/VPH waters contain headspace (>5mm)? Yes / <u>No</u> / NA If Yes, list samples: →	
Were 5035 VOA soils, or VPH soils, covered with MeOH? Yes / No / <u>NA</u> If No, list samples: →	
Was a sufficient amount of sample received for each test indicated on the COC? <u>Yes</u> / No If No, list samples: →	
If chemical preservation is appropriate - Were samples field preserved? <u>Yes</u> / No / NA <input checked="" type="checkbox"/> C=HCl <input type="checkbox"/> M=MeOH <input type="checkbox"/> S=H ₂ SO ₄ <input type="checkbox"/> H=NaOH <input type="checkbox"/> N=HNO ₃ <input type="checkbox"/> Other: _____ <input type="checkbox"/> U=Unknown	Chemical preservation OK for ALL samples? Yes / No / <u>N/A</u>
Preservation (pH) verified at lab for <u>EVERY</u> bottle (<u>Not: VOA</u> / VPH / Sulfide) YES: <2 or >12 (CN) or NO NA If No, why?:	If No, list samples below:
Were samples received within hold time? <u>Yes</u> / No If No, list samples: →	
Discrepancy between samples rec'd & COC? Yes / <u>No</u> If Yes, list samples: →	
Was the Project Manager notified of any other problems? Yes / No / NA	
Project Manager Acknowledgement: _____ Date: _____	Please use back for any additional notes!

Source Control Monitoring: Data Validation

TRC performed a limited validation of the volatile organic compound (VOC) and volatile petroleum hydrocarbon (VPH) analytical data associated with this sampling event (3/25/04). The groundwater samples included in this review are listed below.

VOCs:

IP-1R2	EMW-11R1
IP-2R1	EMW-11R2
IP-2R3	GZA-105R
IP-3R2	BRW-1R2
IP-4R1	BRW-1R4
IP-4R3	MW-4
MW-4A	

VPH:

TRC-104	WE-8
TRC-106	WE-8 (PP)
WE-4S	WE-9
WE-7	WE-9 (PP)

The sample results were assessed using the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (10/99)*. Modification of the Functional Guidelines was done to accommodate the non-CLP methodologies used by the laboratory. Qualification of sample data was not performed.

The limited validation was based upon the following parameters: holding times, cooler temperatures, instrument tunes, calibrations, blanks (laboratory method blanks and trip blanks), surrogate spike recoveries, laboratory control sample (LCS) results, LCS duplicate results, internal standard performance, and an evaluation of sample quantitation limits. These parameters provide an adequate assessment of the overall accuracy and precision of the data set.

In general, the data appear to be valid as reported and may be used for decision-making purposes.

Accuracy

All samples were received with cooler temperatures within the method-specified range. All samples were analyzed within the method-specified holding time.

All instrument tunes met the acceptance criteria and were analyzed at the proper frequency. The percent relative standard deviation of bromomethane and/or 1,4-dioxane in the VOC initial calibrations and the percent differences (%Ds) of bromomethane, 4-

methyl-2-pentanone, tetrahydrofuran, and/or 2-hexanone in the VOC continuing calibrations were outside of the acceptance criteria. Bromomethane, 1,4-dioxane, 4-methyl-2-pentanone, tetrahydrofuran, and 2-hexanone were not detected in any of the groundwater samples. Potential uncertainty exists for these results in the associated samples. Since these compounds are not contaminants of concern at this site, the potential uncertainty did not affect the overall usability of the data. The %Ds of 2-methylpentane or 2,2,4-trimethylpentane in the VPH continuing calibrations were outside of the acceptance criteria. Since these compounds comprise a minor portion of the C₅-C₈ aliphatic hydrocarbon range, overall data usability was not affected.

Target compounds were not detected in any of the laboratory method blanks or the two trip blanks submitted with these samples. It should be noted that a trip blank was not submitted for VPH analysis. Data usability was not affected by the lack of a trip blank.

All samples exhibited acceptable surrogate recoveries. One VOC LCS/LCS Duplicate set exhibited high recoveries of trichlorofluoromethane. Since the associated samples did not detect this compound, data usability was not affected by the potential high bias. One of the VPH LCSs exhibited slightly high recovery of C₉. Since the corresponding LCS duplicate exhibited acceptable recovery of C₉, overall data usability was not affected by this nonconformance.

The performance of the internal standards was within the acceptance criteria in all VOC sample analyses.

Precision

The relative percent differences of the target compounds were within the acceptance limits in the VOC and VPH LCS/LCS duplicate analyses.

Quantitation Limits

Due to the levels of target compounds which would have exceeded the calibration range if analyzed undiluted, all VOC analyses, with the exception of samples MW-4 and MW-4A, were performed on dilution. Quantitation limits for all samples, with the exception of samples MW-4 and MW-4A, were elevated accordingly due to the dilutions and exceed GW-1 standards for select VOCs.

The VPH analysis of sample WE-4S was performed at a two-fold dilution due to the concentration of m&p-xylenes which exceeded the calibration range in the initial undiluted analysis. The results of both analyses were combined in order to report the lowest possible quantitation limits and all results within the calibration range.



ANALYTICAL REPORT

Prepared for:
TRC Environmental
Boott Mills South
Foot of John Street
Lowell, MA 01852

Project: Former GE Site
ETR: 0403086
Report Date: April 02, 2004

Certifications and Accreditations

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220602
Rhode Island 64
New Jersey MA015
Maine MA030
New York 11627
Louisiana 03090

Army Corps of Engineers
Department of the Navy
Florida E87814

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Sample ID Cross Reference

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**

Lab Sample ID	Client Sample ID
0403086-01	BRW-1R2
0403086-02	BRW-1R4
0403086-03	EMW-11R1
0403086-04	EMW-11R2
0403086-05	GZA-105R
0403086-06	IP-1R2
0403086-07	IP-2R1
0403086-08	IP-2R3
0403086-09	IP-3R2
0403086-10	IP-4R1
0403086-11	IP-4R3
0403086-12	TRC-104
0403086-13	TRC-106
0403086-14	WE-4S
0403086-15	WE-7
0403086-16	WE-8
0403086-17	WE-8(pp)
0403086-18	WE-9
0403086-19	WE-9(pp)
0403086-20	Trip Blank

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Woods Hole Group Environmental Laboratories

Project Number: 0403086

Project Location: Wilmington, MA MCP RTN #¹: _____

This Form provides certifications for the following data set: [Laboratory Sample ID Number(s)]:

0403086-01 through 0403086-20

Sample Matrices: Groundwater Soil/Sediment Drinking Water Other:

MCP SW-846 Methods used (as specified in MADEP Compendium of Analytical Methods)

Check all that apply:

8260B <input checked="" type="checkbox"/>	8151A <input type="checkbox"/>	8330 <input type="checkbox"/>	6010B <input type="checkbox"/>	7470A/1A <input type="checkbox"/>
8270C <input type="checkbox"/>	8081A <input type="checkbox"/>	VPH <input checked="" type="checkbox"/>	6020 <input type="checkbox"/>	9014M ² <input type="checkbox"/>
8082 <input type="checkbox"/>	8021B <input type="checkbox"/>	EPH <input type="checkbox"/>	7000 S ³ <input type="checkbox"/>	Other:

¹ - List Release Tracking Number (RTN), if known.

²M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method.

³S - SW-846 Methods 7000 Series. List individual method and analyte.

An affirmative response to question A, B, C and D is required for "Presumptive Certainty" status.

A	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	Yes	<input checked="" type="checkbox"/> No ¹

A response to questions E and F below is required for "Presumptive Certainty" status.

E	Were all QC performance standards and recommendations for the specified methods achieved?	Yes	<input checked="" type="checkbox"/> No ¹
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Edith Hutchinson Position: Senior Project Manager

Printed Name: Edith Hutchinson Date: 4/02/04

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 0403086
Project: Former GE Site

All analyses were performed according to Woods Hole Group Environmental Laboratories' quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report meet all applicable agency and/or NELAC standards, were performed within holding time, and with appropriate quality control measures, except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted. Tissue and sediment samples are not certifiable under the NELAC accreditation.

Volatiles Organics by 8260

1. The initial calibration had compounds outside the 15% RSD QC acceptance limit. Refer to the Form VI Initial Calibration Summary report for specific outliers. The initial calibration meets acceptability criteria.
2. Several samples were analyzed at dilutions based on screening information. Refer to the individual report forms for dilution requirements.

Volatiles Petroleum Hydrocarbons by GC - PID/FID

1. The initial analysis of sample WE-4S (0403086-14) had a concentration for p/m-Xylene that exceeded the calibration range of the instrument. This sample was reanalyzed at a 1:2 dilution (0403086-14E) and both analyses are reported.
2. Opening continuing calibration verification standard, C032901 associated to all samples except (0403086-14E) had a value above the 25% D QC limit for 2,2,4-Trimethylpentane (associated to the C5-C8 range) at 29.4%.
3. Opening and ending continuing calibration verification standards, C040101 and C040102 associated to the diluted analysis of WE-4S (0403086-14E), had values above the 25% D QC limit for 2-Methylpentane (associated to the C5-C8 range) at 31.7% and 37.1%, respectively.
4. Laboratory control sample HS032604BSD04 associated to all samples except (0403086-14E) had a recovery above the 130% QC limit for n-Nonane at 149%. The laboratory control sample duplicate had an acceptable recovery for this compound.
5. For VPH method modifications, please refer to the *VPH Sample Information* sheet found on page 55 of this data package.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group Environmental Laboratories makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group Environmental Laboratories. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: *Edith M. Sullivan* Title: *Senior Project Manager* Date: *4/2/04*

VOLATILE ORGANICS



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **BRW-1R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-01**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	5	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	10 U	1,3-Dichloropropene, Total	10 U
Chloromethane	10 U	Toluene	10 U
Vinyl chloride	10 U	1,1,2-Trichloroethane	10 U
Bromomethane	10 U	2-Hexanone	10 U
Chloroethane	10 U	Tetrachloroethene	310
Trichlorofluoromethane	10 U	1,3-Dichloropropane	10 U
Diethyl ether	10 U	Dibromochloromethane	10 U
Acetone	25 U	1,2-Dibromoethane	10 U
1,1-Dichloroethene	10 U	Chlorobenzene	10 U
Carbon disulfide	10 U	1,1,1,2-Tetrachloroethane	10 U
Methylene chloride	25 U	Ethylbenzene	10 U
Methyl tert-butyl ether (MTBE)	10 U	Xylenes, Total	30 U
trans-1,2-Dichloroethene	10 U	Styrene	10 U
Diisopropyl Ether (DIPE)	10 U	Bromoform	10 U
1,1-Dichloroethane	15	Isopropylbenzene	25 U
tert-Butyl Tertiary Butyl Ether (ETBE)	10 U	1,1,2,2-Tetrachloroethane	10 U
2-Butanone (MEK)	10 U	Bromobenzene	10 U
cis-1,2-Dichloroethene	39	1,2,3-Trichloropropane	10 U
2,2-Dichloropropane	10 U	n-Propylbenzene	10 U
Bromochloromethane	10 U	2-Chlorotoluene	10 U
Chloroform	10 U	1,3,5-Trimethylbenzene	10 U
1,1,1-Trichloroethane	10 U	4-Chlorotoluene	10 U
1,1-Dichloropropene	10 U	tert-Butylbenzene	25 U
Carbon tetrachloride	10 U	1,2,4-Trimethylbenzene	10 U
Benzene	10 U	sec-Butylbenzene	25 U
Tertiary Amyl Methyl Ether (TAME)	10 U	1,3-Dichlorobenzene	10 U
Tetrahydrofuran	10 U	p-Isopropyltoluene	25 U
1,2-Dichloroethane	10 U	1,4-Dichlorobenzene	10 U
Trichloroethene	660	n-Butylbenzene	25 U
1,2-Dichloropropane	10 U	1,2-Dibromo-3-chloropropane	10 U
Dibromomethane	10 U	1,2-Dichlorobenzene	10 U
1,4-Dioxane	500 U	1,2,4-Trichlorobenzene	25 U
Bromodichloromethane	10 U	Hexachlorobutadiene	10 U
Methyl isobutyl ketone (MIBK)	10 U	Naphthalene	25 U
		1,2,3-Trichlorobenzene	25 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	103	70-130
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **BRW-1R4**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-02**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	5	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	10 U	1,3-Dichloropropene, Total	10 U
Chloromethane	10 U	Toluene	10 U
Vinyl chloride	10 U	1,1,2-Trichloroethane	10 U
Bromomethane	10 U	2-Hexanone	10 U
Chloroethane	10 U	Tetrachloroethene	320
Trichlorofluoromethane	10 U	1,3-Dichloropropane	10 U
Diethyl ether	10 U	Dibromochloromethane	10 U
Acetone	25 U	1,2-Dibromoethane	10 U
1,1-Dichloroethene	10 U	Chlorobenzene	10 U
Carbon disulfide	10 U	1,1,1,2-Tetrachloroethane	10 U
Methylene chloride	25 U	Ethylbenzene	10 U
Methyl tert-butyl ether (MTBE)	10 U	Xylenes, Total	30 U
trans-1,2-Dichloroethene	10 U	Styrene	10 U
Diisopropyl Ether (DIPE)	10 U	Bromoform	10 U
1,1-Dichloroethane	12	Isopropylbenzene	25 U
Ethyl Tertiary Butyl Ether (ETBE)	10 U	1,1,2,2-Tetrachloroethane	10 U
2-Butanone (MEK)	10 U	Bromobenzene	10 U
cis-1,2-Dichloroethene	32	1,2,3-Trichloropropane	10 U
2,2-Dichloropropane	10 U	n-Propylbenzene	10 U
Bromochloromethane	10 U	2-Chlorotoluene	10 U
Chloroform	10 U	1,3,5-Trimethylbenzene	10 U
1,1,1-Trichloroethane	10 U	4-Chlorotoluene	10 U
1,1-Dichloropropene	10 U	tert-Butylbenzene	25 U
Carbon tetrachloride	10 U	1,2,4-Trimethylbenzene	10 U
Benzene	10 U	sec-Butylbenzene	25 U
Tertiary Amyl Methyl Ether (TAME)	10 U	1,3-Dichlorobenzene	10 U
Tetrahydrofuran	10 U	p-Isopropyltoluene	25 U
1,2-Dichloroethane	10 U	1,4-Dichlorobenzene	10 U
Trichloroethene	590	n-Butylbenzene	25 U
1,2-Dichloropropane	10 U	1,2-Dibromo-3-chloropropane	10 U
Dibromomethane	10 U	1,2-Dichlorobenzene	10 U
1,4-Dioxane	500 U	1,2,4-Trichlorobenzene	25 U
Bromodichloromethane	10 U	Hexachlorobutadiene	10 U
Methyl isobutyl ketone (MIBK)	10 U	Naphthalene	25 U
		1,2,3-Trichlorobenzene	25 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	103	70-130
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **EMW-11R1**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-03**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	10	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	20 U	1,3-Dichloropropene, Total	20 U
Chloromethane	20 U	Toluene	20 U
Vinyl chloride	20 U	1,1,2-Trichloroethane	20 U
Bromomethane	20 U	2-Hexanone	20 U
Chloroethane	20 U	Tetrachloroethene	830
Trichlorofluoromethane	20 U	1,3-Dichloropropane	20 U
Diethyl ether	20 U	Dibromochloromethane	20 U
Acetone	50 U	1,2-Dibromoethane	20 U
1,1-Dichloroethene	20 U	Chlorobenzene	20 U
Carbon disulfide	20 U	1,1,1,2-Tetrachloroethane	20 U
Methylene chloride	50 U	Ethylbenzene	20 U
Methyl tert-butyl ether (MTBE)	20 U	Xylenes, Total	60 U
trans-1,2-Dichloroethene	20 U	Styrene	20 U
Diisopropyl Ether (DIPE)	20 U	Bromoform	20 U
1,1-Dichloroethane	20 U	Isopropylbenzene	50 U
tert-Butyl Tertiary Butyl Ether (ETBE)	20 U	1,1,2,2-Tetrachloroethane	20 U
Butanone (MEK)	20 U	Bromobenzene	20 U
cis-1,2-Dichloroethene	23	1,2,3-Trichloropropane	20 U
2,2-Dichloropropane	20 U	n-Propylbenzene	20 U
Bromochloromethane	20 U	2-Chlorotoluene	20 U
Chloroform	20 U	1,3,5-Trimethylbenzene	20 U
1,1,1-Trichloroethane	20 U	4-Chlorotoluene	20 U
1,1-Dichloropropene	20 U	tert-Butylbenzene	50 U
Carbon tetrachloride	20 U	1,2,4-Trimethylbenzene	20 U
Benzene	20 U	sec-Butylbenzene	50 U
Tertiary Amyl Methyl Ether (TAME)	20 U	1,3-Dichlorobenzene	20 U
Tetrahydrofuran	20 U	p-Isopropyltoluene	50 U
1,2-Dichloroethane	20 U	1,4-Dichlorobenzene	20 U
Trichloroethene	1100	n-Butylbenzene	50 U
1,2-Dichloropropane	20 U	1,2-Dibromo-3-chloropropane	20 U
Dibromomethane	20 U	1,2-Dichlorobenzene	20 U
1,4-Dioxane	1000 U	1,2,4-Trichlorobenzene	50 U
Bromodichloromethane	20 U	Hexachlorobutadiene	20 U
Methyl isobutyl ketone (MIBK)	20 U	Naphthalene	50 U
		1,2,3-Trichlorobenzene	50 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	100	70-130
Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **EMW-11R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-04**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	20	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	40 U	1,3-Dichloropropene, Total	40 U
Chloromethane	40 U	Toluene	40 U
Vinyl chloride	58	1,1,2-Trichloroethane	40 U
Bromomethane	40 U	2-Hexanone	40 U
Chloroethane	40 U	Tetrachloroethene	250
Trichlorofluoromethane	40 U	1,3-Dichloropropane	40 U
Diethyl ether	40 U	Dibromochloromethane	40 U
Acetone	100 U	1,2-Dibromoethane	40 U
1,1-Dichloroethene	40 U	Chlorobenzene	40 U
Carbon disulfide	40 U	1,1,1,2-Tetrachloroethane	40 U
Methylene chloride	100 U	Ethylbenzene	40 U
Methyl tert-butyl ether (MTBE)	40 U	Xylenes, Total	120 U
trans-1,2-Dichloroethene	40 U	Styrene	40 U
Diisopropyl Ether (DIPE)	40 U	Bromoform	40 U
1,1-Dichloroethane	40 U	Isopropylbenzene	100 U
Ethyl Tertiary Butyl Ether (ETBE)	40 U	1,1,2,2-Tetrachloroethane	40 U
2-Butanone (MEK)	40 U	Bromobenzene	40 U
cis-1,2-Dichloroethene	250	1,2,3-Trichloropropane	40 U
2,2-Dichloropropane	40 U	n-Propylbenzene	40 U
Bromochloromethane	40 U	2-Chlorotoluene	40 U
Chloroform	40 U	1,3,5-Trimethylbenzene	40 U
1,1,1-Trichloroethane	40 U	4-Chlorotoluene	40 U
1,1-Dichloropropene	40 U	tert-Butylbenzene	100 U
Carbon tetrachloride	40 U	1,2,4-Trimethylbenzene	40 U
Benzene	40 U	sec-Butylbenzene	100 U
Tertiary Amyl Methyl Ether (TAME)	40 U	1,3-Dichlorobenzene	40 U
Tetrahydrofuran	40 U	p-Isopropyltoluene	100 U
1,2-Dichloroethane	40 U	1,4-Dichlorobenzene	40 U
Trichloroethene	2700	n-Butylbenzene	100 U
1,2-Dichloropropane	40 U	1,2-Dibromo-3-chloropropane	40 U
Dibromomethane	40 U	1,2-Dichlorobenzene	40 U
1,4-Dioxane	2000 U	1,2,4-Trichlorobenzene	100 U
Bromodichloromethane	40 U	Hexachlorobutadiene	40 U
Methyl isobutyl ketone (MIBK)	40 U	Naphthalene	100 U
		1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	103	70-130
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **GZA-105R**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-05**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	50	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	100 U	1,3-Dichloropropene, Total	100 U
Chloromethane	100 U	Toluene	100 U
Vinyl chloride	100 U	1,1,2-Trichloroethane	100 U
Bromomethane	100 U	2-Hexanone	100 U
Chloroethane	100 U	Tetrachloroethene	3500
Trichlorofluoromethane	100 U	1,3-Dichloropropane	100 U
Diethyl ether	100 U	Dibromochloromethane	100 U
Acetone	250 U	1,2-Dibromoethane	100 U
1,1-Dichloroethene	100 U	Chlorobenzene	100 U
Carbon disulfide	100 U	1,1,1,2-Tetrachloroethane	100 U
Methylene chloride	250 U	Ethylbenzene	100 U
Methyl tert-butyl ether (MTBE)	100 U	Xylenes, Total	300 U
trans-1,2-Dichloroethene	100 U	Styrene	100 U
Diisopropyl Ether (DIPE)	100 U	Bromoform	100 U
1,1-Dichloroethane	100 U	Isopropylbenzene	250 U
Ethyl Tertiary Butyl Ether (ETBE)	100 U	1,1,2,2-Tetrachloroethane	100 U
Butanone (MEK)	100 U	Bromobenzene	100 U
cis-1,2-Dichloroethene	100 U	1,2,3-Trichloropropane	100 U
2,2-Dichloropropane	100 U	n-Propylbenzene	100 U
Bromochloromethane	100 U	2-Chlorotoluene	100 U
Chloroform	100 U	1,3,5-Trimethylbenzene	100 U
1,1,1-Trichloroethane	100 U	4-Chlorotoluene	100 U
1,1-Dichloropropene	100 U	tert-Butylbenzene	250 U
Carbon tetrachloride	100 U	1,2,4-Trimethylbenzene	100 U
Benzene	100 U	sec-Butylbenzene	250 U
Tertiary Amyl Methyl Ether (TAME)	100 U	1,3-Dichlorobenzene	100 U
Tetrahydrofuran	100 U	p-Isopropyltoluene	250 U
1,2-Dichloroethane	100 U	1,4-Dichlorobenzene	100 U
Trichloroethene	4800	n-Butylbenzene	250 U
1,2-Dichloropropane	100 U	1,2-Dibromo-3-chloropropane	100 U
Dibromomethane	100 U	1,2-Dichlorobenzene	100 U
1,4-Dioxane	5000 U	1,2,4-Trichlorobenzene	250 U
Bromodichloromethane	100 U	Hexachlorobutadiene	100 U
Methyl isobutyl ketone (MIBK)	100 U	Naphthalene	250 U
		1,2,3-Trichlorobenzene	250 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-1R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-06**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	200	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	400 U	1,3-Dichloropropene, Total	400 U
Chloromethane	400 U	Toluene	400 U
Vinyl chloride	400 U	1,1,2-Trichloroethane	400 U
Bromomethane	400 U	2-Hexanone	400 U
Chloroethane	400 U	Tetrachloroethene	3000
Trichlorofluoromethane	400 U	1,3-Dichloropropane	400 U
Diethyl ether	400 U	Dibromochloromethane	400 U
Acetone	1000 U	1,2-Dibromoethane	400 U
1,1-Dichloroethene	400 U	Chlorobenzene	400 U
Carbon disulfide	400 U	1,1,1,2-Tetrachloroethane	400 U
Methylene chloride	1000 U	Ethylbenzene	400 U
Methyl tert-butyl ether (MTBE)	400 U	Xylenes, Total	1200 U
trans-1,2-Dichloroethene	400 U	Styrene	400 U
Diisopropyl Ether (DIPE)	400 U	Bromoform	400 U
1,1-Dichloroethane	400 U	Isopropylbenzene	1000 U
Ethyl Tertiary Butyl Ether (ETBE)	400 U	1,1,2,2-Tetrachloroethane	400 U
2-Butanone (MEK)	400 U	Bromobenzene	400 U
cis-1,2-Dichloroethene	400 U	1,2,3-Trichloropropane	400 U
2,2-Dichloropropane	400 U	n-Propylbenzene	400 U
Bromochloromethane	400 U	2-Chlorotoluene	400 U
Chloroform	400 U	1,3,5-Trimethylbenzene	400 U
1,1,1-Trichloroethane	400 U	4-Chlorotoluene	400 U
1,1-Dichloropropene	400 U	tert-Butylbenzene	1000 U
Carbon tetrachloride	400 U	1,2,4-Trimethylbenzene	400 U
Benzene	400 U	sec-Butylbenzene	1000 U
Tertiary Amyl Methyl Ether (TAME)	400 U	1,3-Dichlorobenzene	400 U
Tetrahydrofuran	400 U	p-Isopropyltoluene	1000 U
1,2-Dichloroethane	400 U	1,4-Dichlorobenzene	400 U
Trichloroethene	14000	n-Butylbenzene	1000 U
1,2-Dichloropropane	400 U	1,2-Dibromo-3-chloropropane	400 U
Dibromomethane	400 U	1,2-Dichlorobenzene	400 U
1,4-Dioxane	20000 U	1,2,4-Trichlorobenzene	1000 U
Bromodichloromethane	400 U	Hexachlorobutadiene	400 U
Methyl isobutyl ketone (MIBK)	400 U	Naphthalene	1000 U
		1,2,3-Trichlorobenzene	1000 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	105	70-130
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-2R1**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-07**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	20	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	40 U	1,3-Dichloropropene, Total	40 U
Chloromethane	40 U	Toluene	40 U
Vinyl chloride	40 U	1,1,2-Trichloroethane	40 U
Bromomethane	40 U	2-Hexanone	40 U
Chloroethane	40 U	Tetrachloroethene	660
Trichlorofluoromethane	40 U	1,3-Dichloropropane	40 U
Diethyl ether	40 U	Dibromochloromethane	40 U
Acetone	100 U	1,2-Dibromoethane	40 U
1,1-Dichloroethene	40 U	Chlorobenzene	40 U
Carbon disulfide	40 U	1,1,1,2-Tetrachloroethane	40 U
Methylene chloride	100 U	Ethylbenzene	40 U
Methyl tert-butyl ether (MTBE)	40 U	Xylenes, Total	120 U
trans-1,2-Dichloroethene	40 U	Styrene	40 U
Diisopropyl Ether (DIPE)	40 U	Bromoform	40 U
1,1-Dichloroethane	84	Isopropylbenzene	100 U
Methyl Tertiary Butyl Ether (ETBE)	40 U	1,1,2,2-Tetrachloroethane	40 U
Butanone (MEK)	40 U	Bromobenzene	40 U
cis-1,2-Dichloroethene	40 U	1,2,3-Trichloropropane	40 U
2,2-Dichloropropane	40 U	n-Propylbenzene	40 U
Bromochloromethane	40 U	2-Chlorotoluene	40 U
Chloroform	40 U	1,3,5-Trimethylbenzene	40 U
1,1,1-Trichloroethane	40 U	4-Chlorotoluene	40 U
1,1-Dichloropropene	40 U	tert-Butylbenzene	100 U
Carbon tetrachloride	40 U	1,2,4-Trimethylbenzene	40 U
Benzene	40 U	sec-Butylbenzene	100 U
Tertiary Amyl Methyl Ether (TAME)	40 U	1,3-Dichlorobenzene	40 U
Tetrahydrofuran	40 U	p-Isopropyltoluene	100 U
1,2-Dichloroethane	40 U	1,4-Dichlorobenzene	40 U
Trichloroethene	2200	n-Butylbenzene	100 U
1,2-Dichloropropane	40 U	1,2-Dibromo-3-chloropropane	40 U
Dibromomethane	40 U	1,2-Dichlorobenzene	40 U
1,4-Dioxane	2000 U	1,2,4-Trichlorobenzene	100 U
Bromodichloromethane	40 U	Hexachlorobutadiene	40 U
Methyl isobutyl ketone (MIBK)	40 U	Naphthalene	100 U
		1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-2R3**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-08**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	20	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	40 U	1,3-Dichloropropene, Total	40 U
Chloromethane	40 U	Toluene	40 U
Vinyl chloride	40 U	1,1,2-Trichloroethane	40 U
Bromomethane	40 U	2-Hexanone	40 U
Chloroethane	40 U	Tetrachloroethene	340
Trichlorofluoromethane	40 U	1,3-Dichloropropane	40 U
Diethyl ether	40 U	Dibromochloromethane	40 U
Acetone	100 U	1,2-Dibromoethane	40 U
1,1-Dichloroethene	40 U	Chlorobenzene	40 U
Carbon disulfide	40 U	1,1,1,2-Tetrachloroethane	40 U
Methylene chloride	100 U	Ethylbenzene	40 U
Methyl tert-butyl ether (MTBE)	40 U	Xylenes, Total	120 U
trans-1,2-Dichloroethene	40 U	Styrene	40 U
Diisopropyl Ether (DIPE)	40 U	Bromoform	40 U
1,1-Dichloroethane	120	Isopropylbenzene	100 U
Ethyl Tertiary Butyl Ether (ETBE)	40 U	1,1,2,2-Tetrachloroethane	40 U
2-Butanone (MEK)	40 U	Bromobenzene	40 U
cis-1,2-Dichloroethene	49	1,2,3-Trichloropropane	40 U
2,2-Dichloropropane	40 U	n-Propylbenzene	40 U
Bromochloromethane	40 U	2-Chlorotoluene	40 U
Chloroform	40 U	1,3,5-Trimethylbenzene	40 U
1,1,1-Trichloroethane	40 U	4-Chlorotoluene	40 U
1,1-Dichloropropene	40 U	tert-Butylbenzene	100 U
Carbon tetrachloride	40 U	1,2,4-Trimethylbenzene	40 U
Benzene	40 U	sec-Butylbenzene	100 U
Tertiary Amyl Methyl Ether (TAME)	40 U	1,3-Dichlorobenzene	40 U
Tetrahydrofuran	40 U	p-Isopropyltoluene	100 U
1,2-Dichloroethane	40 U	1,4-Dichlorobenzene	40 U
Trichloroethene	2700	n-Butylbenzene	100 U
1,2-Dichloropropane	40 U	1,2-Dibromo-3-chloropropane	40 U
Dibromomethane	40 U	1,2-Dichlorobenzene	40 U
1,4-Dioxane	2000 U	1,2,4-Trichlorobenzene	100 U
Bromodichloromethane	40 U	Hexachlorobutadiene	40 U
Methyl isobutyl ketone (MIBK)	40 U	Naphthalene	100 U
		1,2,3-Trichlorobenzene	100 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	105	70-130
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-4R1**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-10**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	10	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	20 U	1,3-Dichloropropene, Total	20 U
Chloromethane	20 U	Toluene	20 U
Vinyl chloride	20 U	1,1,2-Trichloroethane	20 U
Bromomethane	20 U	2-Hexanone	20 U
Chloroethane	20 U	Tetrachloroethene	180
Trichlorofluoromethane	20 U	1,3-Dichloropropane	20 U
Diethyl ether	20 U	Dibromochloromethane	20 U
Acetone	50 U	1,2-Dibromoethane	20 U
1,1-Dichloroethene	20 U	Chlorobenzene	20 U
Carbon disulfide	20 U	1,1,1,2-Tetrachloroethane	20 U
Methylene chloride	50 U	Ethylbenzene	20 U
Methyl tert-butyl ether (MTBE)	20 U	Xylenes, Total	60 U
trans-1,2-Dichloroethene	20 U	Styrene	20 U
Diisopropyl Ether (DIPE)	20 U	Bromoform	20 U
1,1-Dichloroethane	30	Isopropylbenzene	50 U
Ethyl Tertiary Butyl Ether (ETBE)	20 U	1,1,2,2-Tetrachloroethane	20 U
Butanone (MEK)	20 U	Bromobenzene	20 U
cis-1,2-Dichloroethene	30	1,2,3-Trichloropropane	20 U
2,2-Dichloropropane	20 U	n-Propylbenzene	20 U
Bromochloromethane	20 U	2-Chlorotoluene	20 U
Chloroform	20 U	1,3,5-Trimethylbenzene	20 U
1,1,1-Trichloroethane	20 U	4-Chlorotoluene	20 U
1,1-Dichloropropene	20 U	tert-Butylbenzene	50 U
Carbon tetrachloride	20 U	1,2,4-Trimethylbenzene	20 U
Benzene	20 U	sec-Butylbenzene	50 U
Tertiary Amyl Methyl Ether (TAME)	20 U	1,3-Dichlorobenzene	20 U
Tetrahydrofuran	20 U	p-Isopropyltoluene	50 U
1,2-Dichloroethane	20 U	1,4-Dichlorobenzene	20 U
Trichloroethene	1000	n-Butylbenzene	50 U
1,2-Dichloropropane	20 U	1,2-Dibromo-3-chloropropane	20 U
Dibromomethane	20 U	1,2-Dichlorobenzene	20 U
1,4-Dioxane	1000 U	1,2,4-Trichlorobenzene	50 U
Bromodichloromethane	20 U	Hexachlorobutadiene	20 U
Methyl isobutyl ketone (MIBK)	20 U	Naphthalene	50 U
		1,2,3-Trichlorobenzene	50 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	106	70-130
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	93	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-3R2**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-09**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	50	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	100 U	1,3-Dichloropropene, Total	100 U
Chloromethane	100 U	Toluene	100 U
Vinyl chloride	100 U	1,1,2-Trichloroethane	100 U
Bromomethane	100 U	2-Hexanone	100 U
Chloroethane	100 U	Tetrachloroethene	1300
Trichlorofluoromethane	100 U	1,3-Dichloropropane	100 U
Diethyl ether	100 U	Dibromochloromethane	100 U
Acetone	250 U	1,2-Dibromoethane	100 U
1,1-Dichloroethene	100 U	Chlorobenzene	100 U
Carbon disulfide	100 U	1,1,1,2-Tetrachloroethane	100 U
Methylene chloride	250 U	Ethylbenzene	100 U
Methyl tert-butyl ether (MTBE)	100 U	Xylenes, Total	300 U
trans-1,2-Dichloroethene	100 U	Styrene	100 U
Diisopropyl Ether (DIPE)	100 U	Bromoform	100 U
1,1-Dichloroethane	110	Isopropylbenzene	250 U
Ethyl Tertiary Butyl Ether (ETBE)	100 U	1,1,2,2-Tetrachloroethane	100 U
2-Butanone (MEK)	100 U	Bromobenzene	100 U
cis-1,2-Dichloroethene	100 U	1,2,3-Trichloropropane	100 U
2,2-Dichloropropane	100 U	n-Propylbenzene	100 U
Bromochloromethane	100 U	2-Chlorotoluene	100 U
Chloroform	100 U	1,3,5-Trimethylbenzene	100 U
1,1,1-Trichloroethane	100 U	4-Chlorotoluene	100 U
1,1-Dichloropropene	100 U	tert-Butylbenzene	250 U
Carbon tetrachloride	100 U	1,2,4-Trimethylbenzene	100 U
Benzene	100 U	sec-Butylbenzene	250 U
Tertiary Amyl Methyl Ether (TAME)	100 U	1,3-Dichlorobenzene	100 U
Tetrahydrofuran	100 U	p-Isopropyltoluene	250 U
1,2-Dichloroethane	100 U	1,4-Dichlorobenzene	100 U
Trichloroethene	4100	n-Butylbenzene	250 U
1,2-Dichloropropane	100 U	1,2-Dibromo-3-chloropropane	100 U
Dibromomethane	100 U	1,2-Dichlorobenzene	100 U
1,4-Dioxane	5000 U	1,2,4-Trichlorobenzene	250 U
Bromodichloromethane	100 U	Hexachlorobutadiene	100 U
Methyl isobutyl ketone (MIBK)	100 U	Naphthalene	250 U
		1,2,3-Trichlorobenzene	250 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	105	70-130
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **IP-4R3**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-11**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/30/04	5	5	50	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	100 U	1,3-Dichloropropene, Total	100 U
Chloromethane	100 U	Toluene	100 U
Vinyl chloride	100 U	1,1,2-Trichloroethane	100 U
Bromomethane	100 U	2-Hexanone	100 U
Chloroethane	100 U	Tetrachloroethene	1000
Trichlorofluoromethane	100 U	1,3-Dichloropropane	100 U
Diethyl ether	100 U	Dibromochloromethane	100 U
Acetone	250 U	1,2-Dibromoethane	100 U
1,1-Dichloroethene	100 U	Chlorobenzene	100 U
Carbon disulfide	100 U	1,1,1,2-Tetrachloroethane	100 U
Methylene chloride	250 U	Ethylbenzene	100 U
Methyl tert-butyl ether (MTBE)	100 U	Xylenes, Total	300 U
trans-1,2-Dichloroethene	100 U	Styrene	100 U
Diisopropyl Ether (DIPE)	100 U	Bromoform	100 U
1,1-Dichloroethane	110	Isopropylbenzene	250 U
tert-Butyl Tertiary Butyl Ether (ETBE)	100 U	1,1,2,2-Tetrachloroethane	100 U
Butanone (MEK)	100 U	Bromobenzene	100 U
cis-1,2-Dichloroethene	100 U	1,2,3-Trichloropropane	100 U
2,2-Dichloropropane	100 U	n-Propylbenzene	100 U
Bromochloromethane	100 U	2-Chlorotoluene	100 U
Chloroform	100 U	1,3,5-Trimethylbenzene	100 U
1,1,1-Trichloroethane	100 U	4-Chlorotoluene	100 U
1,1-Dichloropropene	100 U	tert-Butylbenzene	250 U
Carbon tetrachloride	100 U	1,2,4-Trimethylbenzene	100 U
Benzene	100 U	sec-Butylbenzene	250 U
Tertiary Amyl Methyl Ether (TAME)	100 U	1,3-Dichlorobenzene	100 U
Tetrahydrofuran	100 U	p-Isopropyltoluene	250 U
1,2-Dichloroethane	100 U	1,4-Dichlorobenzene	100 U
Trichloroethene	4100	n-Butylbenzene	250 U
1,2-Dichloropropane	100 U	1,2-Dibromo-3-chloropropane	100 U
Dibromomethane	100 U	1,2-Dichlorobenzene	100 U
1,4-Dioxane	5000 U	1,2,4-Trichlorobenzene	250 U
Bromodichloromethane	100 U	Hexachlorobutadiene	100 U
Methyl isobutyl ketone (MIBK)	100 U	Naphthalene	250 U
		1,2,3-Trichlorobenzene	250 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	104	70-130
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
Bromofluorobenzene	95	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Trip Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-20**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/26/04	03/26/04	03/30/04	5	5	1	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	2.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	5.0 U
Ethyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
2-Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	5.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	5.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	5.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	5.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	2.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	100 U	1,2,4-Trichlorobenzene	5.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	2.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	5.0 U
		1,2,3-Trichlorobenzene	5.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	101	70-130
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form I Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **VW033004B06**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/30/04	5	5	1	MLR

Parameter	Result	Parameter	Result
Dichlorodifluoromethane	2.0 U	1,3-Dichloropropene, Total	2.0 U
Chloromethane	2.0 U	Toluene	2.0 U
Vinyl chloride	2.0 U	1,1,2-Trichloroethane	2.0 U
Bromomethane	2.0 U	2-Hexanone	2.0 U
Chloroethane	2.0 U	Tetrachloroethene	2.0 U
Trichlorofluoromethane	2.0 U	1,3-Dichloropropane	2.0 U
Diethyl ether	2.0 U	Dibromochloromethane	2.0 U
Acetone	5.0 U	1,2-Dibromoethane	2.0 U
1,1-Dichloroethene	2.0 U	Chlorobenzene	2.0 U
Carbon disulfide	2.0 U	1,1,1,2-Tetrachloroethane	2.0 U
Methylene chloride	5.0 U	Ethylbenzene	2.0 U
Methyl tert-butyl ether (MTBE)	2.0 U	Xylenes, Total	6.0 U
trans-1,2-Dichloroethene	2.0 U	Styrene	2.0 U
Diisopropyl Ether (DIPE)	2.0 U	Bromoform	2.0 U
1,1-Dichloroethane	2.0 U	Isopropylbenzene	5.0 U
tert-Butyl Tertiary Butyl Ether (ETBE)	2.0 U	1,1,2,2-Tetrachloroethane	2.0 U
Butanone (MEK)	2.0 U	Bromobenzene	2.0 U
cis-1,2-Dichloroethene	2.0 U	1,2,3-Trichloropropane	2.0 U
2,2-Dichloropropane	2.0 U	n-Propylbenzene	2.0 U
Bromochloromethane	2.0 U	2-Chlorotoluene	2.0 U
Chloroform	2.0 U	1,3,5-Trimethylbenzene	2.0 U
1,1,1-Trichloroethane	2.0 U	4-Chlorotoluene	2.0 U
1,1-Dichloropropene	2.0 U	tert-Butylbenzene	5.0 U
Carbon tetrachloride	2.0 U	1,2,4-Trimethylbenzene	2.0 U
Benzene	2.0 U	sec-Butylbenzene	5.0 U
Tertiary Amyl Methyl Ether (TAME)	2.0 U	1,3-Dichlorobenzene	2.0 U
Tetrahydrofuran	2.0 U	p-Isopropyltoluene	5.0 U
1,2-Dichloroethane	2.0 U	1,4-Dichlorobenzene	2.0 U
Trichloroethene	2.0 U	n-Butylbenzene	5.0 U
1,2-Dichloropropane	2.0 U	1,2-Dibromo-3-chloropropane	2.0 U
Dibromomethane	2.0 U	1,2-Dichlorobenzene	2.0 U
1,4-Dioxane	100 U	1,2,4-Trichlorobenzene	5.0 U
Bromodichloromethane	2.0 U	Hexachlorobutadiene	2.0 U
Methyl isobutyl ketone (MIBK)	2.0 U	Naphthalene	5.0 U
		1,2,3-Trichlorobenzene	5.0 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	99	70-130
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
Bromofluorobenzene	100	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable



Form III Spike Recovery Summary Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **See Below**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/30/04	5	5	1	MLR

Lab ID: **VW033004B06VW033004BS10 VW033004BSD10**

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD Limit	% Recovery Limits
			Conc.	% Recovery	Conc.	% Recovery			
Dichlorodifluoromethane	2.0	U	21	103	19	96	8	20	70-130
Chloromethane	2.0	U	20	101	18	90	11	20	70-130
Vinyl chloride	2.0	U	21	106	19	96	10	20	70-130
Bromomethane	2.0	U	15	73	15	76	4	20	70-130
Chloroethane	2.0	U	22	110	21	104	6	20	70-130
Trichlorofluoromethane	2.0	U	26	127	24	121	5	20	70-130
Diethyl ether	2.0	U	22	109	21	104	5	20	70-130
Acetone	5.0	U	19	94	19	93	1	20	70-130
1,1-Dichloroethene	2.0	U	20	99	19	94	6	20	70-130
Carbon disulfide	2.0	U	19	95	18	91	4	20	70-130
Methylene chloride	5.0	U	19	96	18	91	6	20	70-130
Methyl tert-butyl ether (MTBE)	2.0	U	20	98	19	95	3	20	70-130
trans-1,2-Dichloroethene	2.0	U	19	96	18	89	8	20	70-130
Diisopropyl Ether (DIPE)	2.0	U	20	100	19	96	4	20	70-130
1,1-Dichloroethane	2.0	U	20	98	18	93	5	20	70-130
Ethyl Tertiary Butyl Ether (ETBE)	2.0	U	21	104	20	102	2	20	70-130
2-Butanone (MEK)	2.0	U	19	94	18	91	3	20	70-130
cis-1,2-Dichloroethene	2.0	U	20	99	19	94	5	20	70-130
2,2-Dichloropropane	2.0	U	20	100	19	94	6	20	70-130
Bromochloromethane	2.0	U	20	101	20	100	1	20	70-130
Chloroform	2.0	U	20	98	19	95	4	20	70-130
1,1,1-Trichloroethane	2.0	U	20	100	19	95	5	20	70-130
1,1-Dichloropropene	2.0	U	20	101	19	95	6	20	70-130
Carbon tetrachloride	2.0	U	21	104	20	98	6	20	70-130
Benzene	2.0	U	20	99	18	93	7	20	70-130
Tertiary Amyl Methyl Ether (TAME)	2.0	U	21	107	21	104	2	20	70-130
Tetrahydrofuran	2.0	U	21	105	21	106	1	20	70-130
1,2-Dichloroethane	2.0	U	20	99	19	97	2	20	70-130
Trichloroethene	2.0	U	20	102	20	98	4	20	70-130
1,2-Dichloropropane	2.0	U	21	104	20	100	3	20	70-130
Dibromomethane	2.0	U	21	103	20	101	2	20	70-130
1,4-Dioxane	100	U	170	87	150	73	18	20	70-130
Bromodichloromethane	2.0	U	21	103	20	100	3	20	70-130



Form III Spike Recovery Summary Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **See Below**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/30/04	5	5	1	MLR

Lab ID: **VW033004B06VW033004BS10 VW033004BSD10**

Parameter	Blank		LCS		LCSD		% RPD	RPD Limit	% Recovery Limits
	Conc.	U	Conc.	% Recovery	Conc.	% Recovery			
Methyl isobutyl ketone (MIBK)	2.0	U	19	95	19	95	1	20	70-130
1,3-Dichloropropene, Total	2.0	U	41	102	40	99	3	20	70-130
Toluene	2.0	U	21	103	20	98	5	20	70-130
1,1,2-Trichloroethane	2.0	U	20	103	21	103	0	20	70-130
2-Hexanone	2.0	U	20	99	19	96	3	20	70-130
Tetrachloroethene	2.0	U	21	105	20	101	4	20	70-130
1,3-Dichloropropane	2.0	U	21	103	21	103	0	20	70-130
Dibromochloromethane	2.0	U	20	102	20	101	0	20	70-130
1,2-Dibromoethane	2.0	U	20	103	21	103	1	20	70-130
Chlorobenzene	2.0	U	20	99	19	94	4	20	70-130
1,1,1,2-Tetrachloroethane	2.0	U	20	99	19	96	3	20	70-130
Ethylbenzene	2.0	U	20	101	19	96	5	20	70-130
Xylenes, Total	6.0	U	61	101	58	97	4	20	70-130
Benzene	2.0	U	20	99	19	95	5	20	70-130
Bromoform	2.0	U	20	102	20	100	2	20	70-130
Isopropylbenzene	5.0	U	20	97	18	92	6	20	70-130
1,1,2,2-Tetrachloroethane	2.0	U	20	100	20	100	0	20	70-130
Bromobenzene	2.0	U	20	101	20	97	4	20	70-130
1,2,3-Trichloropropane	2.0	U	20	102	20	102	0	20	70-130
n-Propylbenzene	2.0	U	21	103	20	97	6	20	70-130
2-Chlorotoluene	2.0	U	21	103	20	98	5	20	70-130
1,3,5-Trimethylbenzene	2.0	U	21	105	20	99	6	20	70-130
4-Chlorotoluene	2.0	U	20	102	20	100	3	20	70-130
tert-Butylbenzene	5.0	U	19	93	18	88	5	20	70-130
1,2,4-Trimethylbenzene	2.0	U	21	104	20	100	4	20	70-130
sec-Butylbenzene	5.0	U	20	97	18	92	6	20	70-130
1,3-Dichlorobenzene	2.0	U	20	102	20	98	4	20	70-130
p-Isopropyltoluene	5.0	U	19	96	18	92	4	20	70-130
1,4-Dichlorobenzene	2.0	U	20	102	20	98	4	20	70-130
n-Butylbenzene	5.0	U	19	95	18	91	4	20	70-130
1,2-Dibromo-3-chloropropane	2.0	U	20	100	20	98	2	20	70-130
1,2-Dichlorobenzene	2.0	U	20	101	19	97	4	20	70-130
1,2,4-Trichlorobenzene	5.0	U	19	96	18	90	6	20	70-130



Form III Spike Recovery Summary Volatile Organics by 8260

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **See Below**
 Associated Blank: **VW033004B06**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/30/04	5	5	1	MLR

Lab ID: **VW033004B06VW033004BS10 VW033004BSD10**

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD % Recovery	
			Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
Hexachlorobutadiene	2.0	U	23	114	20	100	13	20	70-130
Naphthalene	5.0	U	19	96	18	91	4	20	70-130
1,2,3-Trichlorobenzene	5.0	U	20	98	19	93	5	20	70-130

Surrogate	% Recovery		Acceptance Range (%)
Dibromofluoromethane	99	99	70-130
1,2-Dichloroethane-d4	99	99	70-130
Toluene-d8	101	103	70-130
4-Bromofluorobenzene	102	102	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

03/31/04 14:38

*Supporting Quality
Control Results*



**Form II
Surrogate Recovery
Volatile Organics by 8260**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**
Matrix: **Water**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
LCS	VW033004BS10	99	99	101	102
LCSD	VW033004BSD10	99	99	103	102
Blank	VW033004B06	99	102	98	100
Trip Blank	0403086-20	101	102	98	94
BRW-1R2	0403086-01	103	106	99	95
BRW-1R4	0403086-02	103	107	99	94
EMW-11R1	0403086-03	104	107	100	94
EMW-11R2	0403086-04	103	107	99	95
GZA-105R	0403086-05	104	106	99	95
IP-1R2	0403086-06	105	108	99	96
IP-2R1	0403086-07	104	107	99	93
IP-2R3	0403086-08	105	108	99	94
IP-3R2	0403086-09	105	108	98	95
IP-4R1	0403086-10	106	109	99	93
IP-4R3	0403086-11	104	108	99	95

N/A - Not Applicable

Surrogate	QC Limit
Dibromofluoromethane	70-130
1,2-Dichloroethane-d4	70-130
Toluene-d8	70-130
4-Bromofluorobenzene	70-130



Form IV
Method Blank Summary
Volatile Organics by 8260

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **VW033004B06**

Date Analyzed: **03/30/04 13:22**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Date/Time Analyzed
LCS	VW033004BS10	03/30/04 12:25
LCSD	VW033004BSD10	03/30/04 12:54
Trip Blank	0403086-20	03/30/04 13:51
BRW-1R2	0403086-01	03/30/04 16:43
BRW-1R4	0403086-02	03/30/04 17:12
EMW-11R1	0403086-03	03/30/04 17:40
EMW-11R2	0403086-04	03/30/04 18:09
GZA-105R	0403086-05	03/30/04 18:37
IP-1R2	0403086-06	03/30/04 19:06
IP-2R1	0403086-07	03/30/04 19:35
IP-2R3	0403086-08	03/30/04 20:03
IP-3R2	0403086-09	03/30/04 20:32
IP-4R1	0403086-10	03/30/04 21:01
IP-4R3	0403086-11	03/30/04 21:29

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260**

Client: TRC Environmental
Project: Former GE Site

Lab Code: MA00030

ETR: 0403086

Lab ID: T1032301

Case: N/A SDG: N/A

Date Analyzed: 03/23/04 15:09

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	21	32165	Pass
75	95	30	60	43.6	66909	Pass
95	95	100	100	100	153408	Pass
96	95	5	9	6.6	10101	Pass
173	174	0	2	0	0	Pass
174	95	50	100	72.7	111597	Pass
175	174	5	9	7.5	8327	Pass
176	174	95	101	96.8	108013	Pass
177	176	5	9	6.6	7133	Pass

Client ID	Lab ID	Date/Time Analyzed
Initial Calibration	I1032301	03/23/04 15:38
Initial Calibration	I1032302	03/23/04 16:07
Initial Calibration	I1032303	03/23/04 16:35
Initial Calibration	I1032304	03/23/04 17:04
Initial Calibration	I1032305	03/23/04 17:33
Initial Calibration	I1032306	03/23/04 18:01

N/A - Not Applicable



**Form V
Tune Summary
Volatile Organics by 8260**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **T1033001**

Case: **N/A** SDG: **N/A**

Date Analyzed: **03/30/04 11:27**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	20.5	29168	Pass
75	95	30	60	44	62405	Pass
95	95	100	100	100	141944	Pass
96	95	5	9	6.8	9685	Pass
173	174	0	2	0	0	Pass
174	95	50	100	75.1	106532	Pass
175	174	5	9	7.4	7892	Pass
176	174	95	101	95.2	101427	Pass
177	176	5	9	6.5	6614	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1033001	03/30/04 11:56
LCS	VW033004BS10	03/30/04 12:25
LCSD	VW033004BSD10	03/30/04 12:54
Blank	VW033004B06	03/30/04 13:22
Trip Blank	0403086-20	03/30/04 13:51
BRW-1R2	0403086-01	03/30/04 16:43
BRW-1R4	0403086-02	03/30/04 17:12
EMW-11R1	0403086-03	03/30/04 17:40
EMW-11R2	0403086-04	03/30/04 18:09
GZA-105R	0403086-05	03/30/04 18:37
IP-1R2	0403086-06	03/30/04 19:06
IP-2R1	0403086-07	03/30/04 19:35
IP-2R3	0403086-08	03/30/04 20:03
IP-3R2	0403086-09	03/30/04 20:32
IP-4R1	0403086-10	03/30/04 21:01
IP-4R3	0403086-11	03/30/04 21:29

N/A - Not Applicable



Form VI Initial Calibration Summary Volatile Organics by 8260

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
I1032301	03/23/04 15:38
I1032302	03/23/04 16:07
I1032303	03/23/04 16:35
I1032304	03/23/04 17:04
I1032305	03/23/04 17:33
I1032306	03/23/04 18:01

Parameter	Response Factors						Mean	% RSD
	2	5	20	50	100	200		
Dichlorodifluoromethane	0.52	0.60	0.79	0.82	0.79	0.74	0.71	16.8*
Chloromethane	0.50	0.50	0.57	0.66	0.67	0.69	0.60	14.4
Vinyl chloride	0.32	0.33	0.39	0.43	0.42	0.44	0.39	13.6
Bromomethane	0.58	0.49	0.42	0.24	0.13		0.37	48.8*
Chloroethane	0.16	0.16	0.18	0.19	0.16		0.17	8.3
Trichlorofluoromethane	0.63	0.65	0.78	0.78	0.70	0.57	0.69	12.2
Diethyl ether	0.21	0.19	0.22	0.24	0.24	0.24	0.22	9.1
Acetone		0.19	0.17	0.17	0.16	0.15	0.17	10.4
1,1-Dichloroethene	0.46	0.42	0.51	0.55	0.52	0.51	0.49	9.4
Carbon disulfide	0.75	0.80	0.90	0.96	0.91	0.95	0.88	9.9
Methylene chloride		0.28	0.29	0.31	0.29	0.28	0.29	3.6
Methyl tert-butyl ether (MTBE)	0.79	0.79	0.84	0.91	0.89	0.87	0.85	5.9
trans-1,2-Dichloroethene	0.41	0.38	0.42	0.45	0.43	0.42	0.42	5.7
Diisopropyl Ether (DIPE)	1.58	1.59	1.84	2.04	2.02	1.96	1.84	11.4
1,1-Dichloroethane	0.84	0.81	0.88	0.93	0.89	0.88	0.87	5.0
Ethyl Tertiary Butyl Ether (ETBE)	1.05	1.11	1.35	1.57	1.60	1.60	1.38	18.2*
2-Butanone (MEK)	0.33	0.36	0.38	0.42	0.43	0.42	0.39	9.7
cis-1,2-Dichloroethene	0.59	0.68	0.80	0.88	0.86	0.86	0.78	14.8
2,2-Dichloropropane	0.60	0.57	0.67	0.72	0.68	0.68	0.65	8.3
Bromochloromethane	0.31	0.31	0.34	0.36	0.33	0.31	0.33	6.3
Chloroform	0.93	0.87	0.96	1.05	0.99	0.98	0.96	6.3
1,1,1-Trichloroethane	0.68	0.68	0.77	0.82	0.78	0.77	0.75	8.0
1,1-Dichloropropene	0.59	0.55	0.64	0.69	0.66	0.67	0.63	8.2
Carbon tetrachloride	0.59	0.54	0.67	0.70	0.65	0.65	0.63	9.1
Benzene	1.59	1.60	1.78	1.98	1.89	1.88	1.79	9.0
Tertiary Amyl Methyl Ether (TAME) 90		1.00	1.22	1.40	1.40	1.39	1.22	18.0*
Tetrahydrofuran	0.15	0.16	0.19	0.21	0.22	0.22	0.19	16.4*
1,2-Dichloroethane	0.74	0.72	0.77	0.83	0.79	0.76	0.77	5.2
Trichloroethene	0.20	0.19	0.22	0.24	0.24	0.25	0.23	10.7
1,2-Dichloropropane	0.19	0.20	0.22	0.25	0.25	0.26	0.23	12.6
Dibromomethane	0.18	0.18	0.20	0.21	0.21	0.21	0.20	8.3
1,4-Dioxane		0.001	0.002	0.002	0.002	0.003	0.002	32.7*

N/A - Not Applicable

* - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
11032301	03/23/04 15:38
11032302	03/23/04 16:07
11032303	03/23/04 16:35
11032304	03/23/04 17:04
11032305	03/23/04 17:33
11032306	03/23/04 18:01

Parameter	Response Factors						Mean	% RSD
	2	5	20	50	100	200		
Bromodichloromethane	0.27	0.26	0.29	0.32	0.31	0.32	0.30	8.4
Methyl isobutyl ketone (MIBK)	0.22	0.28	0.34	0.41	0.41	0.41	0.35	23.3 ^a
cis-1,3-Dichloropropene	0.23	0.25	0.32	0.37	0.37	0.38	0.32	20.4 ^a
Toluene	0.40	0.40	0.48	0.53	0.51	0.53	0.48	12.9
trans-1,3-Dichloropropene	0.24	0.24	0.29	0.34	0.35	0.35	0.30	17.3 ^a
1,1,2-Trichloroethane	0.18	0.18	0.20	0.22	0.22	0.21	0.20	8.8
2-Hexanone	0.15	0.18	0.24	0.28	0.29	0.28	0.24	24.5 ^a
Tetrachloroethene	0.16	0.16	0.19	0.21	0.20	0.22	0.19	14.4
1,3-Dichloropropane	0.32	0.32	0.37	0.41	0.40	0.40	0.37	10.7
Dibromochloromethane	0.22	0.23	0.26	0.29	0.29	0.29	0.26	11.9
1,2-Dibromoethane	0.23	0.24	0.27	0.29	0.29	0.29	0.27	11.2
Chlorobenzene	0.72	0.69	0.78	0.84	0.81	0.84	0.78	8.1
1,1,1,2-Tetrachloroethane	0.26	0.25	0.29	0.31	0.30	0.32	0.29	9.3
Ethylbenzene	0.85	0.91	1.15	1.27	1.25	1.34	1.13	17.9
p/m-Xylene	0.29	0.32	0.43	0.48	0.46	0.50	0.41	21.6 ^a
o-Xylene	0.26	0.32	0.44	0.46	0.45	0.47	0.40	22.1 ^a
Styrene	0.43	0.55	0.75	0.82	0.81	0.87	0.70	24.7 ^a
Bromoform	0.18	0.18	0.22	0.24	0.24	0.24	0.22	13.3
Isopropylbenzene		0.60	0.94	1.05	1.04	1.12	0.95	21.5 ^a
1,1,2,2-Tetrachloroethane	0.41	0.43	0.46	0.46	0.43	0.42	0.43	4.1
Bromobenzene	0.23	0.24	0.28	0.31	0.30	0.32	0.28	13.2
1,2,3-Trichloropropane	0.30	0.32	0.33	0.33	0.31	0.31	0.32	4.2
n-Propylbenzene	0.71	0.79	1.11	1.21	1.18	1.28	1.05	22.6 ^a
2-Chlorotoluene	0.49	0.55	0.71	0.76	0.74	0.80	0.68	18.5 ^a
1,3,5-Trimethylbenzene	0.42	0.49	0.73	0.80	0.79	0.85	0.68	26.5 ^a
4-Chlorotoluene	0.53	0.59	0.73	0.78	0.77	0.83	0.71	17.1 ^a
tert-Butylbenzene		0.36	0.52	0.59	0.59	0.64	0.54	20.1 ^a
1,2,4-Trimethylbenzene	0.42	0.51	0.75	0.82	0.82	0.88	0.70	26.8 ^a
sec-Butylbenzene		0.50	0.76	0.85	0.84	0.93	0.78	21.5 ^a
1,3-Dichlorobenzene	0.33	0.37	0.46	0.49	0.49	0.53	0.45	17.3 ^a
p-Isopropyltoluene		0.38	0.61	0.70	0.70	0.78	0.63	24.4 ^a
1,4-Dichlorobenzene	0.33	0.36	0.46	0.49	0.50	0.53	0.45	17.9 ^a

N/A - Not Applicable

^a - Value outside of QC advisory limits.



Form VI Initial Calibration Summary Volatile Organics by 8260

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**

Case: **N/A** SDG: **N/A**

Lab ID	Date/Time Analyzed
I1032301	03/23/04 15:38
I1032302	03/23/04 16:07
I1032303	03/23/04 16:35
I1032304	03/23/04 17:04
I1032305	03/23/04 17:33
I1032306	03/23/04 18:01

Response Factors

Parameter	2	5	20	50	100	200	Mean	% RSD
n-Butylbenzene		0.29	0.50	0.57	0.59	0.66	0.52	26.9*
1,2-Dibromo-3-chloropropane	0.036	0.048	0.053	0.059	0.061	0.064	0.054	19.3*
1,2-Dichlorobenzene	0.34	0.35	0.43	0.47	0.47	0.50	0.43	15.7*
1,2,4-Trichlorobenzene		0.12	0.17	0.22	0.23	0.25	0.20	25.1*
Hexachlorobutadiene	0.043	0.044	0.062	0.067	0.068	0.075	0.060	22.5*
Naphthalene		0.35	0.56	0.70	0.76	0.82	0.64	29.6*
1,2,3-Trichlorobenzene		0.13	0.18	0.20	0.21	0.23	0.19	20.6*
Dibromofluoromethane	0.78	0.78	0.77	0.77	0.75	0.72	0.76	2.8
1,2-Dichloroethane-d4	0.78	0.78	0.78	0.78	0.75	0.71	0.76	3.6
Toluene-d8	0.91	0.93	0.94	0.95	0.95	0.95	0.94	1.6
4-Bromofluorobenzene	0.44	0.45	0.46	0.45	0.44	0.44	0.45	1.7
Average RSD								14.6

N/A - Not Applicable

* - Value outside of QC advisory limits.



**Form VII
Calibration Verification
Volatile Organics by 8260**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**
Lab ID: **C1033001**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	0.71	0.80	12.6	30
Chloromethane	0.60	0.53	10.9	30
Vinyl chloride	0.39	0.37	4.2	20
Bromomethane	0.37	0.29	21.8	30
Chloroethane	0.17	0.17	2.0	30
Trichlorofluoromethane	0.69	0.74	8.6	30
Diethyl ether	0.22	0.22	1.1	30
Acetone	0.17	0.16	4.4	30
1,1-Dichloroethene	0.49	0.50	0.6	20
Carbon disulfide	0.88	0.92	4.3	30
Methylene chloride	0.29	0.28	4.7	30
Methyl tert-butyl ether (MTBE)	0.85	0.87	2.1	30
trans-1,2-Dichloroethene	0.42	0.42	0.8	30
Diisopropyl Ether (DIPE)	1.84	1.83	0.6	30
1,1-Dichloroethane	0.87	0.84	4.1	30
Ethyl Tertiary Butyl Ether (ETBE)	1.38	1.47	6.3	30
2-Butanone (MEK)	0.39	0.40	2.0	30
cis-1,2-Dichloroethene	0.78	0.83	6.4	30
2,2-Dichloropropane	0.65	0.70	7.4	30
Bromochloromethane	0.33	0.35	8.0	30
Chloroform	0.96	0.98	2.0	20
1,1,1-Trichloroethane	0.75	0.80	6.7	30
1,1-Dichloropropene	0.63	0.67	6.2	30
Carbon tetrachloride	0.63	0.68	7.6	30
Benzene	1.79	1.85	3.3	30
Tertiary Amyl Methyl Ether (TAME)	1.22	1.35	10.6	30
Tetrahydrofuran	0.19	0.20	6.1	30
1,2-Dichloroethane	0.77	0.82	5.6	30
Trichloroethene	0.23	0.25	9.0	30
1,2-Dichloropropane	0.23	0.25	9.6	20
Dibromomethane	0.20	0.22	11.4	30
1,4-Dioxane	0.002	0.002	15.8	30
Bromodichloromethane	0.30	0.32	8.8	30
Methyl isobutyl ketone (MIBK)	0.35	0.44	25.8	30
cis-1,3-Dichloropropene	0.32	0.37	16.4	30
Toluene	0.48	0.53	11.4	20
trans-1,3-Dichloropropene	0.30	0.35	16.9	30
1,1,2-Trichloroethane	0.20	0.23	13.0	30

N/A - Not Applicable



Form VII Calibration Verification Volatile Organics by 8260

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**
Lab ID: **C1033001**

Case: **N/A** SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
2-Hexanone	0.24	0.31	29.2	30
Tetrachloroethene	0.19	0.22	14.7	30
1,3-Dichloropropane	0.37	0.41	11.5	30
Dibromochloromethane	0.26	0.30	15.7	30
1,2-Dibromoethane	0.27	0.31	15.9	30
Chlorobenzene	0.78	0.82	5.6	30
1,1,1,2-Tetrachloroethane	0.29	0.31	7.3	30
Ethylbenzene	1.13	1.23	9.3	20
p/m-Xylene	0.41	0.47	13.1	30
o-Xylene	0.40	0.44	10.5	30
Styrene	0.70	0.79	12.8	30
Bromoform	0.22	0.24	12.5	30
Isopropylbenzene	0.95	1.05	10.5	30
1,1,2,2-Tetrachloroethane	0.43	0.46	5.7	30
Bromobenzene	0.28	0.30	8.9	30
1,2,3-Trichloropropane	0.32	0.34	5.9	30
n-Propylbenzene	1.05	1.18	13.0	30
2-Chlorotoluene	0.68	0.75	11.2	30
1,3,5-Trimethylbenzene	0.68	0.79	16.4	30
1-Chlorotoluene	0.71	0.79	11.2	30
tert-Butylbenzene	0.54	0.58	7.6	30
1,2,4-Trimethylbenzene	0.70	0.80	15.2	30
sec-Butylbenzene	0.78	0.83	6.8	30
1,3-Dichlorobenzene	0.45	0.48	8.3	30
p-Isopropyltoluene	0.63	0.68	7.9	30
1,4-Dichlorobenzene	0.45	0.49	10.4	30
n-Butylbenzene	0.52	0.56	7.6	30
1,2-Dibromo-3-chloropropane	0.054	0.061	13.5	30
1,2-Dichlorobenzene	0.43	0.47	8.9	30
1,2,4-Trichlorobenzene	0.20	0.21	5.4	30
Hexachlorobutadiene	0.060	0.064	6.6	30
Naphthalene	0.64	0.68	7.1	30
1,2,3-Trichlorobenzene	0.19	0.20	3.3	30
Dibromofluoromethane	0.76	0.75	0.9	30
1,2-Dichloroethane-d4	0.76	0.76	0.9	30
Toluene-d8	0.94	0.98	3.9	30
4-Bromofluorobenzene	0.45	0.46	2.2	30
Average % D			8.8	

N/A - Not Applicable



Form VIII Internal Standard Summary Volatile Organics by 8260

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **C1033001**

Case: **N/A** SDG: **N/A**

	Client ID	Lab ID	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5	
			Area	RT	Area	RT	Area	RT
Standard:			610582	6.35	1375065	7.13	1058845	11.49
Upper Limit:			1221164	6.85	2750130	7.63	2117690	11.99
Lower Limit:			305291	5.85	687532	6.63	529422	10.99
LCS	VW033004BS10	622209	6.34	1421673	7.14	1060399	11.49	
LCSD	VW033004BSD10	624763	6.35	1411804	7.14	1068684	11.49	
Blank	VW033004B06	609936	6.35	1400000	7.14	1026327	11.49	
Trip Blank	0403086-20	586422	6.35	1343862	7.14	992140	11.50	
BRW-1R2	0403086-01	535553	6.35	1222422	7.14	921466	11.50	
BRW-1R4	0403086-02	524838	6.36	1202289	7.15	915336	11.50	
EMW-11R1	0403086-03	516435	6.35	1196192	7.14	908173	11.50	
EMW-11R2	0403086-04	519529	6.35	1193608	7.15	900524	11.50	
GZA-105R	0403086-05	515721	6.35	1184024	7.14	905008	11.50	
IP-1R2	0403086-06	507960	6.36	1175842	7.14	896311	11.50	
IP-2R1	0403086-07	508259	6.36	1168404	7.14	889090	11.50	
IP-2R3	0403086-08	507027	6.35	1173875	7.15	879690	11.50	
IP-3R2	0403086-09	502532	6.35	1173777	7.15	882018	11.50	
IP-4R1	0403086-10	502602	6.36	1168006	7.14	884645	11.50	
IP-4R3	0403086-11	503241	6.36	1161202	7.14	874619	11.50	

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.

Area Lower Limit = -50% of internal standard.

RT = Retention Time.

RT Upper Limit = +0.5 minutes of internal standard RT.

RT Lower Limit = -0.5 minutes of internal standard RT.

**VOLATILE PETROLEUM
HYDROCARBONS (VPH)**



Form I Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **TRC-104**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-12**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/26/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	100 U
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	70 U
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	100 U

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	5.0 U
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	5.0 U
p/m-Xylene	C ₉ - C ₁₂	20 U
o-Xylene	C ₉ - C ₁₂	10 U
Naphthalene	N/A	10 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	104	99	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **TRC-106**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-13**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	250
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	120
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	380

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	5.0 U
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	7.8
p/m-Xylene	C ₉ - C ₁₂	20 U
o-Xylene	C ₉ - C ₁₂	10 U
Naphthalene	N/A	10 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
I,4-Difluorobenzene	103	99	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-4S**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-14**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/26/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	380
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	4400
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	1200
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	430
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	6800

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	6.6
Benzene	C ₅ - C ₈	27
Toluene	C ₅ - C ₈	16
Ethylbenzene	C ₉ - C ₁₂	170
p/m-Xylene	C ₉ - C ₁₂	930 E
o-Xylene	C ₉ - C ₁₂	49
Naphthalene	N/A	29

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	115	115	70-130

E - Estimated value, exceeds the upper limit of calibration.
 N/A - Not Applicable



Form I Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-4S**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-14E**
 Associated Blank: **HW040104B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/26/04	03/26/04	04/01/04	5	5	2	MLB

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	480 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	3300
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	1000
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	480 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	5300

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	10 U
Benzene	C ₅ - C ₈	22
Toluene	C ₅ - C ₈	30 U
Ethylbenzene	C ₉ - C ₁₂	140
p/m-Xylene	C ₉ - C ₁₂	800
o-Xylene	C ₉ - C ₁₂	36
Naphthalene	N/A	20 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	100	108	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-7**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-15**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/26/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	130
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	70 U
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	130

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	19
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	5.0 U
p/m-Xylene	C ₉ - C ₁₂	20 U
o-Xylene	C ₉ - C ₁₂	10 U
Naphthalene	N/A	10 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	104	100	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-8**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-16**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	2300
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	840
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	3800

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	5.0 U
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	5.0 U
p/m-Xylene	C ₉ - C ₁₂	540
o-Xylene	C ₉ - C ₁₂	50
Naphthalene	N/A	15

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	119	122	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-8(pp)**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-17**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	460
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	3900
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	1400
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	480
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	6200

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	13
Benzene	C ₅ - C ₈	8.3
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	52
p/m-Xylene	C ₉ - C ₁₂	780
o-Xylene	C ₉ - C ₁₂	66
Naphthalene	N/A	27

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	113	118	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-9**
 Case: **N/A** SDG: N/A
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-18**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	150
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	70 U
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	150

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	5.0 U
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	5.0 U
p/m-Xylene	C ₉ - C ₁₂	20 U
o-Xylene	C ₉ - C ₁₂	10 U
Naphthalene	N/A	10 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	104	99	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **WE-9(pp)**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **0403086-19**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/25/04	03/26/04	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	680
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	5800
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	2800
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	710
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	9400

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	21
Benzene	C ₅ - C ₈	8.9
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	160
p/m-Xylene	C ₉ - C ₁₂	510
o-Xylene	C ₉ - C ₁₂	120
Naphthalene	N/A	56

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	116	108	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **HW032904B07**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/29/04	5	5	1	MLR

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	100 U
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	70 U
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	100 U

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	5.0 U
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	5.0 U
p/m-Xylene	C ₉ - C ₁₂	20 U
o-Xylene	C ₉ - C ₁₂	10 U
Naphthalene	N/A	10 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	104	99	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

Form I

Volatile Petroleum Hydrocarbons by GC - PID/FID



Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **HW040104B01**
 Associated Blank: **N/A**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/01/04	5	5	1	MLB

Petroleum Range Data	Result
C ₅ -C ₈ Aliphatic Hydrocarbons ^{1,2}	240 U
C ₉ -C ₁₂ Aliphatic Hydrocarbons ^{1,3}	100 U
C ₉ -C ₁₀ Aromatic Hydrocarbons ¹	70 U
Unadjusted C ₅ -C ₈ Aliphatic Hydrocarbons ¹	240 U
Unadjusted C ₉ -C ₁₂ Aliphatic Hydrocarbons ¹	100 U

Target Analytes	Elution Range	Result
Methyl tert-butyl ether (MTBE)	C ₅ - C ₈	5.0 U
Benzene	C ₅ - C ₈	5.0 U
Toluene	C ₅ - C ₈	15 U
Ethylbenzene	C ₉ - C ₁₂	5.0 U
p/m-Xylene	C ₉ - C ₁₂	20 U
o-Xylene	C ₉ - C ₁₂	10 U
Naphthalene	N/A	10 U

¹ = Range concentration excludes the concentration of any surrogate(s) and/or internal standards eluting in that range.

² = Range concentration excludes the concentration of target analytes eluting in that range.

³ = Range concentration excludes the concentration of target analytes eluting in that range and the concentration of the aromatic hydrocarbon range.

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene	106	98	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable



Form III
Spike Recovery Summary
Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **See Below**
 Associated Blank: **HW032904B07**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/29/04	5	5	1	MLR

Lab ID: **HW032904B07HW032904BS02 HW032904BSD02**

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD % Recovery	
			Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
Methyl tert-butyl ether (MTBE)	5.0	U	160	103	150	102	2	30	70-130
Benzene	5.0	U	51	102	50	99	3	30	70-130
Toluene	15	U	150	102	150	98	3	30	70-130
Ethylbenzene	5.0	U	53	105	51	102	3	30	70-130
p/m-Xylene	20	U	190	97	190	94	3	30	70-130
o-Xylene	10	U	98	98	95	95	3	30	70-130
Naphthalene	10	U	91	91	88	88	3	30	70-130
Pentane	5.0	U	100	101	98	98	3	30	70-130
2-Methylpentane	15	U	130	85	120	83	2	30	70-130
2,2,4-Trimethylpentane	15	U	160	110	150	98	11	30	70-130
n-Nonane	10	U	150	149 ^a	130	130	14	30	70-130
1,2,4-Trimethylbenzene	5.0	U	97	97	94	94	3	30	70-130

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene (LCS)	107	109	70-130
1,4-Difluorobenzene (LCSD)	110	108	70-130

^a - Value outside of QC Limits.

U - The analyte was analyzed for but not detected at the sample specific level reported.

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

04/01/04 15:27



Form III
Spike Recovery Summary
Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0403086**
 Lab ID: **See Below**
 Associated Blank: **HW040104B01**
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/01/04	5	5	1	MLB

Lab ID: **HW040104B01HW040104BS01 HW040104BSD01**

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD Limit	% Recovery Limits
			Conc.	% Recovery	Conc.	% Recovery			
Methyl tert-butyl ether (MTBE)	5.0	U	160	106	160	105	1	30	70-130
Benzene	5.0	U	52	103	50	100	4	30	70-130
Toluene	15	U	160	103	150	100	4	30	70-130
Ethylbenzene	5.0	U	53	106	50	100	5	30	70-130
p/m-Xylene	20	U	190	95	180	92	3	30	70-130
o-Xylene	10	U	97	97	94	94	3	30	70-130
Naphthalene	10	U	71	71	72	73	2	30	70-130
Pentane	5.0	U	97	97	93	93	4	30	70-130
2-Methylpentane	15	U	120	79	120	77	3	30	70-130
2,2,4-Trimethylpentane	15	U	150	99	150	99	1	30	70-130
n-Nonane	12		110	109	110	110	2	30	70-130
1,2,4-Trimethylbenzene	5.0	U	90	90	89	89	1	30	70-130

Surrogate	% Recovery		Acceptance Range (%)
	FID	PID	
1,4-Difluorobenzene (LCS)	109	110	70-130
1,4-Difluorobenzene (LCSD)	109	110	70-130

U - The analyte was analyzed for but not detected at the sample specific level reported.
 N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

04/01/04 15:27



*Supporting Quality
Control Results*





Form IV
Method Blank Summary
Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **HW032904B07**

Date Analyzed: **03/29/04 18:04**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Date/Time Analyzed
LCS	HW032904BS02	03/29/04 16:35
LCSD	HW032904BSD02	03/29/04 17:05
TRC-104	0403086-12	03/29/04 19:03
TRC-106	0403086-13	03/29/04 19:32
WE-4S	0403086-14	03/29/04 20:02
WE-7	0403086-15	03/29/04 20:31
WE-8	0403086-16	03/29/04 21:01
WE-8(pp)	0403086-17	03/29/04 21:30
WE-9	0403086-18	03/29/04 21:59
WE-9(pp)	0403086-19	03/29/04 22:29

N/A - Not Applicable



Form IV
Method Blank Summary
Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **HW040104B01**

Date Analyzed: **04/01/04 10:06**

Case: **N/A** SDG: **N/A**

Client ID	Lab ID	Date/Time Analyzed
LCS	HW040104BS01	04/01/04 08:37
LCSD	HW040104BSD01	04/01/04 09:06
WE-4S	0403086-14E	04/01/04 11:05

N/A - Not Applicable



Form VII
Calibration Verification
Volatile Petroleum Hydrocarbons by GC - PID/FID

Client: **TRC Environmental**
 Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **C032901**

Case: **N/A** SDG: **N/A**

Concentration Units: **µg/L**

Parameter	RT	RT Window		True Value	CCV Value	% D	Deviation Limit
		Low	High				
Methyl tert-butyl ether (MTBE)	6.71	6.61	6.81	150.00	151.14	0.8	25
Benzene	8.78	8.67	8.88	50.00	52.21	4.4	25
Toluene	11.04	10.94	11.14	150.00	156.00	4.0	25
Ethylbenzene	13.05	12.95	13.15	50.00	50.46	0.9	25
p/m-Xylene	13.14	13.04	13.24	200.00	195.17	2.4	25
o-Xylene	13.67	13.57	13.77	100.00	98.85	1.2	25
Naphthalene	19.29	19.19	19.39	100.00	78.22	21.8	50
Pentane	5.60	5.50	5.70	100.00	95.26	4.7	25
2-Methylpentane	6.42	6.32	6.52	150.00	126.48	15.7	25
2,2,4-Trimethylpentane	8.35	8.25	8.45	150.00	194.05	29.4 ^a	25
n-Nonane	12.66	12.56	12.76	100.00	129.33	29.3	50
1,2,4-Trimethylbenzene	15.14	15.04	15.24	100.00	92.43	7.6	25
1,4-Difluorobenzene (FID)	8.93	8.83	9.03	40.00	43.05	7.6	25
1,4-Difluorobenzene (PID)	8.93	8.83	9.03	40.00	44.68	11.7	25
Average % D						10.1	

^a - Value outside of QC Limits.

N/A - Not Applicable



**Form VII
Calibration Verification
Volatile Petroleum Hydrocarbons by GC - PID/FID**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **C032902**

Case: **N/A** SDG: **N/A**

Concentration Units: **µg/L**

Parameter	RT	RT Window		True Value	CCV Value	% D	Deviation Limit
		Low	High				
Methyl tert-butyl ether (MTBE)	6.70	6.61	6.81	150.00	150.91	0.6	25
Benzene	8.76	8.67	8.88	50.00	48.77	2.5	25
Toluene	11.03	10.94	11.14	150.00	146.46	2.4	25
Ethylbenzene	13.04	12.95	13.15	50.00	46.65	6.7	25
p/m-Xylene	13.13	13.04	13.24	200.00	188.10	5.9	25
o-Xylene	13.66	13.57	13.77	100.00	94.56	5.4	25
Naphthalene	19.29	19.19	19.39	100.00	70.36	29.6	50
Pentane	5.60	5.50	5.70	100.00	90.72	9.3	25
2-Methylpentane	6.41	6.32	6.52	150.00	119.07	20.6	25
2,2,4-Trimethylpentane	8.34	8.25	8.45	150.00	137.59	8.3	25
n-Nonane	12.65	12.56	12.76	100.00	72.68	27.3	50
1,2,4-Trimethylbenzene	15.13	15.04	15.24	100.00	91.39	8.6	25
1,4-Difluorobenzene (FID)	8.92	8.83	9.03	40.00	43.09	7.7	25
1,4-Difluorobenzene (PID)	8.92	8.83	9.03	40.00	43.12	7.8	25
Average % D						10.2	

N/A - Not Applicable



**Form VII
Calibration Verification
Volatile Petroleum Hydrocarbons by GC - PID/FID**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**
ETR: **0403086**
Lab ID: **C040101**

Case: **N/A** SDG: **N/A**

Concentration Units: **µg/L**

Parameter	RT	RT Window		True Value	CCV Value	% D	Deviation Limit
		Low	High				
Methyl tert-butyl ether (MTBE)	6.70	6.60	6.80	150.00	161.90	7.9	25
Benzene	8.76	8.66	8.86	50.00	50.75	1.5	25
Toluene	11.01	10.91	11.11	150.00	152.57	1.7	25
Ethylbenzene	13.03	12.93	13.13	50.00	50.16	0.3	25
p/m-Xylene	13.12	13.02	13.22	200.00	187.86	6.1	25
o-Xylene	13.65	13.55	13.75	100.00	96.17	3.8	25
Naphthalene	19.29	19.19	19.39	100.00	60.90	39.1	50
Pentane	5.59	5.49	5.69	100.00	82.81	17.2	25
2-Methylpentane	6.40	6.30	6.50	150.00	102.48	31.7 ^a	25
2,2,4-Trimethylpentane	8.34	8.24	8.44	150.00	128.51	14.3	25
n-Nonane	12.64	12.54	12.74	100.00	90.85	9.2	50
1,2,4-Trimethylbenzene	15.13	15.03	15.23	100.00	85.48	14.5	25
1,4-Difluorobenzene (FID)	8.91	8.81	9.01	40.00	44.01	10.0	25
1,4-Difluorobenzene (PID)	8.91	8.81	9.01	40.00	42.20	5.5	25
Average % D						11.6	

^a - Value outside of QC Limits.
N/A - Not Applicable



**Form VII
Calibration Verification
Volatile Petroleum Hydrocarbons by GC - PID/FID**

Client: **TRC Environmental**
Project: **Former GE Site**

Lab Code: **MA00030**

ETR: **0403086**

Lab ID: **C040102**

Case: **N/A** SDG: **N/A**

Concentration Units: **µg/L**

Parameter	RT	RT Window		True Value	CCV Value	% D	Deviation Limit
		Low	High				
Methyl tert-butyl ether (MTBE)	6.70	6.60	6.80	150.00	147.63	1.6	25
Benzene	8.76	8.66	8.86	50.00	48.78	2.4	25
Toluene	11.02	10.91	11.11	150.00	147.14	1.9	25
Ethylbenzene	13.05	12.93	13.13	50.00	48.78	2.4	25
p/m-Xylene	13.13	13.02	13.22	200.00	182.57	8.7	25
o-Xylene	13.67	13.55	13.75	100.00	93.53	6.5	25
Naphthalene	19.31	19.19	19.39	100.00	51.20	48.8	50
Pentane	5.60	5.49	5.69	100.00	75.02	25.0	25
2-Methylpentane	6.41	6.30	6.50	150.00	94.28	37.1*	25
2,2,4-Trimethylpentane	8.34	8.24	8.44	150.00	113.15	24.6	25
n-Nonane	12.66	12.54	12.74	100.00	94.66	5.3	50
1,2,4-Trimethylbenzene	15.15	15.03	15.23	100.00	85.85	14.2	25
1,4-Difluorobenzene (FID)	8.91	8.81	9.01	40.00	44.64	11.6	25
1,4-Difluorobenzene (PID)	8.91	8.81	9.01	40.00	42.29	5.7	25
Average % D						14.0	

* - Value outside of QC Limits.
N/A - Not Applicable

VPH SAMPLE INFORMATION

Client: TRCENV

ETR Number: 0403086

Matrix:	<input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Other:		
Containers:	<input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Broken <input type="checkbox"/> Leaking		
Sample Preservatives:	Aqueous <input checked="" type="checkbox"/> pH ≤ 2 <input type="checkbox"/> pH > 2 <input checked="" type="checkbox"/> Sample vials containing acid for field preservation were supplied by the laboratory.**		
	Soil or	<input type="checkbox"/> N/A <input type="checkbox"/> Samples NOT preserved in Methanol or air-tight container	
	Sediment	<input type="checkbox"/> Samples received in methanol. Soil Covered? <input type="checkbox"/> Y <input type="checkbox"/> N	
	<input type="checkbox"/> Samples received in air-tight container		mL Methanol / g soil <input type="checkbox"/> 1:1 +/- 25% <input type="checkbox"/> Other
	<input type="checkbox"/> Trip Blank Received		
Temperature:	<input checked="" type="checkbox"/> Received on ice <input checked="" type="checkbox"/> Received at 4°C (± 2°C) <input type="checkbox"/> Other:		
Comments:	 		

CERTIFICATION

Were all QA/QC procedures REQUIRED by the VPH Method followed?

Yes No *

Were all performance/acceptance standards for the required QA/QC procedures achieved?

Yes No *

Were any significant modifications made to the VPH method, as specified in Section 11.3?

Yes* No

- VPH Method Modifications:

1. The surrogate 1,4-difluorobenzene is substituted for the surrogate 2,5-dibromotoluene

* See Narrative portion of report for details.

** Per MADEP-VPH-98-1.

I attest under the pains and penalties of perjury that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

SIGNATURE: Dawne E. Smart

POSITION: QA Specialist

PRINTED NAME: Dawne E. Smart

DATE: 4/2/04



0403086

TEL: (508) 822-9300
FAX: (508) 822-3288

375 Paramount Drive
Raynham, MA 02767

COMPANY INFORMATION			COMPANY'S PROJECT INFORMATION			SHIPPING INFORMATION			SAMPLE CONTAINERS (NOTE 4)					
Name: <u>TRC</u> Address: <u>Booth Mills South</u> <u>Foot of John St</u> <u>Lowell, MA 01852</u> Telephone: _____ Facsimile: <u>978-453-1995</u> Contact Name: <u>Ken Cormier</u>			Regulatory Protocol: <u>MCP</u> For the State of: <u>MASS.</u> Project Name: <u>Former Lockheed</u> Project Number: <u>E9202</u> P.O. # <u>E9702-9302-09300</u> Sampler Name(s): <u>SS Callahan</u> <u>A. Cameron</u>			Carrier: _____ Airbill Number: _____ Date Shipped: _____ Quote #: _____			VOLUME _____ CONTAINER TYPE _____ PRESERVATIVE _____			NUMBER OF CONTAINERS _____		
(TAT IS IN BUSINESS DAYS) CIRCLE TAT: <u>10 Day</u>			5 Day 3 Day 48 Hr 24 Hr Other			ANALYSIS/REMARKS (NOTES 2, 3)			SAMPLER(S) INITIALS					
WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COMPOSITE OR GRAB	MATRIX	ANALYSIS/REMARKS (NOTES 2, 3)			SAMPLER(S) INITIALS						
-01	BRW-1R2	3/25/04	G	GW	MCP-8260			NEC						
-02	PRW-1R4	3/25/04	G	GW	MCP-8260			NEC						
-03	EMW-11R1	3/25/04	G	GW	MCP-8260			NEC						
-04	EMW-11R2	3/25/04	G	GW	MCP-8260			NEC						
-05	GZA-105R	3/25/04	G	GW	MCP-8260			NEC						
-06	IP-1R2	3/25/04	G	GW	MCP-8260			NEC						
-07	IP-2R1	3/25/04	G	GW	MCP-8260			NEC						
-08	IP-2R3	3/25/04	G	GW	MCP-8260			NEC						
-09	IP-3R2	3/25/04	G	GW	MCP-8260			NEC						
-10	IP-4R1	3/25/04	G	GW	MCP-8260			NEC						

NOTES TO SAMPLER(S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab O.C. sample and type (e.g.: MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.: 40ml/glass/H₂O.

Notes to Lab: _____

Relinquished by: (signature) <u>[Signature]</u>	DATE 3/24/04	TIME 1307	Received by: (signature) <u>Ed Butcher</u>
Relinquished by: (signature) <u>Ed Butcher</u>	DATE 3/25/04	TIME 21:45	Received by: (signature) <u>J. Hutchinson</u>
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)



CHAIN-OF-CUSTODY RECORD

0403086

375 Paramount Drive
Raynham, MA 02767

TEL: (508) 822-9300
FAX: (508) 822-3288

PAGE 2 OF 2

COMPANY INFORMATION

Name: TRC
Address: Booth Mills South
Foot of John Street
Lowell, MA 01852
Telephone: 978-656-3562
Facsimile: 978-453-1995
Contact Name: Ken Cormier

COMPANY'S PROJECT INFORMATION

Regulatory Protocol: MCP
For the State of: MASSACHUSETTS
Project Name: FORMER LOCKHEED
Project Number: E9202
P.O. # E9202-9302-09300
Sample Name(s): JJ Callahan
N. Cameron

SHIPPING INFORMATION

Carrier: _____
Airbill Number: _____
Date Shipped: _____
Quote #: _____

SAMPLE CONTAINERS (NOTE 4)

VOLUME _____
CONTAINER TYPE _____
PRESERVATIVE _____

(TAT IS IN BUSINESS DAYS)

CIRCLE TAT: 10 Day 5 Day 3 Day 48 Hr 24 Hr Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COMPOSITE OR GRAB	MATRIX	ANALYSIS/REMARKS (NOTES 2, 3)	SAMPLER(S) INITIALS	NUMBER OF CONTAINERS
-11	IP-4R3	3/25/04	G	GW	MCP-8260	NEC	3
-12	TRC-104	3/26/04	G	GW	MCP-VPH	Ⓢ	3
-13	TRC-106	3/25/04	G	GW	MCP-VPH	Ⓢ	3
-14	WE-45	3/26/04	G	GW	MCP-VPH	Ⓢ	3
-15	WE-7	3/26/04	G	GW	MCP-VPH	Ⓢ	3
-16	WE-8	3/25/04	G	GW	MCP-VPH	NEC	3
-17	WE-8 (pp)	3/25/04	G	GW	MCP-VPH	Ⓢ	3
-18	WE-9	3/25/04	G	GW	MCP-VPH	NEC	3
-19	WE-9 (pp)	3/25/04	G	GW	MCP-VPH	Ⓢ	3
-20	TRIP BLANK			LAS WATER	MCP 8260 (VOCs)	Ⓢ	3

NOTES TO SAMPLER(S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g. MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.: 40ml/glass/H₂SO₄

Notes to Lab: _____

Relinquished by: (signature) <u>[Signature]</u>	DATE <u>3/24/04</u>	TIME <u>1307</u>	Received by: (signature) <u>Ed Dutka</u>
Relinquished by: (signature) <u>Ed Butler</u>	DATE <u>3/25/04</u>	TIME <u>2:45</u>	Received by: (signature) <u>J. Hatcher</u>
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

Sample Receipt Checklist

Client: <u>TRC</u>	Receipt Date: <u>3-26-04</u>
Project: <u>Former GE site</u>	Log-in Date: <u>3/26/04</u>
ETR #: <u>0403086</u>	Inspection by: <u>SLB</u> Login by: <u>EAT</u>

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ No, <u>WHG Courier pick-up</u> / Hand delivered	Sample storage refrigerator #: <u>VOA</u> Sample storage freezer #: _____ Cooler 2: _____ Cooler 3: _____ Cooler 4: _____ Cooler 5: _____ Cooler 6: _____ Cooler 7: _____ More: _____ No time listed on vials for samples: WE-45 WE-7
Is bill of lading retained? Yes, Tracking #: _____ No, Unavailable / <u>NA</u>	
Number of coolers received for this project delivery: <u>1</u>	
Indicate cooler temperature upon opening (if multiple coolers, record all temps): Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received above 6°C. Cooler 1: Temperature(s) taken from: <u>03°C</u> IR Gun, <u>6°C</u> Temp. Blank, / NA	
Were samples received on ice? <u>Yes</u> / No	
Chain-of-Custody present? <u>Yes</u> / No Complete? <u>Yes</u> / No	
Custody seals present on Cooler? Yes / <u>No</u> on Bottles? Yes / <u>No</u> Intact? Yes / No / <u>NA</u> <i>Note: Affix custody seals to back of this page.</i>	
Were sample containers intact? <u>Yes</u> / No If No, list samples: →	
Did VOA/VPH waters contain headspace (>5mm)? Yes / <u>No</u> / NA If Yes, list samples: →	
Were 5035 VOA soils, or VPH soils, covered with MeOH? Yes / No / <u>NA</u> If No, list samples: →	
Was a sufficient amount of sample received for each test indicated on the COC? <u>Yes</u> / No If No, list samples: →	
If chemical preservation is appropriate - Were samples field preserved? <u>Yes</u> / No / NA <input checked="" type="checkbox"/> C=HCl <input type="checkbox"/> M=MeOH <input type="checkbox"/> S=H ₂ SO ₄ <input type="checkbox"/> H=NaOH <input type="checkbox"/> N=HNO ₃ <input type="checkbox"/> Other: _____ <input type="checkbox"/> U= Unknown	Chemical preservation OK for ALL samples? Yes / No / <u>NA</u> If No, list samples below:
Preservation (pH) verified at lab for EVERY bottle? (<u>Not</u> : VOA / VPH / Sulfide) YES: <2 or >12 (CN) or NO NA If No, why?:	
Were samples received within hold time? <u>Yes</u> / No If No, list samples: →	
Discrepancy between samples rec'd & COC? <u>Yes</u> / No If Yes, list samples: →	
Was the Project Manager notified of any other problems? Yes / No / NA	
Project Manager Acknowledgement: <u>J.H.</u> Date: <u>3/26/04</u>	Please use back for any additional notes!



Certificate Program Summary

Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Woods Hole Group Environmental Laboratories Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate No. : PH-0141 - *Wastewater* (General Chemistry: 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2, 365.2, 405.1, 413.1, COD HACH 8000; Metals: 200.7, 245.1; Organics: 608, 624, 625). *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9056, 9060; Metals: 6010, 6020, 7041, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate No. : E87814 - Secondary NELAP Accreditation for *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, SM2320B, 335.2, 365.2, 413.1, 420.1, SM2540G, COD HACH 8000; Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9060, 9065; Metals: 6010, 6020, 7041, 7060, 7421, 7470, 7471, 7740, 7841; Organics: 8081, 8082, 8260, 8270).

Louisiana Department of Environmental Quality Certificate No. : 03090 - Primary NELAP Accrediting Authority for *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 376.2, 405.1, 413.1, 420.1, SM2540G, COD HACH 8000; Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625). *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 9010/9014, 9045, 9056, 9060; Metals: 6010, 6020, 7041, 7060, 7191, 7421, 7470, 7471, 7740, 7841; Organics: 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate No. : MA030 - *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 405.1, 413.1, 420.1, COD HACH 8000; Metals: 200.7, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624).

Massachusetts Department of Environmental Protection Certificate No. : M-MA030 - *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 405.1, 413.1, 420.1, COD HACH 8000; Metals: 200.7, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624).

New Hampshire Department of Environmental Services Certificate No. : 220602 - Secondary NELAP Accreditation for *Wastewater* (General Chemistry: 120.1/2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 376.2, 405.1, 413.1, 420.1, COD HACH 8000, SM2540G; Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625).

New Jersey Department of Environmental Protection Certificate No. : MA015 - *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 3060, 7196, 9010/9014, 9045, 9056, 9060; Metals: 3010, 3015, 3020, 3050, 3051, 6010, 6020, 7041, 7060, 7131, 7191, 7211, 7421, 7470, 7471, 7520, 7740, 7761, 7841; Organics: 3510, 3545, 5030, 5035, 3620, 3630, 3640, 3660, 8081, 8082, 8100, 8260, 8270).

New York Department of Health Certificate No. : 11627 - Secondary NELAP Accreditation for *Wastewater* (Metals: 200.7, 204.2, 206.2, 239.2, 245.1, 270.2, 279.2; Organics: 608, 624, 625). *Solid and Hazardous Waste* (Metals: 6010, 7041, 7060, 7470, 7471, 7740; Organics: 8081, 8082, 8260, 8270).

Rhode Island Department of Health Certificate No. : 00064 - Chemistry: *Organic and Inorganic in Surface Water, Wastewater/Sewage and Soil* (Method numbers not specified with certificate.)

U.S. Army Corps of Engineers - General Chemistry: 9010/9014, 9071/418.1, 9060; Organics: 8081, 8082, 8260, 8270, 8270-SIM; Metals: 6010, 6020, 7000.

Department of the Navy - General Chemistry: 9010/9014, 9060; Organics: 8081, 8082, 8015-mod, 8260, 8270, 8270-SIM; Metals: 6010, 6020.

APPENDIX C

TANK K- FIELD MONITORING FORMS

Name: Mike Cunningham

BLOWING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WS-48 feet	Comments
9.0	8.5	180	90	334	

Sample Point	PM10 (µg/m³)	PM2.5 (µg/m³)
1	1.75	3.5
2	1.75	6.0
3	1.75	5.5
4	2.0	4.5
5	4.0	4.5
6	—	11.5
7	1.5	8.0
8	1.5	8.5
9	2.0	9.5
10	2.0	4.0
11	2.25	5.5
12	3.0	3.0
13	2.5	5.5
14	2.0	5.5
15	2.0	4.5

- SYSTEM OPERATIONAL ON ARRIVAL
 - Changed oil & Greased Filings IN AS BLOWER

EYE COMPONENT

Rawhead Inlet Vacuum In. Hg.	Rawhead Outlet Vacuum In. Hg.	Blower Discharge Pressure In. Hg.	GAC Inlet Vapor Conc. ppm	Middream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
11.0	16.0	26.0	—	—	—	

Label ID	Vacuum In. Hg.	Vapor Conc. ppm	Comments
Label A	8.0	—	
Label B	8.0	—	
Label C	8.0	—	

Date: 11/21/03

Name: D. Rollis

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
9	9	195	92	3.39	

Sparge Point	Flow, CFM	Pressure, psi
C1	2	3.5
C2	2	6.5
C3	2	5.5
C4	2	0.5
C5	2	4.5
C6	2	4.5
B5	0	3.5
B4	1.5	9.0
B3	2	4.5
B2	2	4.5
B1	2	3.5
M4	2	3.5
A2	1	9.0
A3	2	11.0
A1	2	4.5

Tested interlock
 Greased Bearings on sparge blower
 Checked oil in sparge blower

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
11	16	25	0	0	0	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	0	0	
Lateral B	0	0	
Lateral C	0	0	

Tank K Biosparging and SVE Systems O&M Field Monitoring Form
 Wilmington, Ma

Date: 12/5/03

Name:

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
10	8.5	180	80	3.7	

Sparge Point	Flow, CFM	Pressure, psi
C1	2	3.5
C2	2	3.0
C3	2	5.5
C4	2	0.5
C5	2	4.5
C8	2	4.5
B5	2	8.5
B4	2	1.0
B3	2	4.0
B2	2	4.0
B1	2	5.0
A4	2	3.5
A2	2	1.0
A3	2	1.0
A1	2	4.0

Tested sparge interlock
 Changed oil in sparge blower
 Greased bearings

Reactivated

New sparge points

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
12	17	25	-	-	-	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	8.5	-	
Lateral B	8.5	-	
Lateral C	8.5	-	

Name: Darren Rolfs

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
9	8.5	175	80	2.85	

Surge Point	Flow, CFM	Pressure, psi
C1	2	4.0
C2	2	5.5
C3	2	5.5
C4	2	5.5
C5	2	4.5
C6	2	4.5
B5	0	6.5
B4	2	5.5
B3	2	5.0
B2	2	4.5
B1	2	6.0
A4	2	3.0
A2	2	6.0
A3	2	6.0
A1	2	4.5

Checked oil
 Greased bearings
 Checked interlocks

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
12	16	25	0	0	0	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	?	0	
Lateral B	?	0	
Lateral C	?	0	

Site Tel #

988-3982

Date: 1/2/04

Name: Darren Rollis

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-48 feet	Comments
8.25	8.75	180	92	3.10	

Sparge Point	Flow CFM	Pressure psi
C1	2	3.75
C2	2	3.75
C3	2	6.0
C4	2	0.5
C5	2	5.25
C6	2	5.25
B6	0	1.50
B4	2	5.50
B3	2	5.0
B2	2	4.5
B1	2	5.5
M	2	4.0
A2	2	5.5
A3	2	4.0
A1	2	4.5

Changed oil in sparge blower
 Greased bearings

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Middlem GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
13	17	25	---	---	---	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	10	---	
Lateral B	10	---	
Lateral C	10	---	

Blew out SVE lines. Lines were increasing (incur of water)
 Decreased to 3" of water.

Grease fitting on sparge blower was not working properly.

Removed & cleaned.

Tank K Bioreactor and SVE Systems OM&M Field Monitoring Form
 Wilmington, Ma

Date: 1/12/04

Name: Darren Rolfs

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
90	85	175	84	Can't find snow	

Sparge Point	Flow CFM	Pressure, psi
C1	2.0	1.0
C2	2.0	1.0
C3	2.0	1.0
C4	2.0	1.0
C5	2.0	1.0
C6	2.0	1.0
C7	2.0	1.0
C8	2.0	1.0
C9	2.0	1.0
C10	2.0	1.0
C11	2.0	1.0
C12	2.0	1.0
C13	2.0	1.0
C14	2.0	1.0
C15	2.0	1.0
C16	2.0	1.0
C17	2.0	1.0
C18	2.0	1.0
C19	2.0	1.0
C20	2.0	1.0
C21	2.0	1.0
C22	2.0	1.0
C23	2.0	1.0
C24	2.0	1.0
C25	2.0	1.0
C26	2.0	1.0
C27	2.0	1.0
C28	2.0	1.0
C29	2.0	1.0
C30	2.0	1.0
C31	2.0	1.0
C32	2.0	1.0
C33	2.0	1.0
C34	2.0	1.0
C35	2.0	1.0
C36	2.0	1.0
C37	2.0	1.0
C38	2.0	1.0
C39	2.0	1.0
C40	2.0	1.0
C41	2.0	1.0
C42	2.0	1.0
C43	2.0	1.0
C44	2.0	1.0
C45	2.0	1.0
C46	2.0	1.0
C47	2.0	1.0
C48	2.0	1.0
C49	2.0	1.0
C50	2.0	1.0
C51	2.0	1.0
C52	2.0	1.0
C53	2.0	1.0
C54	2.0	1.0
C55	2.0	1.0
C56	2.0	1.0
C57	2.0	1.0
C58	2.0	1.0
C59	2.0	1.0
C60	2.0	1.0
C61	2.0	1.0
C62	2.0	1.0
C63	2.0	1.0
C64	2.0	1.0
C65	2.0	1.0
C66	2.0	1.0
C67	2.0	1.0
C68	2.0	1.0
C69	2.0	1.0
C70	2.0	1.0
C71	2.0	1.0
C72	2.0	1.0
C73	2.0	1.0
C74	2.0	1.0
C75	2.0	1.0
C76	2.0	1.0
C77	2.0	1.0
C78	2.0	1.0
C79	2.0	1.0
C80	2.0	1.0
C81	2.0	1.0
C82	2.0	1.0
C83	2.0	1.0
C84	2.0	1.0
C85	2.0	1.0
C86	2.0	1.0
C87	2.0	1.0
C88	2.0	1.0
C89	2.0	1.0
C90	2.0	1.0
C91	2.0	1.0
C92	2.0	1.0
C93	2.0	1.0
C94	2.0	1.0
C95	2.0	1.0
C96	2.0	1.0
C97	2.0	1.0
C98	2.0	1.0
C99	2.0	1.0
C100	2.0	1.0

Tested interlock
 Checked vapors w/ OVM
 Greased fittings
 Checked oil / oil

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
10	15	25	0	0	0	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	1	0	
Lateral B	7	0	
Lateral C	7	0	

Name: D. Rolls

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
10.00	9.75	185	88	rent kind snow	

Suction Point	Flow, CFM	Pressure, psi
C1	2	0.5
C2	2	10.0
C3	2	0.5
C4	2	0.5
C5	2	4.5
C6	2	4.5
B5	2	4.5
B4	2	5.5
B3	2	4.5
B2	2	4.0
B1	2	5.5
A4	2	3.5
A2	2	5.5
A3	2	4.5
A1	2	4.5

Tested inter-lock
 Changed oil
 Greased Bearings

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
10	15	25	-	-	-	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	7	-	
Lateral B	7	-	
Lateral C	7	-	

Date: 2/11/04

Name: Darren Rolls

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4B feet	Comments
9.5	9.5	195	95	3.23	

Sparge Point	Flow CFM	Pressure psi
C1	2	7.0
C2	1	9.0
C3	2	0.5
C4	2	8.5
C5	2	4.0
C6	2	4.0
C7	2	1.5
B1	2	5.5
B2	2	4.5
B3	2	4.5
B4	2	2.5
B5	2	3.0
A1	2	3.5
A2	2	5.5
A3	2	5.5
A4	2	4.0

Tested interlock
 Blew-out SVE lines
 Greased fittings

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
13	18	25	0	0	0	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	18	0	
Lateral B	10	0	
Lateral C	18	0	

1 Drum on left side of bldg. No label - filled w/ soil

Date: 2/24/04

Name: Darren Rolls

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-48 feet	Comments
9.5	9.5	190	90	3.45	

Scrape Point	Flow, CFM	Pressure, psi
C1	2	2.0
C2	1	8.5
C3	2	0.5
C4	2	0.5
C5	2	4.5
C6	2	4.5
B6	2	4.0
B4	2	3.5
B3	2	4.5
B2	2	4.0
B1	2	0.5
A4	2	4.0
A2	2	5.5
A3	2	3.0
A1	2	4.0

> Blow down this point w/ increased pressure.
 Greased 1 CFM - Flow @ 2 CFM upon departure.
 Changed oil - greased fittings

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
12	17	25	0	0	0	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	10	0	
Lateral B	10	0	
Lateral C	10	0	

Blew out SVE lines for ~ 15 min A+C & 30 min B
 No change - water table may be high in this area
 or ground frozen.

Name: D. Rollis

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
9	9	205	100	3.3	

Scrape Point	Flow, CFM	Pressure, psi
A1	2	4.5
A2	2	5.0
A3	2	5.5
A4	2	6.0
A5	2	6.5
A6	2	7.0
A7	2	7.5
A8	2	8.0
A9	2	8.5
A10	2	9.0
A11	2	9.5
A12	2	10.0
A13	2	10.5
A14	2	11.0
A15	2	11.5
A16	2	12.0
A17	2	12.5
A18	2	13.0
A19	2	13.5
A20	2	14.0
A21	2	14.5
A22	2	15.0
A23	2	15.5
A24	2	16.0
A25	2	16.5
A26	2	17.0
A27	2	17.5
A28	2	18.0
A29	2	18.5
A30	2	19.0
A31	2	19.5
A32	2	20.0
A33	2	20.5
A34	2	21.0
A35	2	21.5
A36	2	22.0
A37	2	22.5
A38	2	23.0
A39	2	23.5
A40	2	24.0
A41	2	24.5
A42	2	25.0
A43	2	25.5
A44	2	26.0
A45	2	26.5
A46	2	27.0
A47	2	27.5
A48	2	28.0
A49	2	28.5
A50	2	29.0
A51	2	29.5
A52	2	30.0
A53	2	30.5
A54	2	31.0
A55	2	31.5
A56	2	32.0
A57	2	32.5
A58	2	33.0
A59	2	33.5
A60	2	34.0
A61	2	34.5
A62	2	35.0
A63	2	35.5
A64	2	36.0
A65	2	36.5
A66	2	37.0
A67	2	37.5
A68	2	38.0
A69	2	38.5
A70	2	39.0
A71	2	39.5
A72	2	40.0
A73	2	40.5
A74	2	41.0
A75	2	41.5
A76	2	42.0
A77	2	42.5
A78	2	43.0
A79	2	43.5
A80	2	44.0
A81	2	44.5
A82	2	45.0
A83	2	45.5
A84	2	46.0
A85	2	46.5
A86	2	47.0
A87	2	47.5
A88	2	48.0
A89	2	48.5
A90	2	49.0
A91	2	49.5
A92	2	50.0
A93	2	50.5
A94	2	51.0
A95	2	51.5
A96	2	52.0
A97	2	52.5
A98	2	53.0
A99	2	53.5
A100	2	54.0

Tested inter-lock
 Greased fittings
 Checked oil

SVE COMPONENT

Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
8	13	26	—	—	—	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	4	—	
Lateral B	4	—	
Lateral C	4	—	

SVE has gone back down to 4" - Blow lines out last visit

Name: D. Rollis

Date: 3/25/04

BIOSPARGING COMPONENT

Cooling Loop Inlet Pressure psi	Cooling Loop Outlet Pressure psi	Cooling Loop Inlet Temperature °F	Cooling Loop Outlet Temperature °F	Depth to water in WE-4S feet	Comments
9	9.5	210	98	3.4	

Sparging Point	Flow, CFM	Pressure, psi
C1	2	3.5
C2	1.5	9.5
C3	1.5	1.5
C4	1.5	0.5
B6	1.5	4.5
B5	1.5	5.5
B4	1.5	8.5
B3	1.5	4.5
B2	1.5	5.0
B1	1.5	5.0
A4	1.5	5.0
A2	1.5	5.0
A3	1.5	5.0
A1	1.5	4.5

Changed oil
 Greased bearings
 Checked vapors

SVE COMPONENT

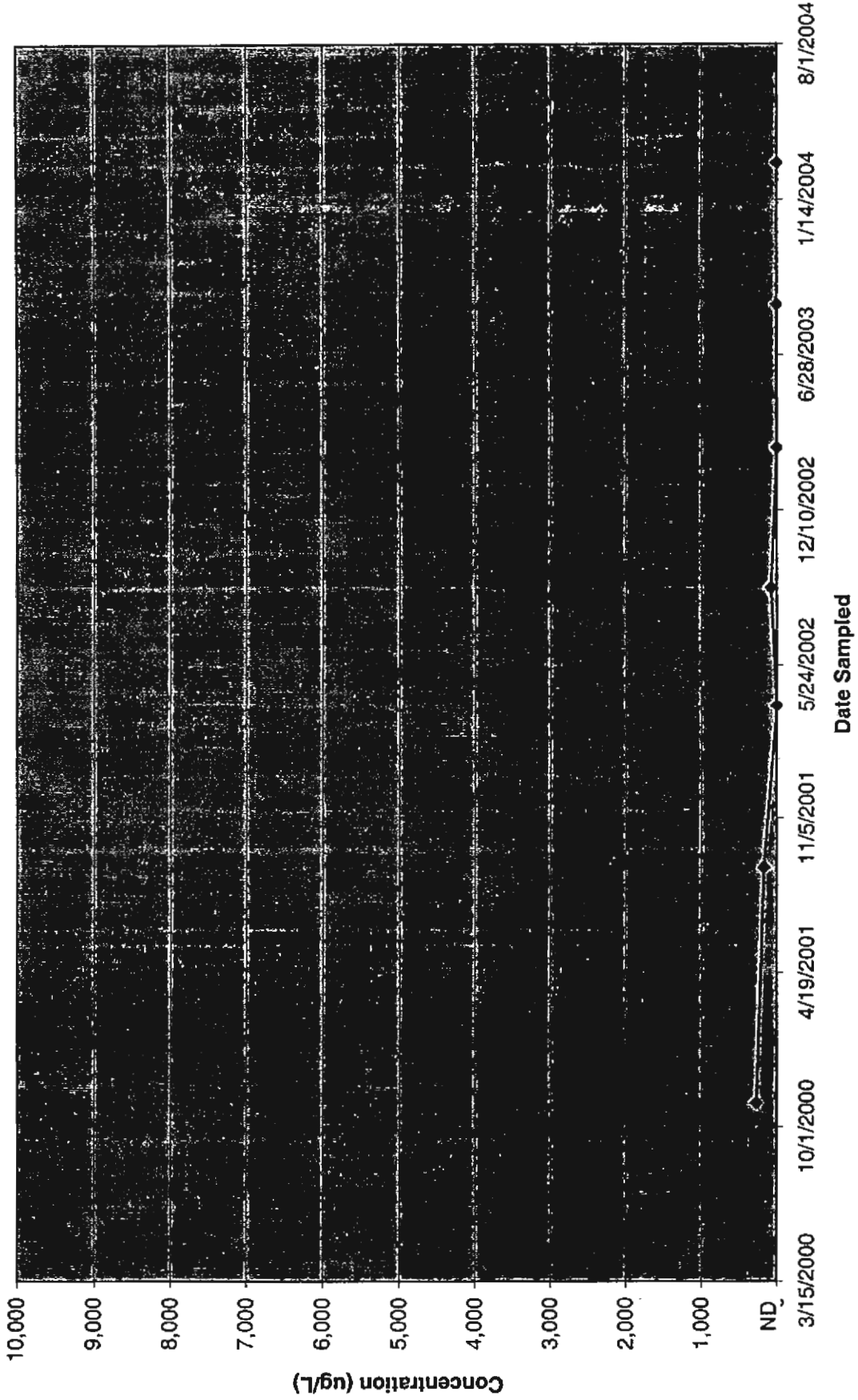
Knockout Inlet Vacuum in.w.c.	Knockout Outlet Vacuum in.w.c.	Blower Discharge Pressure in.w.c.	GAC Inlet Vapor Conc. ppm	Midstream GAC Vapor Conc. ppm	GAC Outlet Vapor Conc. ppm	Comments
8	13	26	0	0	0	

Lateral ID	Vacuum in.w.c.	Vapor Conc. ppm	Comments
Lateral A	5	8	Losses fixed
Lateral B	5	8	
Lateral C	5	8	

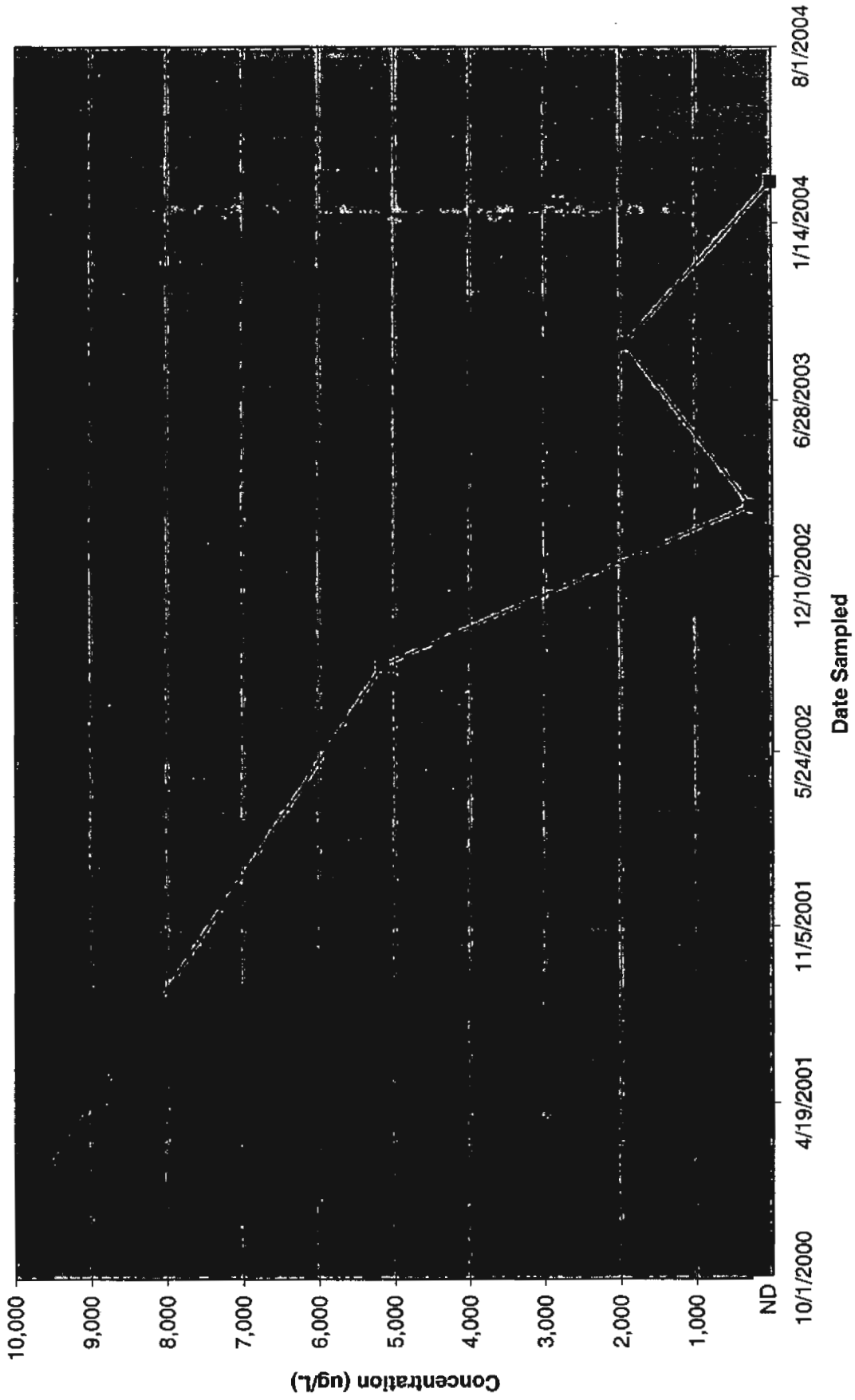
APPENDIX D

**TANK K – GROUNDWATER CONTAMINANT
TREND GRAPHS**

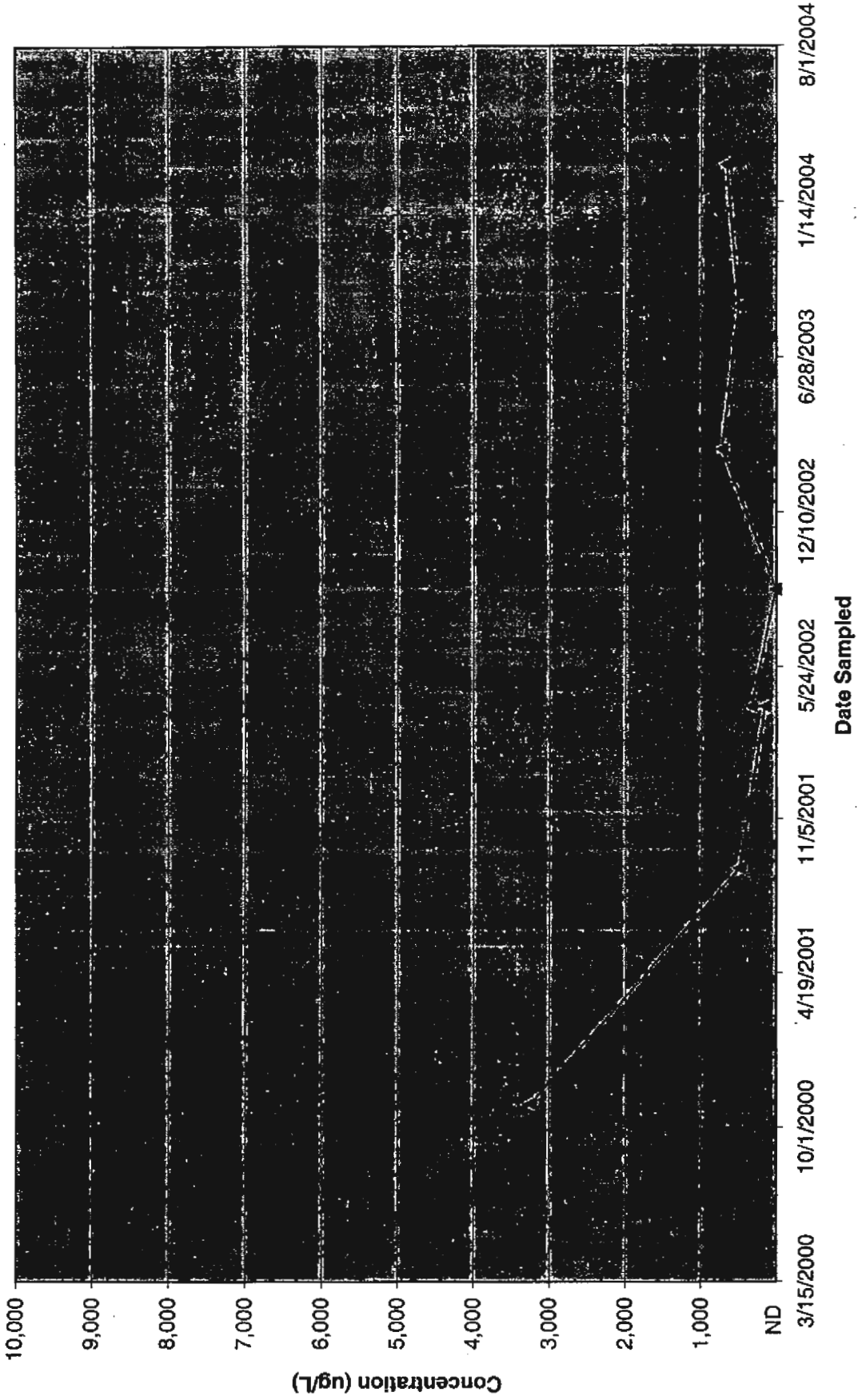
TRC-104 Total BTEX, MTBE, and Naphthalene



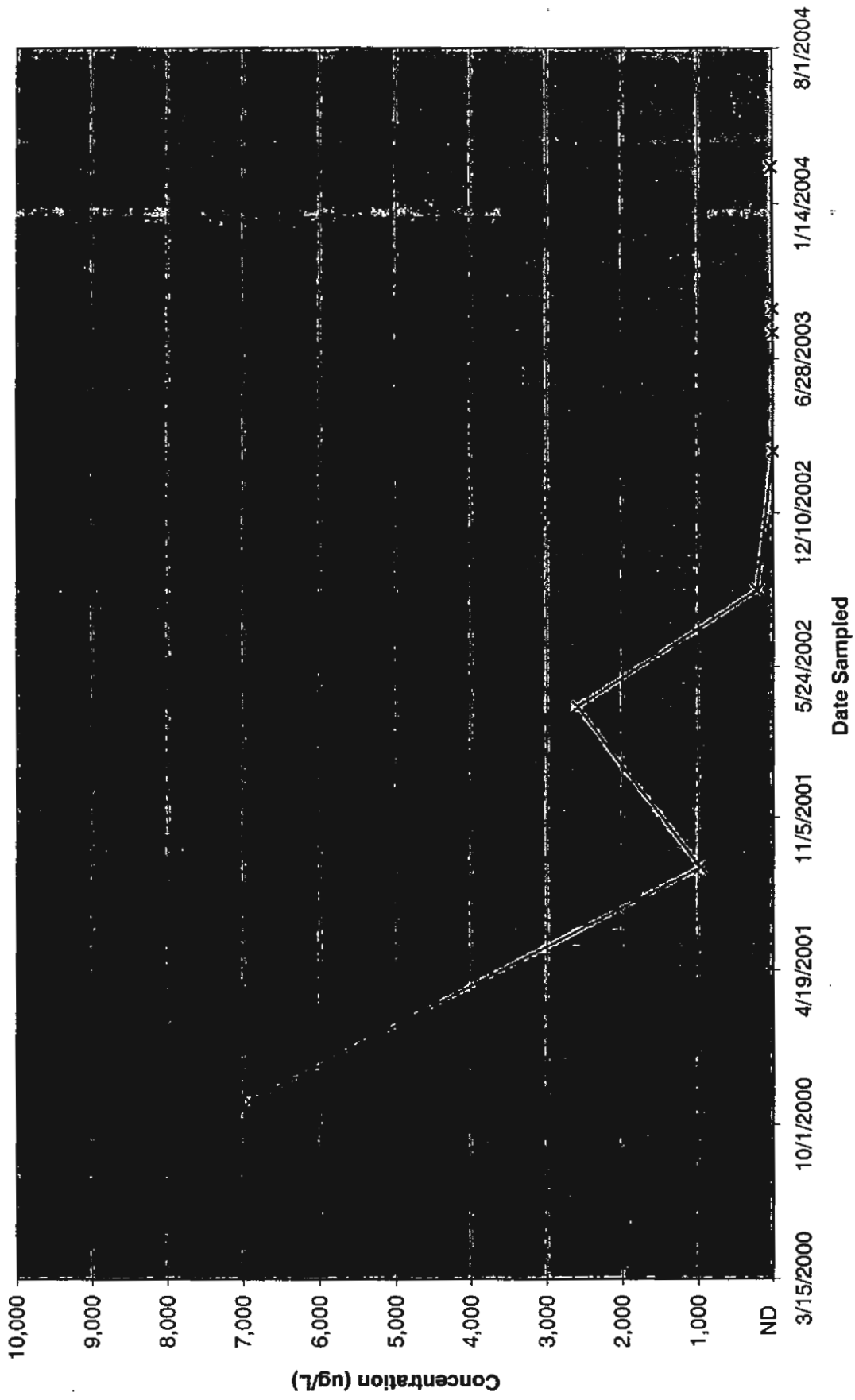
TRC-106 Total BTEX, MTBE, and Naphthalene



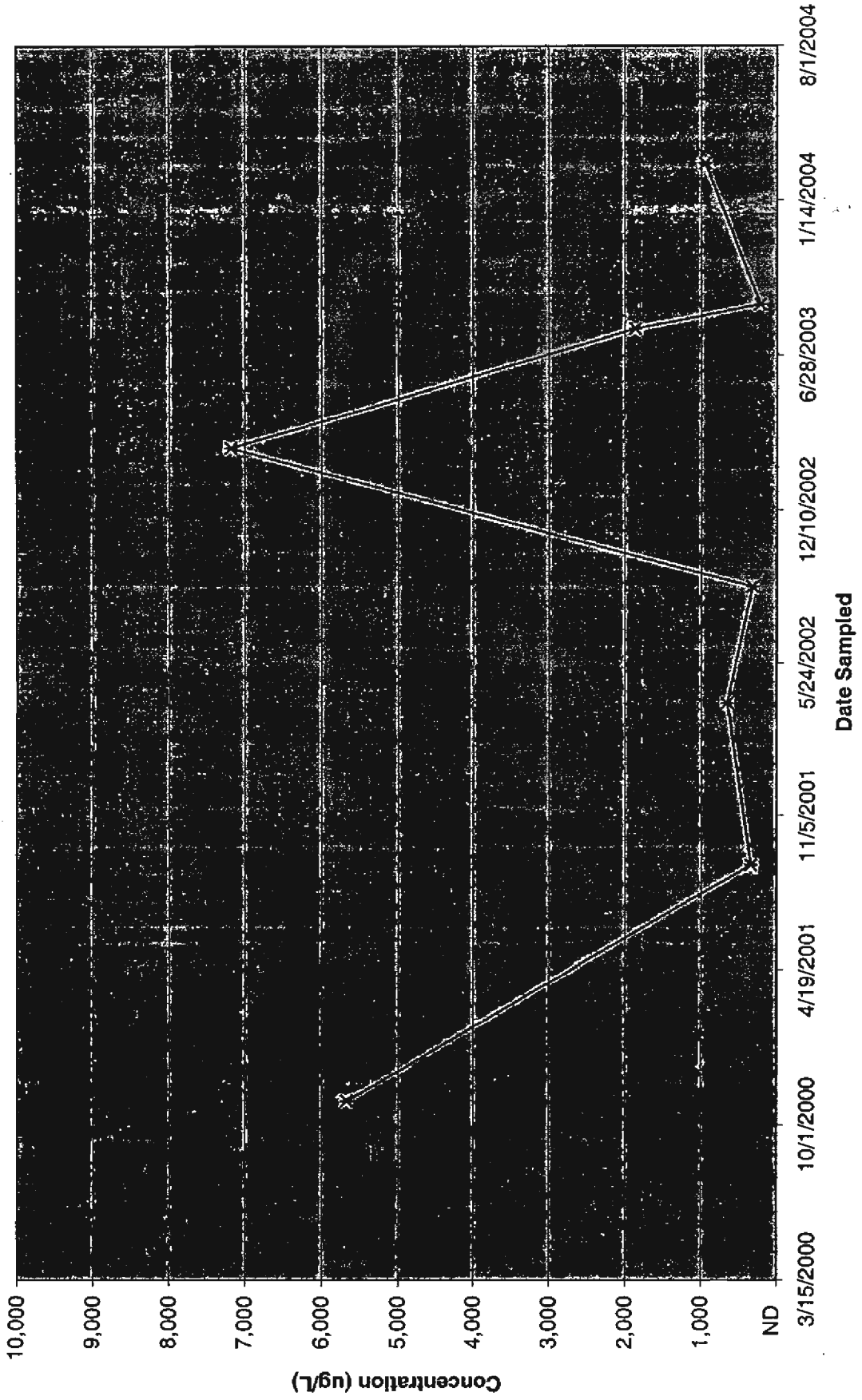
WE-4S Total BTEX, MTBE, and Naphthalene



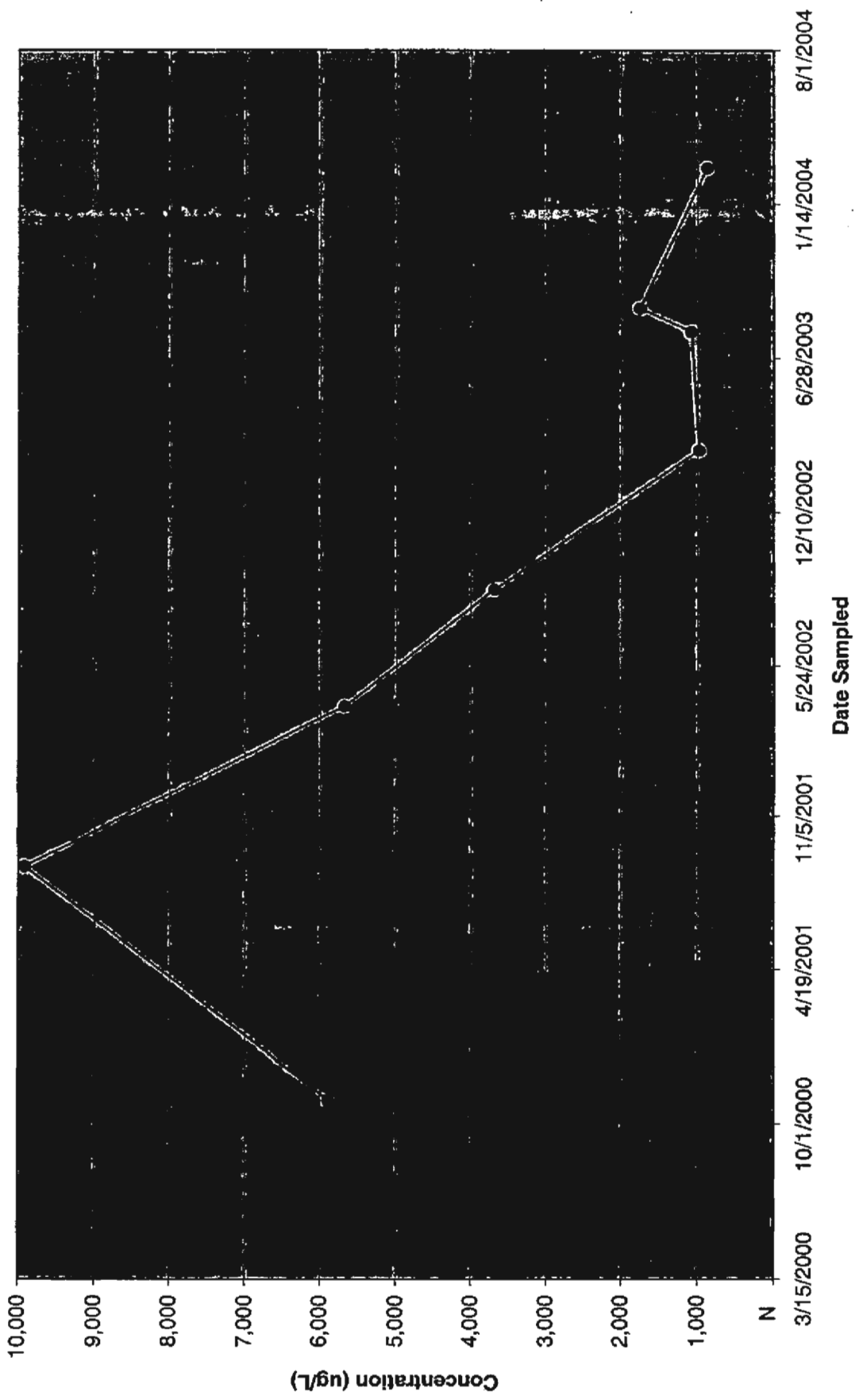
WE-7 Total BTEX, MTBE, and Naphthalene



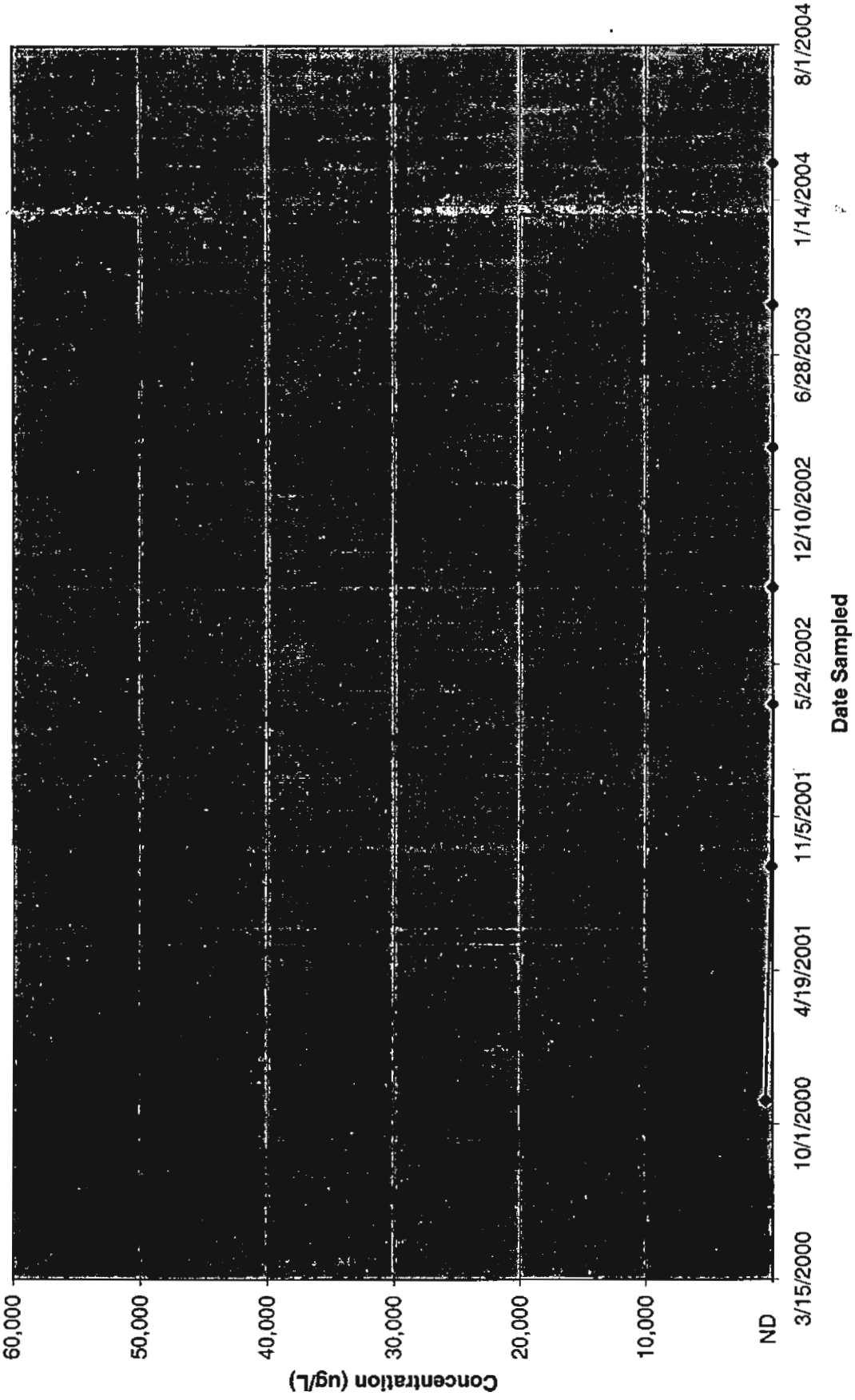
WE-8 Total BTEX, MTBE, and Naphthalene



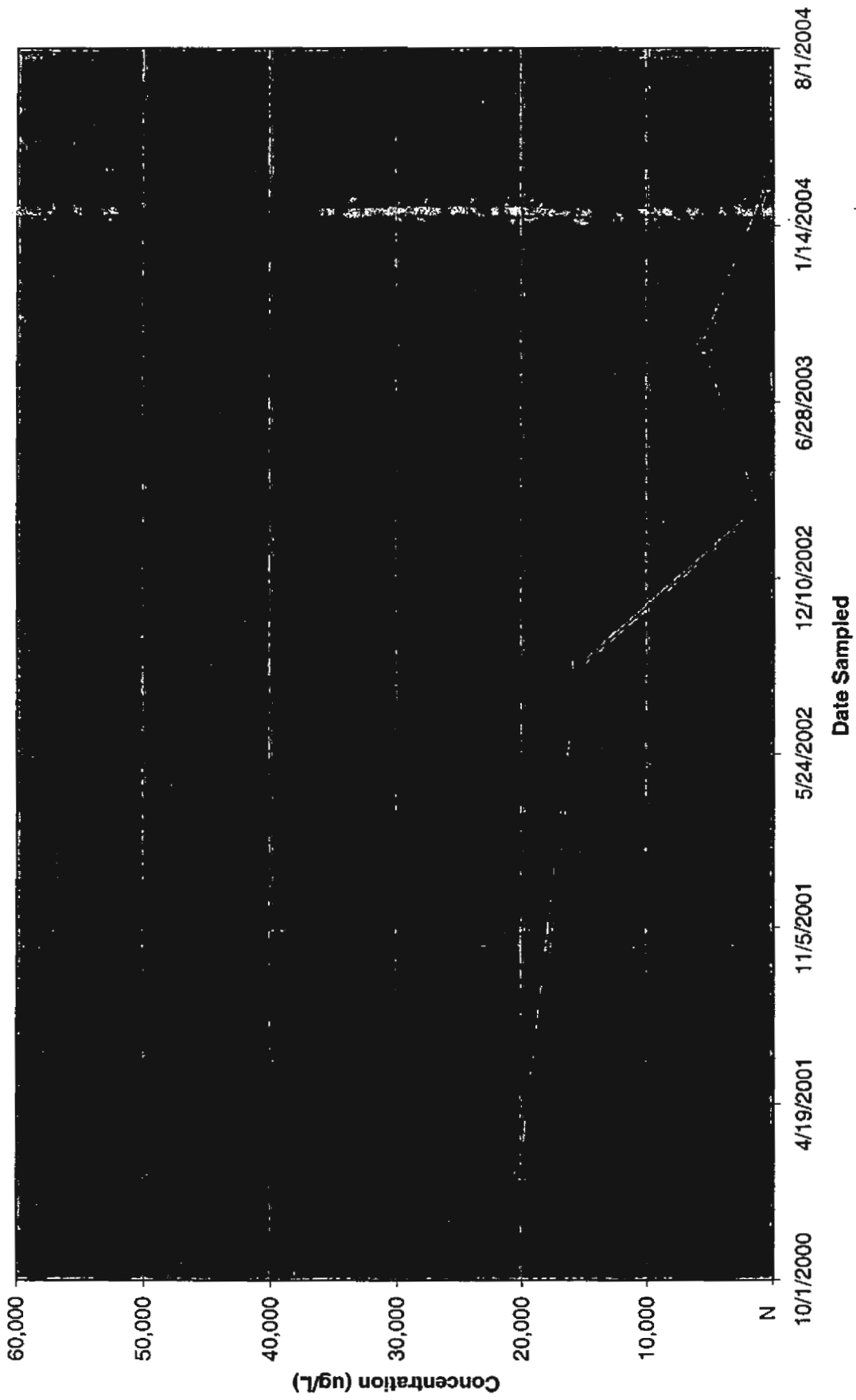
WE-9 Total BTEX, MTBE, and Naphthalene



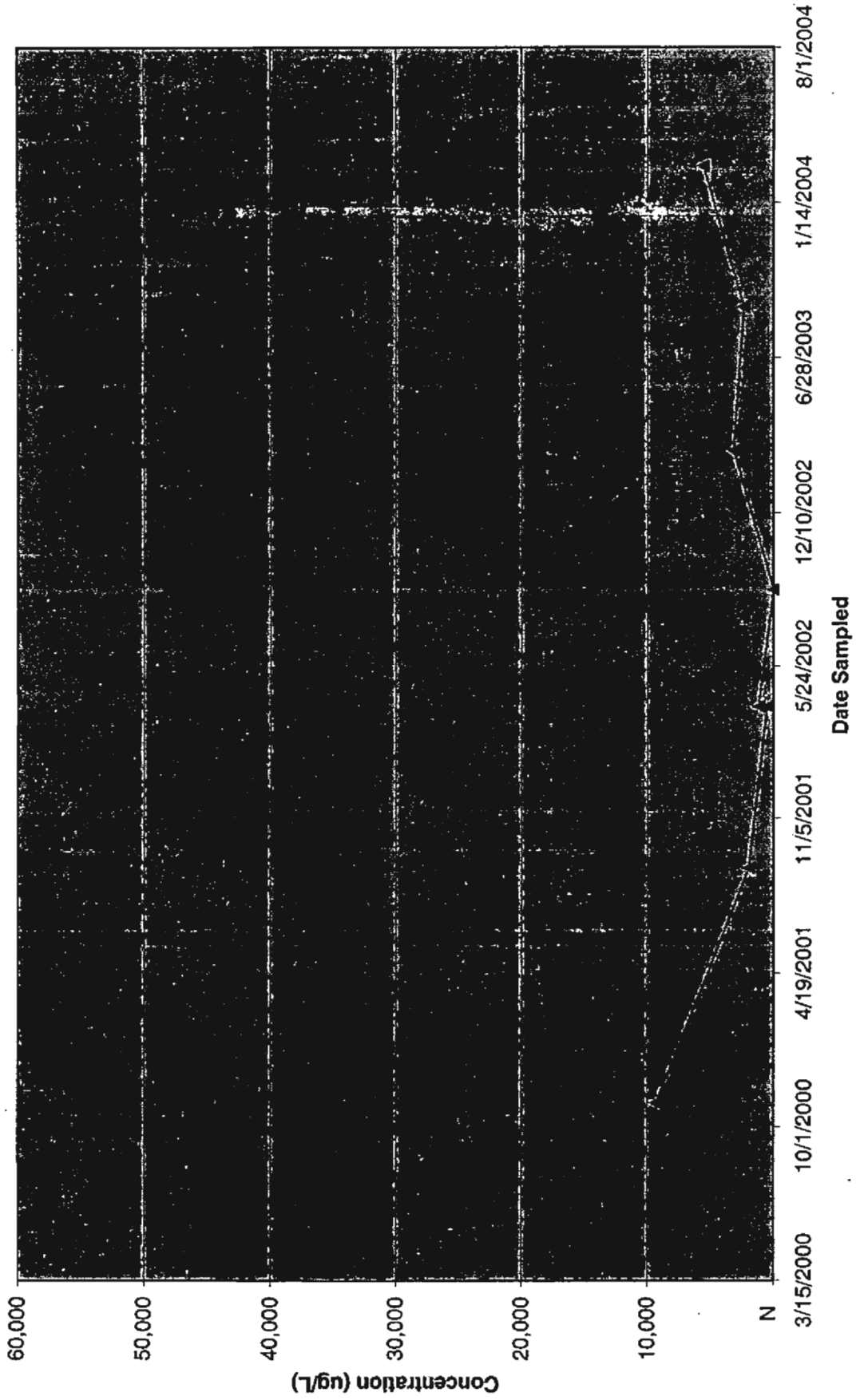
TRC-104 Total VPH



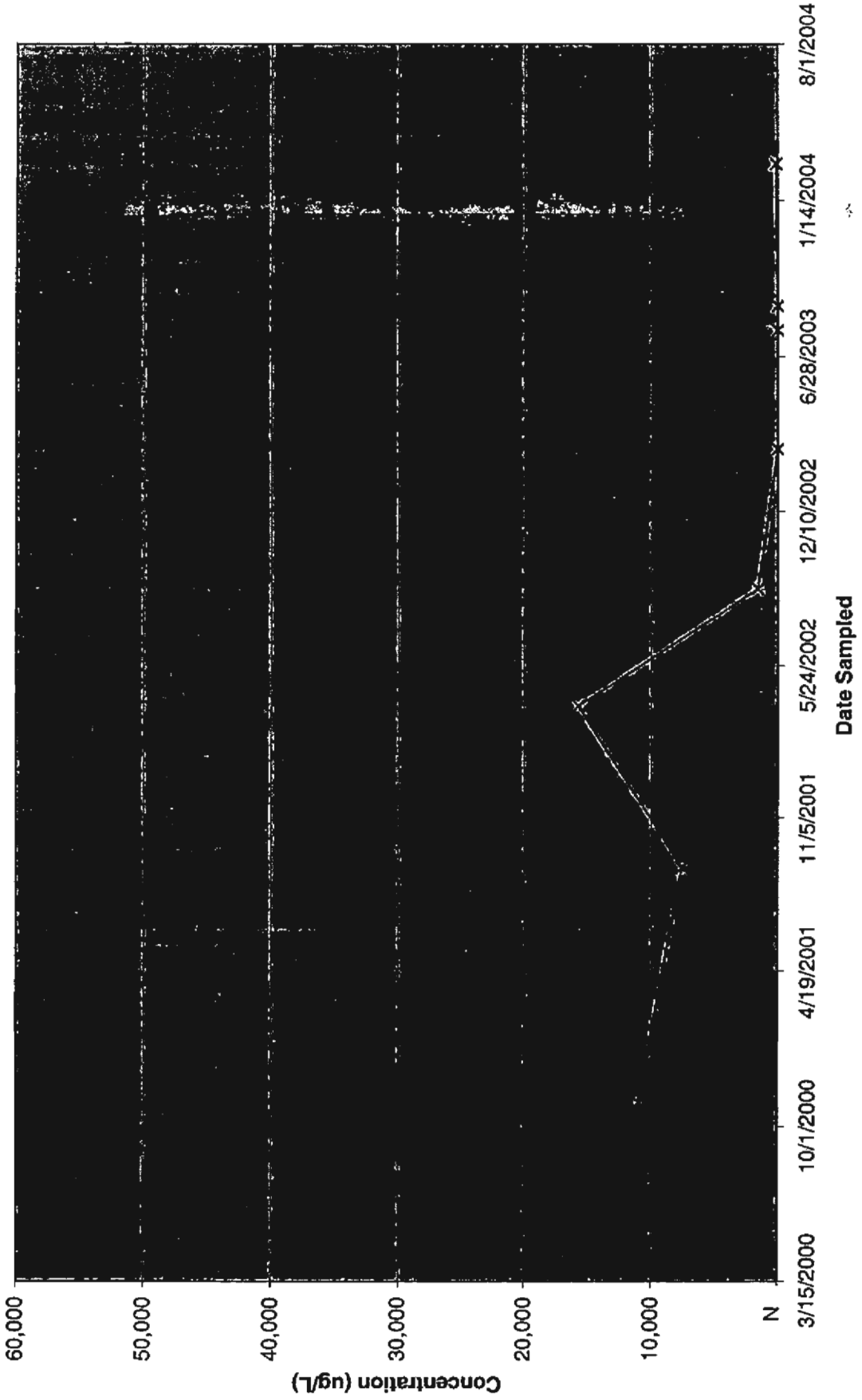
TRC-106 Total VPH



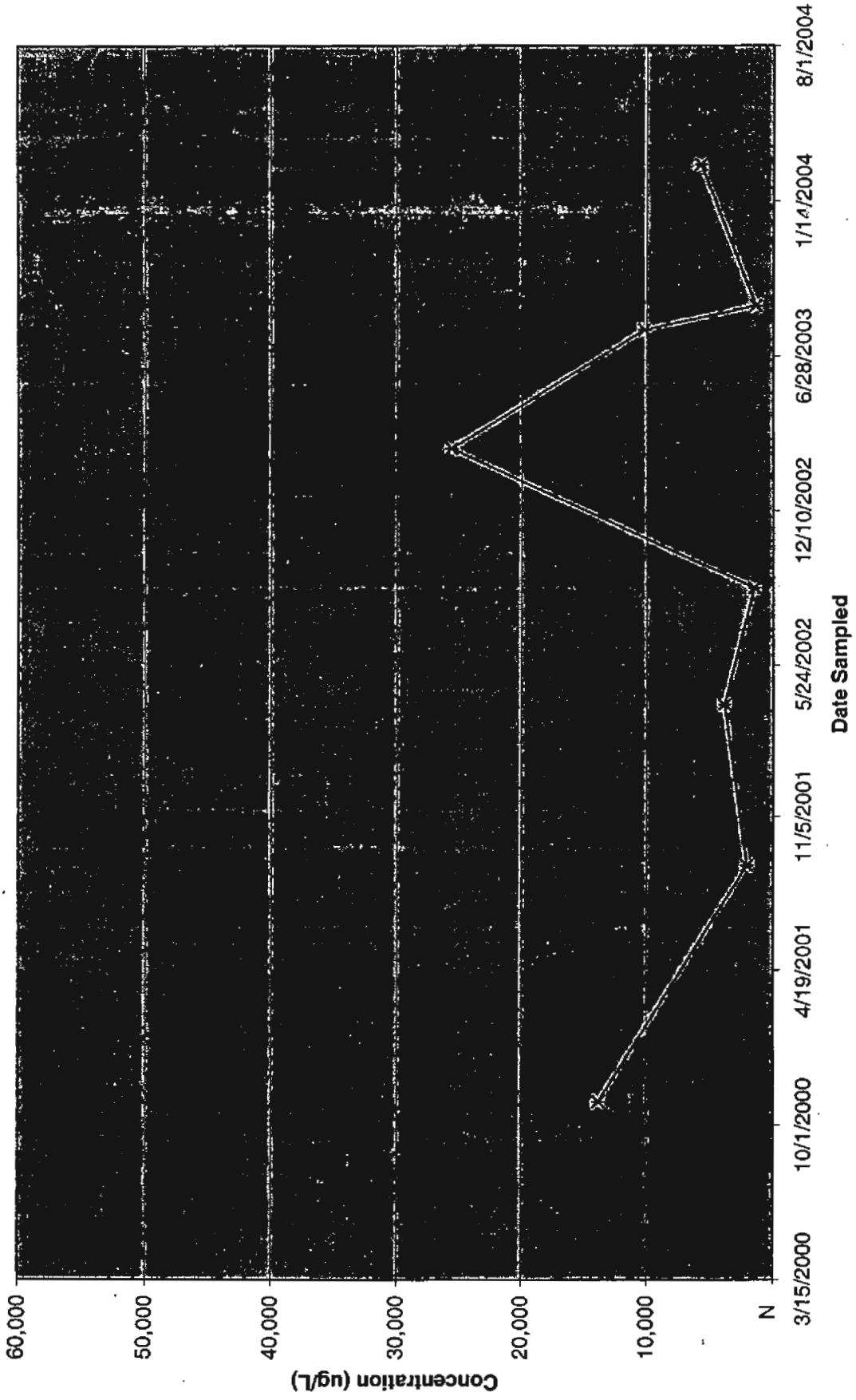
WE-4S Total VPH



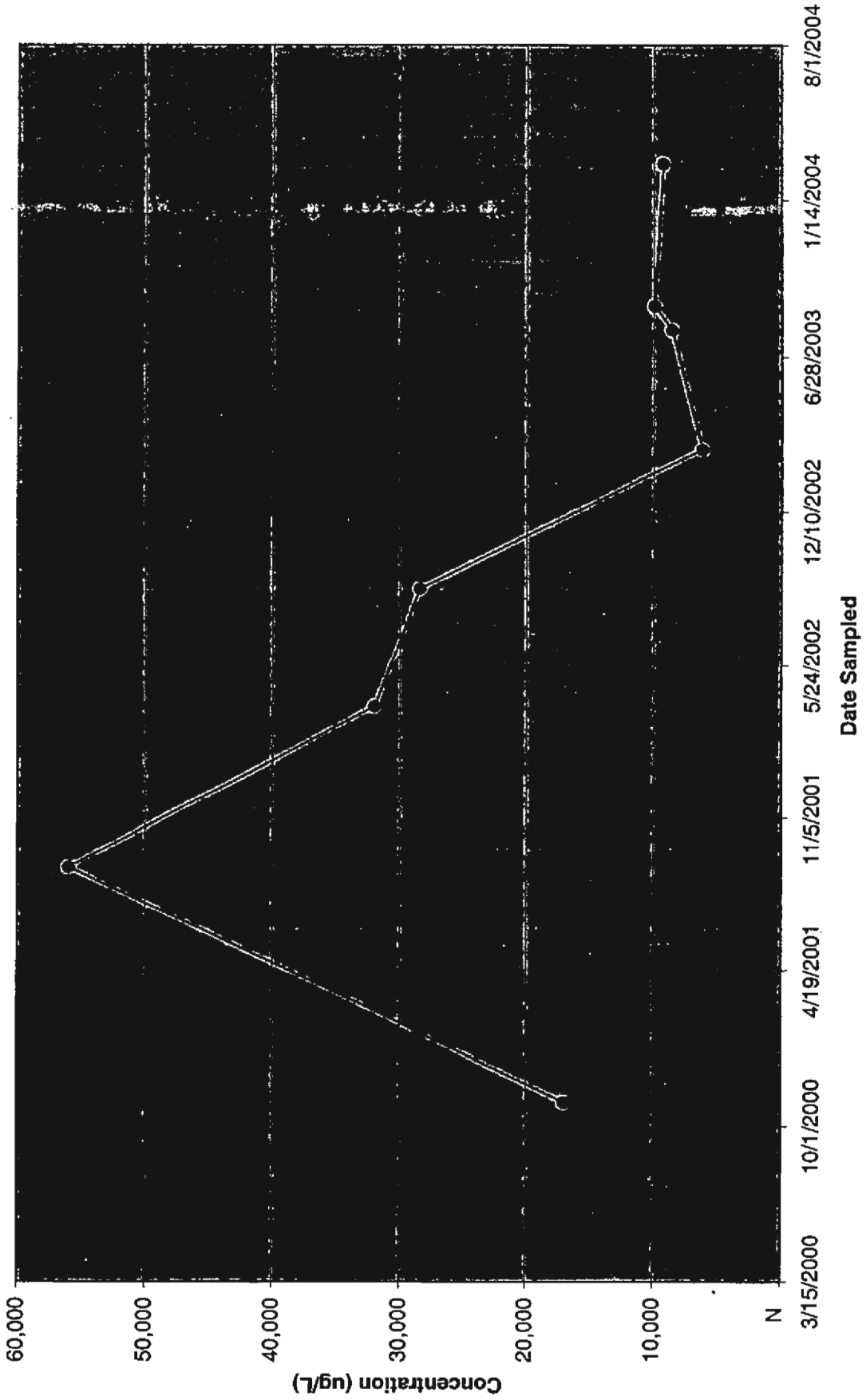
WE-7 Total VPH



WE-8 Total VPH



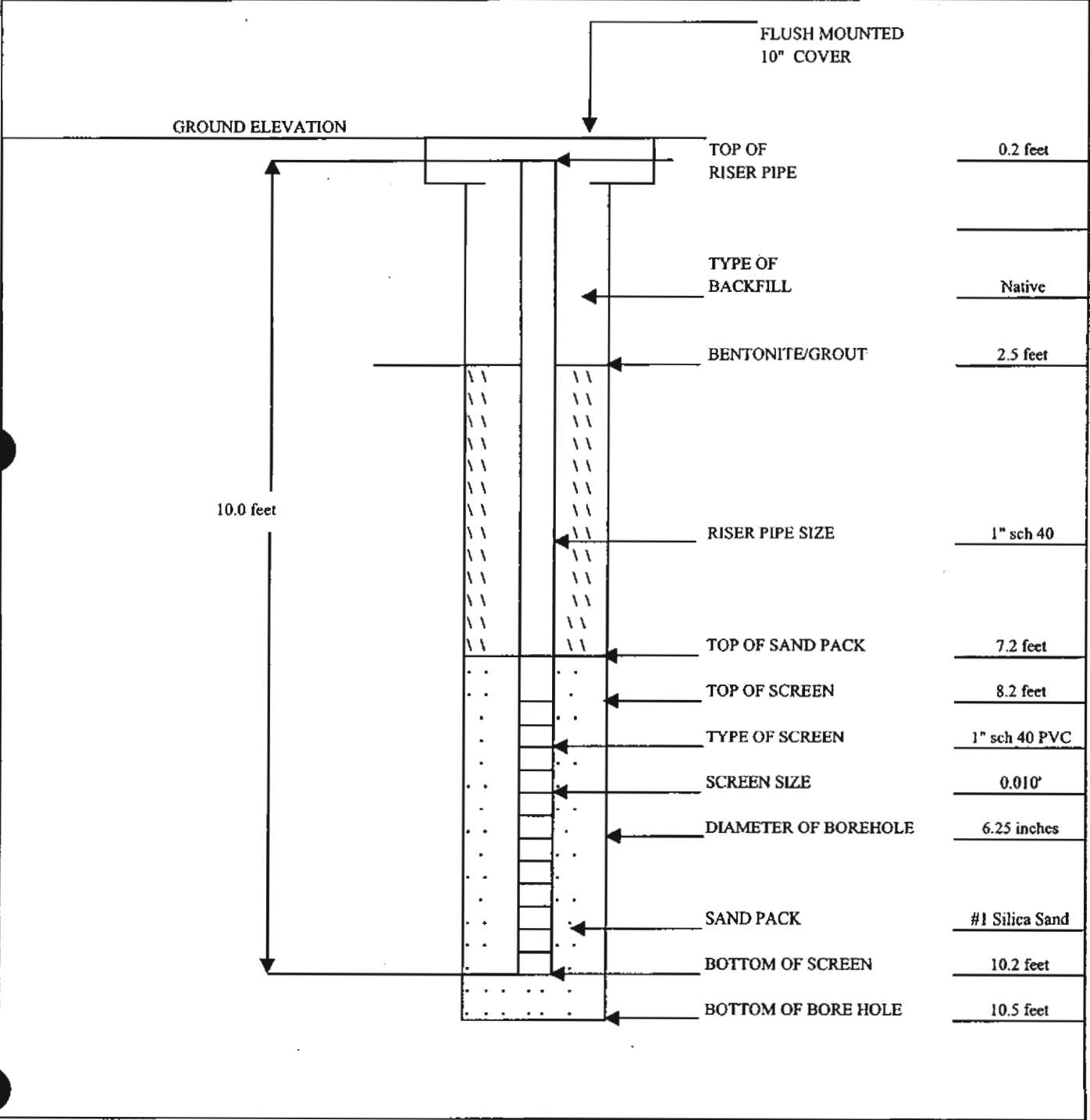
WE-9 Total VPH



APPENDIX E

**TANK K – SPARGE POINT REPLACEMENT
CONSTRUCTION LOGS**

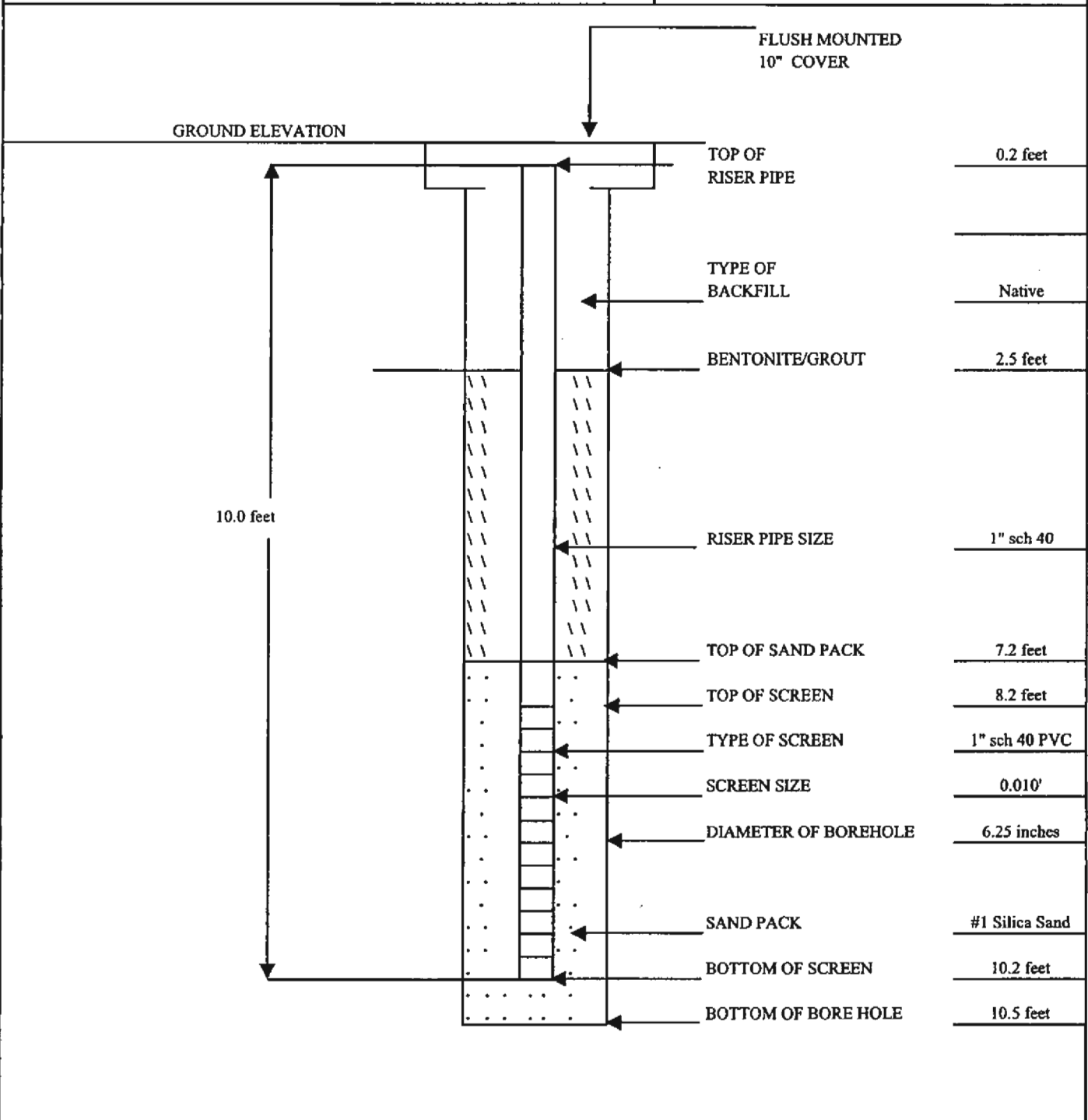
PROJECT SITE:	Former GE, Tank K, 60 Fordham Rd, Wilmington, MA	WELL ID.:	A-2
CLIENT:	TRC Environmental Corp.	JOB NUMBER:	TR003
DRILLING CONTRACTOR:	Environmental Drilling	LOCATION OF WELL:	Tank K area
DRILLING FOREMAN:		SHEET:	1 OF 1
INSPECTOR:	B. Dynkin		
INSTALLATION DATE:	December 1, 2003		



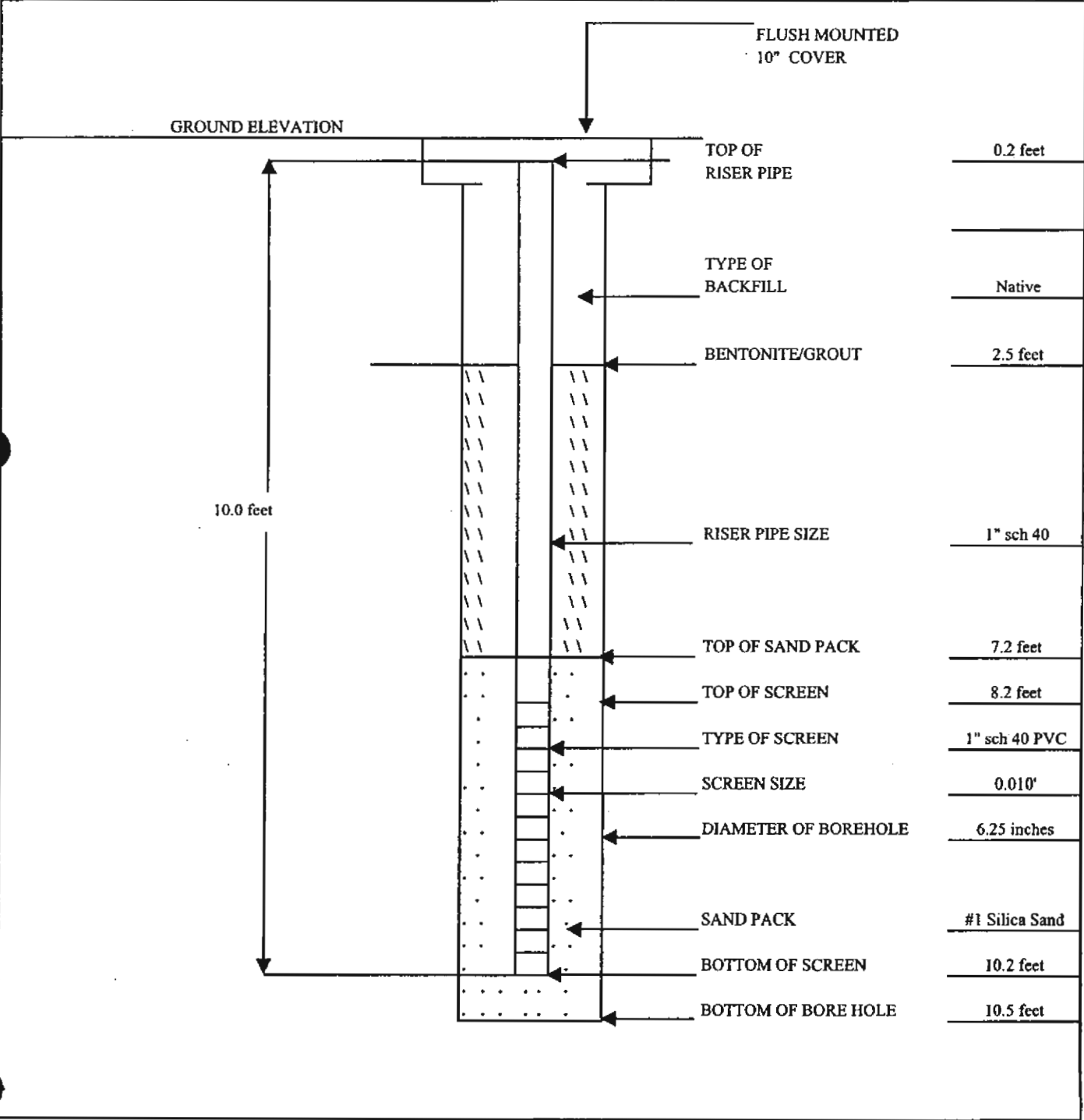
Innovative Engineering Solutions, Inc.

BIO_SPARGING WELL CONSTRUCTION LOG

PROJECT SITE:	Former GE, Tank K, 60 Fordham Rd, Wilmington, MA	WELL ID.:	A-3
CLIENT:	TRC Environmental Corp.	JOB NUMBER:	TR003
DRILLING CONTRACTOR:	Environmental Drilling	LOCATION OF WELL:	Tank K area
DRILLING FOREMAN:		SHEET:	1 OF 1
INSPECTOR:	B. Dynkin		
INSTALLATION DATE:	December 1, 2003		



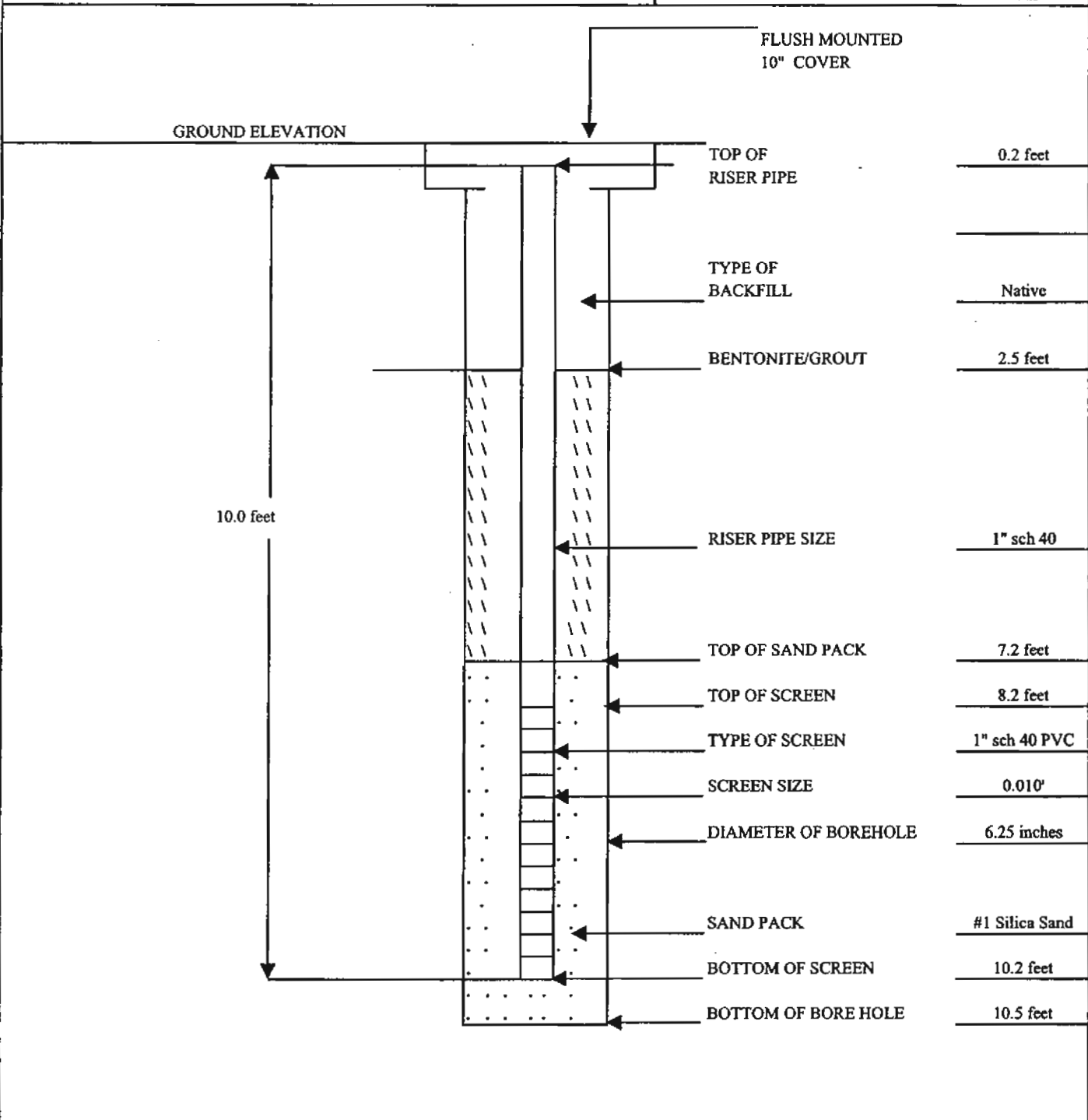
PROJECT SITE:	Former GE, Tank K, 60 Fordham Rd, Wilmington, MA	WELL ID.:	B-4
CLIENT:	TRC Environmental Corp.	JOB NUMBER:	TR003
DRILLING CONTRACTOR:	Environmental Drilling	LOCATION OF WELL:	Tank K area
DRILLING FOREMAN:		SHEET:	1 OF 1
INSPECTOR:	B. Dynkin		
INSTALLATION DATE:	December 1, 2003		



Innovative Engineering Solutions, Inc.

BIO_SPARGING WELL CONSTRUCTION LOG

PROJECT SITE:	Former GE, Tank K, 60 Fordham Rd, Wilmington, MA	WELL ID.:	B-5
CLIENT:	TRC Environmental Corp.	JOB NUMBER:	TR003
DRILLING CONTRACTOR:	Environmental Drilling	LOCATION OF WELL:	Tank K area
DRILLING FOREMAN:		SHEET:	1 OF 1
INSPECTOR:	B. Dynkin		
INSTALLATION DATE:	December 1, 2003		



APPENDIX F

**GROUNDWATER SOURCE CONTROL
AREA - AMBIENT AIR MONITORING RESULTS**

MITKEM
CORPORATION

"Environmental Testing For The New Millennium"

September 9, 2003

TRC Solutions, Inc.
Foot of John Street
Lowell, MA 01852
Attn: Ms. Liz Denly

RE: Client Project: Lockheed-Wilmington, 9/5 Samples
Lab Project #: B1417

Dear Ms. Denly:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,



Agnes R. Ng
CLP Project Manager



Report of Laboratory Analyses for TRC Solutions, Inc.

Client Project: Lockheed – Wilmington, 9/5 Samples

SDG# B1417

Mitkem Project ID: B1417

September 9, 2003

Prepared For: TRC Solutions, Inc.
Foot of John Street
Lowell, MA 01852
Attn: Ms. Liz Denly

Prepared By: Mitkem Corporation
175 Metro Center Boulevard
Warwick, RI 02886
(401) 732-3400

0001



Client: TRC Solutions, Inc

Client Project: Lockheed-Wilmington

Lab Project ID: B1417

Date samples received: 09/06/03

Project Narrative

This data report includes the analysis results for four (4) samples that were received on September 6, 2003. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and the laboratory sample ID.

Spike recoveries were within the QC limits in the lab control sample and lab control sample duplicate with the exception of chloroform in the lab control sample. Replicate RPDs were within the QC limits with the exception of vinyl acetate. Results for vinyl chloride are reported below the normal reporting limit, but above the laboratory method detection limit to achieve project objectives. This reduced reporting limit is supported by the analysis of a laboratory fortified blank, spiked at the 2 ug/L concentration level.

No other unusual observation was noted during sample analysis.

The pages in this report have been numbered consecutively starting with the title page and ending with a page saying only "Last Page of Data Report".

This data report has been reviewed and is authorized for release as evidenced by the signature below.

A handwritten signature in black ink, appearing to read "Agnes Ng".

Agnes Ng
CLP Project Manager
09/09/03

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ABOVE ROOF

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: B1417-04A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8694

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ABOVE ROOF

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: B1417-04A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8694

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
142-28-9-----	1,3-Dichloropropane		5 U
127-18-4-----	Tetrachloroethene		5 U
591-78-6-----	2-Hexanone		5 U
124-48-1-----	Dibromochloromethane		5 U
106-93-4-----	1,2-Dibromoethane		5 U
108-90-7-----	Chlorobenzene		5 U
630-20-6-----	1,1,1,2-Tetrachloroethane		5 U
100-41-4-----	Ethylbenzene		5 U
-----	m,p-Xylene		5 U
95-47-6-----	o-Xylene		5 U
1330-20-7-----	Xylene (Total)		5 U
100-42-5-----	Styrene		5 U
75-25-2-----	Bromoform		5 U
98-82-8-----	Isopropylbenzene		5 U
79-34-5-----	1,1,2,2-Tetrachloroethane		5 U
108-86-1-----	Bromobenzene		5 U
96-18-4-----	1,2,3-Trichloropropane		5 U
103-65-1-----	n-Propylbenzene		5 U
95-49-8-----	2-Chlorotoluene		5 U
108-67-8-----	1,3,5-Trimethylbenzene		5 U
106-43-4-----	4-Chlorotoluene		5 U
98-06-6-----	tert-Butylbenzene		5 U
95-63-6-----	1,2,4-Trimethylbenzene		5 U
135-98-8-----	sec-Butylbenzene		5 U
99-87-6-----	4-Isopropyltoluene		5 U
541-73-1-----	1,3-Dichlorobenzene		5 U
106-46-7-----	1,4-Dichlorobenzene		5 U
104-51-8-----	n-Butylbenzene		5 U
95-50-1-----	1,2-Dichlorobenzene		5 U
96-12-8-----	1,2-Dibromo-3-chloropropane		5 U
120-82-1-----	1,2,4-Trichlorobenzene		5 U
87-68-3-----	Hexachlorobutadiene		5 U
91-20-3-----	Naphthalene		5 U
87-61-6-----	1,2,3-Trichlorobenzene		5 U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RINSE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix: (soil/water) WATER

Lab Sample ID: B1417-01A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2F8691

Level: (low/med) LOW

Date Received: 09/06/03

% Moisture: not dec. _____

Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	2	J
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RINSE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix: (soil/water) WATER

Lab Sample ID: B1417-01A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2F8691

Level: (low/med) LOW

Date Received: 09/06/03

% Moisture: not dec. _____

Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
---------	----------	--	---

142-28-9-----	1,3-Dichloropropane	5	U
127-18-4-----	Tetrachloroethene	5	U
591-78-6-----	2-Hexanone	5	U
124-48-1-----	Dibromochloromethane	5	U
106-93-4-----	1,2-Dibromoethane	5	U
108-90-7-----	Chlorobenzene	5	U
630-20-6-----	1,1,1,2-Tetrachloroethane	5	U
100-41-4-----	Ethylbenzene	5	U
-----	m,p-Xylene	5	U
95-47-6-----	o-Xylene	5	U
1330-20-7-----	Xylene (Total)	5	U
100-42-5-----	Styrene	5	U
75-25-2-----	Bromoform	5	U
98-82-8-----	Isopropylbenzene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	5	U
108-86-1-----	Bromobenzene	5	U
96-18-4-----	1,2,3-Trichloropropane	5	U
103-65-1-----	n-Propylbenzene	5	U
95-49-8-----	2-Chlorotoluene	5	U
108-67-8-----	1,3,5-Trimethylbenzene	5	U
106-43-4-----	4-Chlorotoluene	5	U
98-06-6-----	tert-Butylbenzene	5	U
95-63-6-----	1,2,4-Trimethylbenzene	5	U
135-98-8-----	sec-Butylbenzene	5	U
99-87-6-----	4-Isopropyltoluene	5	U
541-73-1-----	1,3-Dichlorobenzene	5	U
106-46-7-----	1,4-Dichlorobenzene	5	U
104-51-8-----	n-Butylbenzene	5	U
95-50-1-----	1,2-Dichlorobenzene	5	U
96-12-8-----	1,2-Dibromo-3-chloropropane	5	U
120-82-1-----	1,2,4-Trichlorobenzene	5	U
87-68-3-----	Hexachlorobutadiene	5	U
91-20-3-----	Naphthalene	5	U
87-61-6-----	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SHED INSIDE

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1417
 Matrix: (soil/water) WATER Lab Sample ID: B1417-02A
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8692
 Level: (low/med) LOW Date Received: 09/06/03
 % Moisture: not dec. _____ Date Analyzed: 09/08/03
 GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SHED INSIDE

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: B1417-02A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8692

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
142-28-9-----	1,3-Dichloropropane		5 U
127-18-4-----	Tetrachloroethene		5 U
591-78-6-----	2-Hexanone		5 U
124-48-1-----	Dibromochloromethane		5 U
106-93-4-----	1,2-Dibromoethane		5 U
108-90-7-----	Chlorobenzene		5 U
630-20-6-----	1,1,1,2-Tetrachloroethane		5 U
100-41-4-----	Ethylbenzene		5 U
-----	m,p-Xylene		5 U
95-47-6-----	o-Xylene		5 U
1330-20-7-----	Xylene (Total)		5 U
100-42-5-----	Styrene		5 U
75-25-2-----	Bromoform		5 U
98-82-8-----	Isopropylbenzene		5 U
79-34-5-----	1,1,2,2-Tetrachloroethane		5 U
108-86-1-----	Bromobenzene		5 U
96-18-4-----	1,2,3-Trichloropropane		5 U
103-65-1-----	n-Propylbenzene		5 U
95-49-8-----	2-Chlorotoluene		5 U
108-67-8-----	1,3,5-Trimethylbenzene		5 U
106-43-4-----	4-Chlorotoluene		5 U
98-06-6-----	tert-Butylbenzene		5 U
95-63-6-----	1,2,4-Trimethylbenzene		5 U
135-98-8-----	sec-Butylbenzene		5 U
99-87-6-----	4-Isopropyltoluene		5 U
541-73-1-----	1,3-Dichlorobenzene		5 U
106-46-7-----	1,4-Dichlorobenzene		5 U
104-51-8-----	n-Butylbenzene		5 U
95-50-1-----	1,2-Dichlorobenzene		5 U
96-12-8-----	1,2-Dibromo-3-chloropropane		5 U
120-82-1-----	1,2,4-Trichlorobenzene		5 U
87-68-3-----	Hexachlorobutadiene		5 U
91-20-3-----	Naphthalene		5 U
87-61-6-----	1,2,3-Trichlorobenzene		5 U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SHED OUTSIDE

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: B1417-03A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8693

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SHED OUTSIDE

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: B1417-03A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8693

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V2ELCS

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: LCS-9066

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8684

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/07/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	38	
74-87-3	Chloromethane	39	
75-01-4	Vinyl Chloride	40	
74-83-9	Bromomethane	45	
75-00-3	Chloroethane	44	
75-69-4	Trichlorofluoromethane	42	
75-35-4	1,1-Dichloroethene	43	
67-64-1	Acetone	35	
74-88-4	Iodomethane	46	
75-15-0	Carbon Disulfide	41	
75-09-2	Methylene Chloride	43	
156-60-5	trans-1,2-Dichloroethene	46	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	44	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	40	
156-59-2	cis-1,2-Dichloroethene	50	
590-20-7	2,2-Dichloropropane	46	
74-97-5	Bromochloromethane	46	
67-66-3	Chloroform	44	
71-55-6	1,1,1-Trichloroethane	44	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon Tetrachloride	43	
107-06-2	1,2-Dichloroethane	44	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	46	
74-95-3	Dibromomethane	45	
75-27-4	Bromodichloromethane	45	
10061-01-5	cis-1,3-Dichloropropene	52	
108-10-1	4-Methyl-2-pentanone	42	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	46	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V2ELCS

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: LCS-9066

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8684

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/07/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane		47
127-18-4	Tetrachloroethene		46
591-78-6	2-Hexanone		45
124-48-1	Dibromochloromethane		47
106-93-4	1,2-Dibromoethane		48
108-90-7	Chlorobenzene		46
630-20-6	1,1,1,2-Tetrachloroethane		45
100-41-4	Ethylbenzene		50
	m,p-Xylene		98
95-47-6	o-Xylene		52
1330-20-7	Xylene (Total)		150
100-42-5	Styrene		52
75-25-2	Bromoform		49
98-82-8	Isopropylbenzene		47
79-34-5	1,1,2,2-Tetrachloroethane		43
108-86-1	Bromobenzene		50
96-18-4	1,2,3-Trichloropropane		45
103-65-1	n-Propylbenzene		46
95-49-8	2-Chlorotoluene		48
108-67-8	1,3,5-Trimethylbenzene		46
106-43-4	4-Chlorotoluene		49
98-06-6	tert-Butylbenzene		43
95-63-6	1,2,4-Trimethylbenzene		48
135-98-8	sec-Butylbenzene		39
99-87-6	4-Isopropyltoluene		40
541-73-1	1,3-Dichlorobenzene		48
106-46-7	1,4-Dichlorobenzene		46
104-51-8	n-Butylbenzene		37
95-50-1	1,2-Dichlorobenzene		49
96-12-8	1,2-Dibromo-3-chloropropane		45
120-82-1	1,2,4-Trichlorobenzene		45
87-68-3	Hexachlorobutadiene		30
91-20-3	Naphthalene		52
87-61-6	1,2,3-Trichlorobenzene		43

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V2ELCSD

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix: (soil/water) WATER

Lab Sample ID: LCSD-9066

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2F8685

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/07/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	48	
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	49	
124-48-1	Dibromochloromethane	49	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	47	
100-41-4	Ethylbenzene	52	
	m,p-Xylene	100	
95-47-6	o-Xylene	55	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	54	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	44	
108-86-1	Bromobenzene	52	
96-18-4	1,2,3-Trichloropropane	43	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	41	
99-87-6	4-Isopropyltoluene	42	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	38	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	46	
87-68-3	Hexachlorobutadiene	32	
91-20-3	Naphthalene	52	
87-61-6	1,2,3-Trichlorobenzene	44	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V2ELFB

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: LFB-9066

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8686

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	2	J
74-87-3	Chloromethane	2	J
75-01-4	Vinyl Chloride	2	
74-83-9	Bromomethane	3	J
75-00-3	Chloroethane	2	J
75-69-4	Trichlorofluoromethane	1	J
75-35-4	1,1-Dichloroethene	2	J
67-64-1	Acetone	8	
74-88-4	Iodomethane	2	J
75-15-0	Carbon Disulfide	2	J
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	2	J
1634-04-4	Methyl tert-butyl ether	2	J
75-34-3	1,1-Dichloroethane	2	J
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	2	J
156-59-2	cis-1,2-Dichloroethene	2	J
590-20-7	2,2-Dichloropropane	2	J
74-97-5	Bromochloromethane	2	J
67-66-3	Chloroform	2	J
71-55-6	1,1,1-Trichloroethane	2	J
563-58-6	1,1-Dichloropropene	2	J
56-23-5	Carbon Tetrachloride	2	J
107-06-2	1,2-Dichloroethane	2	J
71-43-2	Benzene	2	J
79-01-6	Trichloroethene	2	J
78-87-5	1,2-Dichloropropane	2	J
74-95-3	Dibromomethane	2	J
75-27-4	Bromodichloromethane	2	J
10061-01-5	cis-1,3-Dichloropropene	2	J
108-10-1	4-Methyl-2-pentanone	2	J
108-88-3	Toluene	2	J
10061-02-6	trans-1,3-Dichloropropene	2	J
79-00-5	1,1,2-Trichloroethane	2	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V2ELFB

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: LFB-9066

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8686

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/08/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane		2 J
127-18-4	Tetrachloroethene		2 J
591-78-6	2-Hexanone		2 J
124-48-1	Dibromochloromethane		2 J
106-93-4	1,2-Dibromoethane		2 J
108-90-7	Chlorobenzene		2 J
630-20-6	1,1,1,2-Tetrachloroethane		2 J
100-41-4	Ethylbenzene		2 J
	m,p-Xylene		4 J
95-47-6	o-Xylene		2 J
1330-20-7	Xylene (Total)		6
100-42-5	Styrene		2 J
75-25-2	Bromoform		2 J
98-82-8	Isopropylbenzene		2 J
79-34-5	1,1,2,2-Tetrachloroethane		2 J
108-86-1	Bromobenzene		2 J
96-18-4	1,2,3-Trichloropropane		2 J
103-65-1	n-Propylbenzene		2 J
95-49-8	2-Chlorotoluene		2 J
108-67-8	1,3,5-Trimethylbenzene		2 J
106-43-4	4-Chlorotoluene		2 J
98-06-6	tert-Butylbenzene		2 J
95-63-6	1,2,4-Trimethylbenzene		2 J
135-98-8	sec-Butylbenzene		2 J
99-87-6	4-Isopropyltoluene		2 J
541-73-1	1,3-Dichlorobenzene		2 J
106-46-7	1,4-Dichlorobenzene		2 J
104-51-8	n-Butylbenzene		2 J
95-50-1	1,2-Dichlorobenzene		2 J
96-12-8	1,2-Dibromo-3-chloropropane		2 J
120-82-1	1,2,4-Trichlorobenzene		2 J
87-68-3	Hexachlorobutadiene		3 J
91-20-3	Naphthalene		2 J
87-61-6	1,2,3-Trichlorobenzene		2 J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2E

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1417

Matrix: (soil/water) WATER Lab Sample ID: MB-9066

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V2F8682

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/07/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2E

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix: (soil/water) WATER

Lab Sample ID: MB-9066

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V2F8682

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/07/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane		5 U
127-18-4	Tetrachloroethene		5 U
591-78-6	2-Hexanone		5 U
124-48-1	Dibromochloromethane		5 U
106-93-4	1,2-Dibromoethane		5 U
108-90-7	Chlorobenzene		5 U
630-20-6	1,1,1,2-Tetrachloroethane		5 U
100-41-4	Ethylbenzene		5 U
	m,p-Xylene		5 U
95-47-6	o-Xylene		5 U
1330-20-7	Xylene (Total)		5 U
100-42-5	Styrene		5 U
75-25-2	Bromofom		5 U
98-82-8	Isopropylbenzene		5 U
79-34-5	1,1,2,2-Tetrachloroethane		5 U
108-86-1	Bromobenzene		5 U
96-18-4	1,2,3-Trichloropropane		5 U
103-65-1	n-Propylbenzene		5 U
95-49-8	2-Chlorotoluene		5 U
108-67-8	1,3,5-Trimethylbenzene		5 U
106-43-4	4-Chlorotoluene		5 U
98-06-6	tert-Butylbenzene		5 U
95-63-6	1,2,4-Trimethylbenzene		5 U
135-98-8	sec-Butylbenzene		5 U
99-87-6	4-Isopropyltoluene		5 U
541-73-1	1,3-Dichlorobenzene		5 U
106-46-7	1,4-Dichlorobenzene		5 U
104-51-8	n-Butylbenzene		5 U
95-50-1	1,2-Dichlorobenzene		5 U
96-12-8	1,2-Dibromo-3-chloropropane		5 U
120-82-1	1,2,4-Trichlorobenzene		5 U
87-68-3	Hexachlorobutadiene		5 U
91-20-3	Naphthalene		5 U
87-61-6	1,2,3-Trichlorobenzene		5 U

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLK2E	90	93	104	98	0
02	V2ELCS	92	93	104	102	0
03	V2ELCSD	89	92	106	101	0
04	V2ELFB	92	89	103	100	0
05	RINSE	94	98	102	92	0
06	SHED INSIDE	98	98	101	92	0
07	SHED OUTSIDE	98	100	99	88	0
08	ABOVE ROOF	101	99	100	90	0
09						
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29						
30						

QC LIMITS

SMC1 = Dibromofluoromethane (78-117)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (62-124)
 SMC3 (TOL) = Toluene-d8 (81-116)
 OTHER (BFB) = Bromofluorobenzene (74-126)

Column to be used to flag recovery values

* Values outside of contract required QC limits

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELFB

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Chloride	2.0		1.9	95	65-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2E

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1417
 Lab File ID: V2F8682 Lab Sample ID: MB-9066
 Date Analyzed: 09/07/03 Time Analyzed: 2226
 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N
 Instrument ID: V2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V2ELCS	LCS-9066	V2F8684	2321
02	V2ELCSD	LCSD-9066	V2F8685	2348
03	V2ELFB	LFB-9066	V2F8686	0016
04	RINSE	B1417-01A	V2F8691	0232
05	SHED INSIDE	B1417-02A	V2F8692	0259
06	SHED OUTSIDE	B1417-03A	V2F8693	0326
07	ABOVE ROOF	B1417-04A	V2F8694	0352
08				
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30				

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50		38	76	48-135
Chloromethane	50		39	78	60-118
Vinyl Chloride	50		40	80	65-113
Bromomethane	50		45	90	73-122
Chloroethane	50		44	88	72-118
Trichlorofluoromethane	50		42	84	68-129
1,1-Dichloroethene	50		43	86	67-121
Acetone	50		35	70	38-161
Iodomethane	50		46	92	72-130
Carbon Disulfide	50		41	82	53-137
Methylene Chloride	50		43	86	59-132
trans-1,2-Dichloroethen	50		46	92	71-124
Methyl tert-butyl ether	50		52	104	75-123
1,1-Dichloroethane	50		44	88	83-116
Vinyl acetate	50		50	100	44-160
2-Butanone	50		40	80	64-139
cis-1,2-Dichloroethene	50		50	100	83-120
2,2-Dichloropropane	50		46	92	70-129
Bromochloromethane	50		46	92	85-124
Chloroform	50		44	88*	89-118
1,1,1-Trichloroethane	50		44	88	81-122
1,1-Dichloropropene	50		52	104	76-122
Carbon Tetrachloride	50		43	86	79-125
1,2-Dichloroethane	50		44	88	83-123
Benzene	50		48	96	81-120
Trichloroethene	50		49	98	77-121
1,2-Dichloropropane	50		46	92	81-116
Dibromomethane	50		45	90	86-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50		45	90	90-114
cis-1,3-Dichloropropene	50		52	104	78-119
4-Methyl-2-pentanone	50		42	84	57-138
Toluene	50		50	100	81-121
trans-1,3-Dichloroprope	50		50	100	85-118
1,1,2-Trichloroethane	50		46	92	44-159
1,3-Dichloropropane	50		47	94	79-125
Tetrachloroethene	50		46	92	73-121
2-Hexanone	50		45	90	53-145
Dibromochloromethane	50		47	94	80-124
1,2-Dibromoethane	50		48	96	80-124
Chlorobenzene	50		46	92	82-118
1,1,1,2-Tetrachloroetha	50		45	90	84-121
Ethylbenzene	50		50	100	80-122
Xylene (Total)	150		150	100	81-121
Styrene	50		52	104	77-128
Bromoform	50		49	98	77-130
Isopropylbenzene	50		47	94	58-148
1,1,2,2-Tetrachloroetha	50		43	86	76-125
Bromobenzene	50		50	100	76-124
1,2,3-Trichloropropane	50		45	90	57-140
n-Propylbenzene	50		46	92	72-119
2-Chlorotoluene	50		48	96	75-120
1,3,5-Trimethylbenzene	50		46	92	76-116
4-Chlorotoluene	50		49	98	78-116
tert-Butylbenzene	50		43	86	71-115
1,2,4-Trimethylbenzene	50		48	96	77-117
sec-Butylbenzene	50		39	78	67-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
4-Isopropyltoluene	50		40	80	68-118
1,3-Dichlorobenzene	50		48	96	80-116
1,4-Dichlorobenzene	50		46	92	80-114
n-Butylbenzene	50		37	74	58-121
1,2-Dichlorobenzene	50		49	98	81-116
1,2-Dibromo-3-chloropro	50		45	90	71-126
1,2,4-Trichlorobenzene	50		45	90	67-114
Hexachlorobutadiene	50		30	60	50-111
Naphthalene	50		52	104	58-133
1,2,3-Trichlorobenzene	50		43	86	64-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD	%	QC LIMITS	
			REC #	RPD #	RPD	REC.
Dichlorodifluoromethane	50	44	88	15	40	48-135
Chloromethane	50	44	88	12	40	60-118
Vinyl Chloride	50	46	92	14	40	65-113
Bromomethane	50	49	98	8	40	73-122
Chloroethane	50	48	96	9	40	72-118
Trichlorofluoromethane	50	47	94	11	40	68-129
1,1-Dichloroethene	50	45	90	4	40	67-121
Acetone	50	44	88	23	40	38-161
Iodomethane	50	50	100	8	40	72-130
Carbon Disulfide	50	46	92	11	40	53-137
Methylene Chloride	50	44	88	2	40	59-132
trans-1,2-Dichloroethen	50	48	96	4	40	71-124
Methyl tert-butyl ether	50	56	112	7	40	75-123
1,1-Dichloroethane	50	46	92	4	40	83-116
Vinyl acetate	50	30	60	50*	40	44-160
2-Butanone	50	45	90	12	40	64-139
cis-1,2-Dichloroethene	50	52	104	4	40	83-120
2,2-Dichloropropane	50	47	94	2	40	70-129
Bromochloromethane	50	47	94	2	40	85-124
Chloroform	50	45	90	2	40	89-118
1,1,1-Trichloroethane	50	46	92	4	40	81-122
1,1-Dichloropropene	50	53	106	2	40	76-122
Carbon Tetrachloride	50	44	88	2	40	79-125
1,2-Dichloroethane	50	44	88	0	40	83-123
Benzene	50	48	96	0	40	81-120
Trichloroethene	50	51	102	4	40	77-121
1,2-Dichloropropane	50	46	92	0	40	81-116
Dibromomethane	50	46	92	2	40	86-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Bromodichloromethane	50	46	92	2	40	90-114
cis-1,3-Dichloropropene	50	54	108	4	40	78-119
4-Methyl-2-pentanone	50	46	92	9	40	57-138
Toluene	50	52	104	4	40	81-121
trans-1,3-Dichloroprope	50	52	104	4	40	85-118
1,1,2-Trichloroethane	50	46	92	0	40	44-159
1,3-Dichloropropane	50	48	96	2	40	79-125
Tetrachloroethene	50	49	98	6	40	73-121
2-Hexanone	50	49	98	8	40	53-145
Dibromochloromethane	50	49	98	4	40	80-124
1,2-Dibromoethane	50	50	100	4	40	80-124
Chlorobenzene	50	48	96	4	40	82-118
1,1,1,2-Tetrachloroetha	50	47	94	4	40	84-121
Ethylbenzene	50	52	104	4	40	80-122
Xylene (Total)	150	160	107	7	40	81-121
Styrene	50	54	108	4	40	77-128
Bromoform	50	50	100	2	40	77-130
Isopropylbenzene	50	50	100	6	40	58-148
1,1,2,2-Tetrachloroetha	50	44	88	2	40	76-125
Bromobenzene	50	52	104	4	40	76-124
1,2,3-Trichloropropane	50	43	86	4	40	57-140
n-Propylbenzene	50	48	96	4	40	72-119
2-Chlorotoluene	50	50	100	4	40	75-120
1,3,5-Trimethylbenzene	50	48	96	4	40	76-116
4-Chlorotoluene	50	48	96	2	40	78-116
tert-Butylbenzene	50	46	92	7	40	71-115
1,2,4-Trimethylbenzene	50	49	98	2	40	77-117
sec-Butylbenzene	50	41	82	5	40	67-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: B1417

Matrix Spike - Sample No.: V2ELCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
4-Isopropyltoluene	50	42	84	5	40	68-118
1,3-Dichlorobenzene	50	50	100	4	40	80-116
1,4-Dichlorobenzene	50	47	94	2	40	80-114
n-Butylbenzene	50	38	76	3	40	58-121
1,2-Dichlorobenzene	50	51	102	4	40	81-116
1,2-Dibromo-3-chloropro	50	44	88	2	40	71-126
1,2,4-Trichlorobenzene	50	46	92	2	40	67-114
Hexachlorobutadiene	50	32	64	6	40	50-111
Naphthalene	50	52	104	0	40	58-133
1,2,3-Trichlorobenzene	50	44	88	2	40	64-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 66 outside limits

Spike Recovery: 1 out of 132 outside limits

COMMENTS: _____

Client ID: TRC_MA
Project: Lockheed-Wilmington
Location:
Comments: N/A

Case:
SDG:
PO: E9202-9403-09400

Report Level: LEVEL 2
EDD: GISKEY
HC Due: 09/29/03
Fax Due: 09/10/03

Sample ID	Client Sample ID	Collection Date	Date Received	Matrix	Test Code	Test Code Comments	Iold	MS	SEL	Storage
B1417-01A	RINSE	09/05/03 0:00	09/06/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VOA
B1417-02A	SHED INSIDE	09/05/03 0:00	09/06/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VOA
B1417-03A	SHED OUTSIDE	09/05/03 0:00	09/06/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VOA
B1417-04A	ABOVE ROOF	09/05/03 0:00	09/06/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VOA

Last Page of Data Report



"Environmental Testing For The New Millennium"

September 18, 2003

TRC Solutions, Inc.
Foot of John Street
Lowell, MA 01852
Attn: Ms. Liz Denly

RE: Client Project: Lockheed-Wilmington, 08/29 Samples
Lab Project #: B1384

Dear Ms. Denly:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

A handwritten signature in cursive script, appearing to read "Agnes R. Ng".

Agnes R. Ng
CLP Project Manager



Report of Laboratory Analyses for TRC Solutions, Inc.

Client Project: Lockheed – Wilmington, 08/29 Samples

SDG# B1384

Mitkem Project ID: B1384

September 18, 2003

Prepared For: TRC Solutions, Inc.
Foot of John Street
Lowell, MA 01852
Attn: Ms. Liz Denly

Prepared By: Mitkem Corporation
175 Metro Center Boulevard
Warwick, RI 02886
(401) 732-3400



Client: TRC Solutions, Inc

Client Project: Lockheed-Wilmington

Lab Project ID: B1384

Date samples received: 08/29/03

Project Narrative

This data report includes the analysis results for five (5) samples that were received on August 29, 2003. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and the laboratory sample ID.

Spike recoveries were within the QC limits in the lab control sample with the exception of bromomethane, chloroethane and trichlorofluoromethane in V6RLCS and bromomethane, chloroethane, trichlorofluoromethane, 1,2-dichloromethane and bromodichloromethane in V6WLCS. Results for vinyl chloride are reported below the normal reporting limit, but above the laboratory method detection limit to achieve project objectives. This reduced reporting limit is supported by the analysis of a laboratory fortified blank, spiked at the 2 ug/L concentration level. Due to high concentration of target analytes, sample A/SEFFL4 was re-analyzed at 8x dilution. Both the initial and re-analysis at dilution are reported.

No other unusual observation was noted during sample analysis.

The pages in this report have been numbered consecutively starting with the title page and ending with a page saying only "Last Page of Data Report".

This data report has been reviewed and is authorized for release as evidenced by the signature below.

A handwritten signature in black ink, appearing to read "Agnes Ng".

Agnes Ng
CLP Project Manager

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A/S EFFL2

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-01A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8346

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	11	
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	4	J
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A/S EFFL2

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-01A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8346

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	2	J
87-61-6	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A/S EFFL4

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-04A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8349

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	6	
67-64-1	Acetone	13	
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	1	J
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	33	
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	3	J
156-59-2	cis-1,2-Dichloroethene	50	
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	940	E
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	3	J
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A/S EFFL4

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Matrix: (soil/water) WATER Lab Sample ID: B1384-04A
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8349
 Level: (low/med) LOW Date Received: 08/30/03
 % Moisture: not dec. _____ Date Analyzed: 09/02/03
 GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	850	E
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A/SEFFL4DL

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-04ADL

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8388

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
142-28-9-----	1,3-Dichloropropane	40	U
127-18-4-----	Tetrachloroethene	840	D
591-78-6-----	2-Hexanone	40	U
124-48-1-----	Dibromochloromethane	40	U
106-93-4-----	1,2-Dibromoethane	40	U
108-90-7-----	Chlorobenzene	40	U
630-20-6-----	1,1,1,2-Tetrachloroethane	40	U
100-41-4-----	Ethylbenzene	40	U
-----	m,p-Xylene	40	U
95-47-6-----	o-Xylene	40	U
1330-20-7-----	Xylene (Total)	40	U
100-42-5-----	Styrene	40	U
75-25-2-----	Bromoform	40	U
98-82-8-----	Isopropylbenzene	40	U
79-34-5-----	1,1,2,2-Tetrachloroethane	40	U
108-86-1-----	Bromobenzene	40	U
96-18-4-----	1,2,3-Trichloropropane	40	U
103-65-1-----	n-Propylbenzene	40	U
95-49-8-----	2-Chlorotoluene	40	U
108-67-8-----	1,3,5-Trimethylbenzene	40	U
106-43-4-----	4-Chlorotoluene	40	U
98-06-6-----	tert-Butylbenzene	40	U
95-63-6-----	1,2,4-Trimethylbenzene	40	U
135-98-8-----	sec-Butylbenzene	40	U
99-87-6-----	4-Isopropyltoluene	40	U
541-73-1-----	1,3-Dichlorobenzene	40	U
106-46-7-----	1,4-Dichlorobenzene	40	U
104-51-8-----	n-Butylbenzene	40	U
95-50-1-----	1,2-Dichlorobenzene	40	U
96-12-8-----	1,2-Dibromo-3-chloropropane	40	U
120-82-1-----	1,2,4-Trichlorobenzene	40	U
87-68-3-----	Hexachlorobutadiene	40	U
91-20-3-----	Naphthalene	40	U
87-61-6-----	1,2,3-Trichlorobenzene	40	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BUBBLER13

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-03A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8348

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	12	
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	3	J
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BUBBLER13

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Matrix: (soil/water) WATER Lab Sample ID: B1384-03A
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8348
 Level: (low/med) LOW Date Received: 08/30/03
 % Moisture: not dec. _____ Date Analyzed: 09/02/03
 GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BUBBLER78

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-05A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8387

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	12	
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BUBBLER78

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-05A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8387

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane		5 U
127-18-4	Tetrachloroethene		5 U
591-78-6	2-Hexanone		5 U
124-48-1	Dibromochloromethane		5 U
106-93-4	1,2-Dibromoethane		5 U
108-90-7	Chlorobenzene		5 U
630-20-6	1,1,1,2-Tetrachloroethane		5 U
100-41-4	Ethylbenzene		5 U
	m,p-Xylene		5 U
95-47-6	o-Xylene		5 U
1330-20-7	Xylene (Total)		5 U
100-42-5	Styrene		5 U
75-25-2	Bromoform		5 U
98-82-8	Isopropylbenzene		5 U
79-34-5	1,1,2,2-Tetrachloroethane		5 U
108-86-1	Bromobenzene		5 U
96-18-4	1,2,3-Trichloropropane		5 U
103-65-1	n-Propylbenzene		5 U
95-49-8	2-Chlorotoluene		5 U
108-67-8	1,3,5-Trimethylbenzene		5 U
106-43-4	4-Chlorotoluene		5 U
98-06-6	tert-Butylbenzene		5 U
95-63-6	1,2,4-Trimethylbenzene		5 U
135-98-8	sec-Butylbenzene		5 U
99-87-6	4-Isopropyltoluene		5 U
541-73-1	1,3-Dichlorobenzene		5 U
106-46-7	1,4-Dichlorobenzene		5 U
104-51-8	n-Butylbenzene		5 U
95-50-1	1,2-Dichlorobenzene		5 U
96-12-8	1,2-Dibromo-3-chloropropane		5 U
120-82-1	1,2,4-Trichlorobenzene		5 U
87-68-3	Hexachlorobutadiene		5 U
91-20-3	Naphthalene		5 U
87-61-6	1,2,3-Trichlorobenzene		5 U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-02A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8347

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	3	J
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: B1384-02A

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8347

Level: (low/med) LOW Date Received: 08/30/03

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V6RLCS

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Matrix: (soil/water) WATER Lab Sample ID: LCS-8935
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8336
 Level: (low/med) LOW Date Received: _____
 % Moisture: not dec. _____ Date Analyzed: 09/02/03
 GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	45	
74-87-3	Chloromethane	52	
75-01-4	Vinyl Chloride	55	
74-83-9	Bromomethane	69	
75-00-3	Chloroethane	66	
75-69-4	Trichlorofluoromethane	69	
75-35-4	1,1-Dichloroethene	57	
67-64-1	Acetone	54	
74-88-4	Iodomethane	55	
75-15-0	Carbon Disulfide	48	
75-09-2	Methylene Chloride	52	
156-60-5	trans-1,2-Dichloroethene	52	
1634-04-4	Methyl tert-butyl ether	45	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	42	
78-93-3	2-Butanone	38	
156-59-2	cis-1,2-Dichloroethene	52	
590-20-7	2,2-Dichloropropane	47	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon Tetrachloride	50	
107-06-2	1,2-Dichloroethane	46	
71-43-2	Benzene	53	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	49	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	49	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	39	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	47	
79-00-5	1,1,2-Trichloroethane	50	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V6RLCS

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: LCS-8935

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8336

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	49	
127-18-4	Tetrachloroethene	47	
591-78-6	2-Hexanone	34	
124-48-1	Dibromochloromethane	48	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	50	
	m,p-Xylene	110	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	53	
75-25-2	Bromoform	47	
98-82-8	Isopropylbenzene	53	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	45	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	52	
106-43-4	4-Chlorotoluene	52	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	52	
135-98-8	sec-Butylbenzene	53	
99-87-6	4-Isopropyltoluene	53	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	53	
104-51-8	n-Butylbenzene	52	
95-50-1	1,2-Dichlorobenzene	52	
96-12-8	1,2-Dibromo-3-chloropropane	38	
120-82-1	1,2,4-Trichlorobenzene	45	
87-68-3	Hexachlorobutadiene	41	
91-20-3	Naphthalene	45	
87-61-6	1,2,3-Trichlorobenzene	45	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V6TLC5

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: LFB-8935

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8343

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/02/03

GC Column: DB-624 ID: 0.25 (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
142-28-9-----	1,3-Dichloropropane	2	J
127-18-4-----	Tetrachloroethene	2	J
591-78-6-----	2-Hexanone	2	J
124-48-1-----	Dibromochloromethane	2	J
106-93-4-----	1,2-Dibromoethane	2	J
108-90-7-----	Chlorobenzene	2	J
630-20-6-----	1,1,1,2-Tetrachloroethane	2	J
100-41-4-----	Ethylbenzene	2	J
-----	m,p-Xylene	4	J
95-47-6-----	o-Xylene	2	J
1330-20-7-----	Xylene (Total)	6	
100-42-5-----	Styrene	2	J
75-25-2-----	Bromoform	2	J
98-82-8-----	Isopropylbenzene	2	J
79-34-5-----	1,1,2,2-Tetrachloroethane	2	J
108-86-1-----	Bromobenzene	2	J
96-18-4-----	1,2,3-Trichloropropane	2	J
103-65-1-----	n-Propylbenzene	2	J
95-49-8-----	2-Chlorotoluene	2	J
108-67-8-----	1,3,5-Trimethylbenzene	2	J
106-43-4-----	4-Chlorotoluene	2	J
98-06-6-----	tert-Butylbenzene	2	J
95-63-6-----	1,2,4-Trimethylbenzene	2	J
135-98-8-----	sec-Butylbenzene	2	J
99-87-6-----	4-Isopropyltoluene	2	J
541-73-1-----	1,3-Dichlorobenzene	2	J
106-46-7-----	1,4-Dichlorobenzene	2	J
104-51-8-----	n-Butylbenzene	2	J
95-50-1-----	1,2-Dichlorobenzene	2	J
96-12-8-----	1,2-Dibromo-3-chloropropane	1	J
120-82-1-----	1,2,4-Trichlorobenzene	2	J
87-68-3-----	Hexachlorobutadiene	5	U
91-20-3-----	Naphthalene	2	J
87-61-6-----	1,2,3-Trichlorobenzene	2	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V6WLCS

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1384

Matrix: (soil/water) WATER

Lab Sample ID: LCS-8985

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: V6C8384

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (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

142-28-9	1,3-Dichloropropane	45	
127-18-4	Tetrachloroethene	41	
591-78-6	2-Hexanone	37	
124-48-1	Dibromochloromethane	45	
106-93-4	1,2-Dibromoethane	45	
108-90-7	Chlorobenzene	47	
630-20-6	1,1,1,2-Tetrachloroethane	44	
100-41-4	Ethylbenzene	44	
	m,p-Xylene	94	
95-47-6	o-Xylene	45	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	47	
75-25-2	Bromoform	42	
98-82-8	Isopropylbenzene	46	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	46	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	49	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	39	
120-82-1	1,2,4-Trichlorobenzene	42	
87-68-3	Hexachlorobutadiene	37	
91-20-3	Naphthalene	45	
87-61-6	1,2,3-Trichlorobenzene	43	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V6YLCS

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Matrix: (soil/water) WATER Lab Sample ID: LFB-8985
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8386
 Level: (low/med) LOW Date Received: _____
 % Moisture: not dec. _____ Date Analyzed: 09/04/03
 GC Column: DB-624 ID: 0.25 (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
75-71-8	Dichlorodifluoromethane	1	J
74-87-3	Chloromethane	2	J
75-01-4	Vinyl Chloride	2	J
74-83-9	Bromomethane	3	J
75-00-3	Chloroethane	3	J
75-69-4	Trichlorofluoromethane	2	J
75-35-4	1,1-Dichloroethene	3	J
67-64-1	Acetone	5	
74-88-4	Iodomethane	3	J
75-15-0	Carbon Disulfide	2	J
75-09-2	Methylene Chloride	3	J
156-60-5	trans-1,2-Dichloroethene	2	J
1634-04-4	Methyl tert-butyl ether	2	J
75-34-3	1,1-Dichloroethane	2	J
108-05-4	Vinyl acetate	1	J
78-93-3	2-Butanone	3	J
156-59-2	cis-1,2-Dichloroethene	2	J
590-20-7	2,2-Dichloropropane	2	J
74-97-5	Bromochloromethane	2	J
67-66-3	Chloroform	2	J
71-55-6	1,1,1-Trichloroethane	2	J
563-58-6	1,1-Dichloropropene	2	J
56-23-5	Carbon Tetrachloride	2	J
107-06-2	1,2-Dichloroethane	2	J
71-43-2	Benzene	2	J
79-01-6	Trichloroethene	2	J
78-87-5	1,2-Dichloropropane	2	J
74-95-3	Dibromomethane	2	J
75-27-4	Bromodichloromethane	2	J
10061-01-5	cis-1,3-Dichloropropene	2	J
108-10-1	4-Methyl-2-pentanone	2	J
108-88-3	Toluene	2	J
10061-02-6	trans-1,3-Dichloropropene	2	J
79-00-5	1,1,2-Trichloroethane	2	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

V6YLCS

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: LFB-8985

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8386

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane		2 J
127-18-4	Tetrachloroethene		2 J
591-78-6	2-Hexanone		1 J
124-48-1	Dibromochloromethane		2 J
106-93-4	1,2-Dibromoethane		2 J
108-90-7	Chlorobenzene		2 J
630-20-6	1,1,1,2-Tetrachloroethane		2 J
100-41-4	Ethylbenzene		2 J
	m,p-Xylene		4 J
95-47-6	o-Xylene		2 J
1330-20-7	Xylene (Total)		6
100-42-5	Styrene		2 J
75-25-2	Bromoform		2 J
98-82-8	Isopropylbenzene		2 J
79-34-5	1,1,2,2-Tetrachloroethane		3 J
108-86-1	Bromobenzene		2 J
96-18-4	1,2,3-Trichloropropane		2 J
103-65-1	n-Propylbenzene		2 J
95-49-8	2-Chlorotoluene		2 J
108-67-8	1,3,5-Trimethylbenzene		2 J
106-43-4	4-Chlorotoluene		2 J
98-06-6	tert-Butylbenzene		2 J
95-63-6	1,2,4-Trimethylbenzene		2 J
135-98-8	sec-Butylbenzene		2 J
99-87-6	4-Isopropyltoluene		2 J
541-73-1	1,3-Dichlorobenzene		2 J
106-46-7	1,4-Dichlorobenzene		2 J
104-51-8	n-Butylbenzene		2 J
95-50-1	1,2-Dichlorobenzene		2 J
96-12-8	1,2-Dibromo-3-chloropropane		2 J
120-82-1	1,2,4-Trichlorobenzene		5 U
87-68-3	Hexachlorobutadiene		5 U
91-20-3	Naphthalene		2 J
87-61-6	1,2,3-Trichlorobenzene		2 J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Matrix: (soil/water) WATER Lab Sample ID: MB-8935
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8332
 Level: (low/med) LOW Date Received: _____
 % Moisture: not dec. _____ Date Analyzed: 09/02/03
 GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6W

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: MB-8985

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8382

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (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
75-71-8-----	Dichlorodifluoromethane	5 U	
74-87-3-----	Chloromethane	5 U	
75-01-4-----	Vinyl Chloride	2 U	
74-83-9-----	Bromomethane	5 U	
75-00-3-----	Chloroethane	5 U	
75-69-4-----	Trichlorofluoromethane	5 U	
75-35-4-----	1,1-Dichloroethene	5 U	
67-64-1-----	Acetone	5 U	
74-88-4-----	Iodomethane	5 U	
75-15-0-----	Carbon Disulfide	5 U	
75-09-2-----	Methylene Chloride	5 U	
156-60-5-----	trans-1,2-Dichloroethene	5 U	
1634-04-4-----	Methyl tert-butyl ether	5 U	
75-34-3-----	1,1-Dichloroethane	5 U	
108-05-4-----	Vinyl acetate	5 U	
78-93-3-----	2-Butanone	5 U	
156-59-2-----	cis-1,2-Dichloroethene	5 U	
590-20-7-----	2,2-Dichloropropane	5 U	
74-97-5-----	Bromochloromethane	5 U	
67-66-3-----	Chloroform	5 U	
71-55-6-----	1,1,1-Trichloroethane	5 U	
563-58-6-----	1,1-Dichloropropene	5 U	
56-23-5-----	Carbon Tetrachloride	5 U	
107-06-2-----	1,2-Dichloroethane	5 U	
71-43-2-----	Benzene	5 U	
79-01-6-----	Trichloroethene	5 U	
78-87-5-----	1,2-Dichloropropane	5 U	
74-95-3-----	Dibromomethane	5 U	
75-27-4-----	Bromodichloromethane	5 U	
10061-01-5-----	cis-1,3-Dichloropropene	5 U	
108-10-1-----	4-Methyl-2-pentanone	5 U	
108-88-3-----	Toluene	5 U	
10061-02-6-----	trans-1,3-Dichloropropene	5 U	
79-00-5-----	1,1,2-Trichloroethane	5 U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6W

Lab Name: MITKEM CORPORATION Contract: _____

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: B1384

Matrix: (soil/water) WATER Lab Sample ID: MB-8985

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V6C8382

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/04/03

GC Column: DB-624 ID: 0.25 (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
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1384

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
=====	=====	=====	=====	=====	=====	=====
01	VBLK6R	105	98	100	95	0
02	V6RLCS	99	94	99	93	0
03	V6TLCS	98	98	102	92	0
04	A/S EFFL2	99	96	104	92	0
05	TB	98	98	108	94	0
06	BUBBLER13	94	94	105	92	0
07	A/S EFFL4	95	93	105	91	0
08	VBLK6W	104	100	98	95	0
09	V6WLCS	100	94	100	90	0
10	V6YLCS	98	94	103	91	0
11	BUBBLER78	103	96	100	92	0
12	A/SEFFL4DL	104	99	101	93	0
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QC LIMITS

SMC1 = Dibromofluoromethane (78-117)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (62-124)
 SMC3 (TOL) = Toluene-d8 (81-116)
 OTHER (BFB) = Bromofluorobenzene (74-126)

Column to be used to flag recovery values

* Values outside of contract required QC limits

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6RLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50		45	90	48-135
Chloromethane	50		52	104	60-118
Vinyl Chloride	50		55	110	65-113
Bromomethane	50		69	138*	73-122
Chloroethane	50		66	132*	72-118
Trichlorofluoromethane	50		69	138*	68-129
1,1-Dichloroethene	50		57	114	67-121
Acetone	50		54	108	38-161
Iodomethane	50		55	110	72-130
Carbon Disulfide	50		48	96	53-137
Methylene Chloride	50		52	104	59-132
trans-1,2-Dichloroethen	50		52	104	71-124
Methyl tert-butyl ether	50		45	90	75-123
1,1-Dichloroethane	50		50	100	83-116
Vinyl acetate	50		42	84	44-160
2-Butanone	50		38	76	64-139
cis-1,2-Dichloroethene	50		52	104	83-120
2,2-Dichloropropane	50		47	94	70-129
Bromochloromethane	50		51	102	85-124
Chloroform	50		52	104	89-118
1,1,1-Trichloroethane	50		49	98	81-122
1,1-Dichloropropene	50		50	100	76-122
Carbon Tetrachloride	50		50	100	79-125
1,2-Dichloroethane	50		46	92	83-123
Benzene	50		53	106	81-120
Trichloroethene	50		50	100	77-121
1,2-Dichloropropane	50		49	98	81-116
Dibromomethane	50		49	98	86-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6RLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50		49	98	90-114
cis-1,3-Dichloropropene	50		49	98	78-119
4-Methyl-2-pentanone	50		39	78	57-138
Toluene	50		53	106	81-121
trans-1,3-Dichloroprope	50		47	94	85-118
1,1,2-Trichloroethane	50		50	100	44-159
1,3-Dichloropropane	50		49	98	79-125
Tetrachloroethene	50		47	94	73-121
2-Hexanone	50		34	68	53-145
Dibromochloromethane	50		48	96	80-124
1,2-Dibromoethane	50		48	96	80-124
Chlorobenzene	50		52	104	82-118
1,1,1,2-Tetrachloroetha	50		50	100	84-121
Ethylbenzene	50		50	100	80-122
Xylene (Total)	150		160	107	81-121
Styrene	50		53	106	77-128
Bromoform	50		47	94	77-130
Isopropylbenzene	50		53	106	58-148
1,1,2,2-Tetrachloroetha	50		48	96	76-125
Bromobenzene	50		48	96	76-124
1,2,3-Trichloropropane	50		45	90	57-140
n-Propylbenzene	50		51	102	72-119
2-Chlorotoluene	50		51	102	75-120
1,3,5-Trimethylbenzene	50		52	104	76-116
4-Chlorotoluene	50		52	104	78-116
tert-Butylbenzene	50		52	104	71-115
1,2,4-Trimethylbenzene	50		52	104	77-117
sec-Butylbenzene	50		53	106	67-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6RLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
4-Isopropyltoluene	50		53	106	68-118
1,3-Dichlorobenzene	50		51	102	80-116
1,4-Dichlorobenzene	50		53	106	80-114
n-Butylbenzene	50		52	104	58-121
1,2-Dichlorobenzene	50		52	104	81-116
1,2-Dibromo-3-chloropro	50		38	76	71-126
1,2,4-Trichlorobenzene	50		45	90	67-114
Hexachlorobutadiene	50		41	82	50-111
Naphthalene	50		45	90	58-133
1,2,3-Trichlorobenzene	50		45	90	64-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 3 out of 66 outside limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6TLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Chloride	2.0		2.2	110	80-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6WLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50		39	78	48-135
Chloromethane	50		51	102	60-118
Vinyl Chloride	50		54	108	65-113
Bromomethane	50		70	140*	73-122
Chloroethane	50		68	136*	72-118
Trichlorofluoromethane	50		68	136*	68-129
1,1-Dichloroethene	50		55	110	67-121
Acetone	50		60	120	38-161
Iodomethane	50		53	106	72-130
Carbon Disulfide	50		52	104	53-137
Methylene Chloride	50		42	84	59-132
trans-1,2-Dichloroethen	50		48	96	71-124
Methyl tert-butyl ether	50		44	88	75-123
1,1-Dichloroethane	50		46	92	83-116
Vinyl acetate	50		39	78	44-160
2-Butanone	50		41	82	64-139
cis-1,2-Dichloroethene	50		46	92	83-120
2,2-Dichloropropane	50		42	84	70-129
Bromochloromethane	50		45	90	85-124
Chloroform	50		46	92	89-118
1,1,1-Trichloroethane	50		44	88	81-122
1,1-Dichloropropene	50		44	88	76-122
Carbon Tetrachloride	50		43	86	79-125
1,2-Dichloroethane	50		41	82*	83-123
Benzene	50		46	92	81-120
Trichloroethene	50		44	88	77-121
1,2-Dichloropropane	50		45	90	81-116
Dibromomethane	50		46	92	86-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6WLC5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50		44	88*	90-114
cis-1,3-Dichloropropene	50		44	88	78-119
4-Methyl-2-pentanone	50		40	80	57-138
Toluene	50		46	92	81-121
trans-1,3-Dichloroprope	50		43	86	85-118
1,1,2-Trichloroethane	50		45	90	44-159
1,3-Dichloropropane	50		45	90	79-125
Tetrachloroethene	50		41	82	73-121
2-Hexanone	50		37	74	53-145
Dibromochloromethane	50		45	90	80-124
1,2-Dibromoethane	50		45	90	80-124
Chlorobenzene	50		47	94	82-118
1,1,1,2-Tetrachloroetha	50		44	88	84-121
Ethylbenzene	50		44	88	80-122
Xylene (Total)	150		140	93	81-121
Styrene	50		47	94	77-128
Bromoform	50		42	84	77-130
Isopropylbenzene	50		46	92	58-148
1,1,2,2-Tetrachloroetha	50		49	98	76-125
Bromobenzene	50		45	90	76-124
1,2,3-Trichloropropane	50		46	92	57-140
n-Propylbenzene	50		46	92	72-119
2-Chlorotoluene	50		48	96	75-120
1,3,5-Trimethylbenzene	50		49	98	76-116
4-Chlorotoluene	50		47	94	78-116
tert-Butylbenzene	50		48	96	71-115
1,2,4-Trimethylbenzene	50		49	98	77-117
sec-Butylbenzene	50		50	100	67-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6WLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
4-Isopropyltoluene	50		49	98	68-118
1,3-Dichlorobenzene	50		47	94	80-116
1,4-Dichlorobenzene	50		48	96	80-114
n-Butylbenzene	50		49	98	58-121
1,2-Dichlorobenzene	50		48	96	81-116
1,2-Dibromo-3-chloropro	50		39	78	71-126
1,2,4-Trichlorobenzene	50		42	84	67-114
Hexachlorobutadiene	50		37	74	50-111
Naphthalene	50		45	90	58-133
1,2,3-Trichlorobenzene	50		43	86	64-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 5 out of 66 outside limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: B1384

Matrix Spike - Sample No.: V6YLCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Chloride	2.0		2.3	115	80-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Lab File ID: V6C8332 Lab Sample ID: MB-8935
 Date Analyzed: 09/02/03 Time Analyzed: 1125
 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N
 Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
01	V6RLCS	LCS-8935	V6C8336	1339
02	V6TLCS	LFB-8935	V6C8343	1820
03	A/S EFFL2	B1384-01A	V6C8346	1943
04	TB	B1384-02A	V6C8347	2010
05	BUBBLER13	B1384-03A	V6C8348	2038
06	A/S EFFL4	B1384-04A	V6C8349	2105
07				
08				
09				
10				
11				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK6W

Lab Name: MITKEM CORPORATION Contract:
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: B1384
 Lab File ID: V6C8382 Lab Sample ID: MB-8985
 Date Analyzed: 09/04/03 Time Analyzed: 1029
 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N
 Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V6WLCS	LCS-8985	V6C8384	1141
02	V6YLCS	LFB-8985	V6C8386	1239
03	BUBBLER78	B1384-05A	V6C8387	1335
04	A/SEFFL4DL	B1384-04ADL	V6C8388	1404
05				
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COMMENTS:

Client ID: TRC_MA
 Project: Lockheed Wilmington
 Location:
 Comments: N/A

Case:
 SDG:
 PO: E9202-9403-09400, LOCKHEED WILMINGTON

Report Level: LEVEL 2
 EDD: GISKEY
 HC Due: 09/22/03
 Fax Due: 09/03/03

Sample ID	Client Sample ID	Collection Date	Date Received	Matrix	Test Code	Test Code Comments	fold	MS	SEL	Storage
B1384-01A	A/S EFFL2	08/29/03 10:30	08/30/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VOA
B1384-02A	TB	08/29/03 10:35	08/30/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VOA
B1384-03A	BUBBLER13	08/29/03 10:40	08/30/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VOA
B1384-04A	A/SEFFL4	08/29/03 11:55	08/30/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VOA
B1384-05A	BUBBLER78	08/29/03 12:00	08/30/03	Aqueous	SW8260B_W		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VOA

MITKEM CORPORATION
Sample Condition Form

Received By: <u>MA</u>	Reviewed By:	Date: <u>8-30-03</u>	MITKEM Project: <u>B1384</u>			
Client Project:			VOA MATRIX			
Client: <u>TLC</u>						
1) Cooler Sealed <u>YES / NO*</u> *	Lab Sample ID	HNO3	H2SO4	HCl	NaOH	
	<u>B1384-N</u>					H
	<u> " "</u>					H
	<u> " "</u>					H
	<u> " "</u>					H
	<u>B1384-GS</u>					H
2) Custody Seal(s) <u>Present / Absent</u> <u>Coolers / Bottles</u> <u>Intact / Broken</u> Custody Seal Numbers						
3) Chain-of-Custody <u>Present / Absent</u>						
4) Airbill(s) <u>Present / Absent</u>						
Airbill Number(s) <u>FED-EX</u> <u>843416040010</u>						
5) Cooler Temperature <u>3C</u>						
Coolant Condition <u>OK</u>						
6) Sample Bottles <u>Intact/Broken/Leaking</u>						
7) Date Received <u>8-30-03</u>						
8) Time Received <u>0900</u>						
VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M/N = MeOH & NaHSO4 E = Encore N = NaHSO4 M = MeOH						
See Sample Condition Notification / Corrective Action Form Comments / / Remarks		yes / no <u>Rad OK</u> yes / no				

Last Page of Data Report

Source Control OM&M Sampling Events : Air Sampling: Data Validation

Air samples collected during these sampling events were submitted to Alpha Analytical Laboratories in Westborough, MA for analysis. All samples were collected in SUMMA® canisters and analyzed for volatile organic compounds (VOCs) using EPA Method TO-15. The samples included in this review are listed below. These samples were collected on September 29 and October 20, 2003.

September 29, 2003	October 20, 2003
Ambient Air-092903	AA-101-10.20.03
	AA-102-10.20.03
	AA-103-10.20.03
	AA-104-10.20.03

TRC performed a limited validation of the VOC analytical data associated with these sampling events. The sample results were assessed using the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (10/99)*. Modification of the Functional Guidelines was done to accommodate the non-CLP methodology used by the laboratory. Qualification of sample data was not performed.

The limited validation was based upon the following parameters: holding times, laboratory method blanks, laboratory control sample (LCS) results, laboratory duplicate results, and an evaluation of sample quantitation limits. These parameters provide an adequate assessment of the overall accuracy and precision of the data set.

In general, the data appear to be valid as reported and may be used for decision-making purposes.

Accuracy

All samples were analyzed within the method-specified holding times.

Target compounds were not detected in the laboratory method blanks.

Two LCSs were associated with this data set. One of the LCSs exhibited low recovery of ethyl alcohol (52%). Since this compound is not a contaminant of concern at this site, the overall decision-making process was not adversely affected by the potential low bias of the ethyl alcohol results. One LCS exhibited slightly high recovery (139%) of 2-hexanone and one LCS exhibited slightly high recovery (136%) of benzyl chloride. Since 2-hexanone and benzyl chloride were not detected in the associated samples, data usability was not adversely affected by the potential high bias.

Precision

The laboratory reported the results of a duplicate analysis performed on sample Ambient Air-092903. The relative percent differences of all detected compounds were within the acceptance limits, indicating acceptable analytical precision.

Quantitation Limits

There were no dilutions performed on any samples in this data set. Quantitation limits were therefore not adversely affected.

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: TRC Environmental Corporation Laboratory Job Number: L0309622
Address: Boots Mills South
 Foot of John Street
 Lowell, MA 01852 Date Received: 01-OCT-2003
Attn: Ms. Liz Denly Date Reported: 08-OCT-2003
Project Number: E9202 Delivery Method: Alpha
Site: LOCKHEED

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0309622-01	AMBIENT AIR-092903	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0309622

TO-15

The LCS % recovery for 2-hexanone at 139% is above the acceptance criteria for the method. All associated samples were non-detect for the affected compounds.

The LCS % recovery for Ethyl Alcohol at 52% is below acceptance criteria. The continuing calibration check was acceptable.

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0309622-01
 Sample Matrix: AMBIENT AIR-092903
 Condition of Sample: Satisfactory
 Number & Type of Containers: 1-Can

Date Collected: 29-SEP-2003 18:15
 Date Received : 01-OCT-2003
 Date Reported : 08-OCT-2003
 Field Prep: None

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organic Compounds in Air - ug/m3				48 TO-15		1007 18:13 AR	
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Butadiene	ND	ug/m3	1.10				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dioxane	ND	ug/m3	3.60				
2,2,4-Trimethylpentane	ND	ug/m3	2.33				
2-Butanone	3.44	ug/m3	1.47				
2-Hexanone	ND	ug/m3	2.05				
3-Chloropropene	ND	ug/m3	1.56				
4-Ethyltoluene	ND	ug/m3	2.46				
Acetone	8.12	ug/m3	4.75				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromodichloromethane	ND	ug/m3	3.35				
Bromoform	ND	ug/m3	5.16				
Bromomethane	ND	ug/m3	1.94				
Carbon disulfide	ND	ug/m3	1.56				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	1.12	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Cyclohexane	ND	ug/m3	1.72				
Dibromochloromethane	ND	ug/m3	4.26				
Dichlorodifluoromethane	ND	ug/m3	4.94				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309622-01
 AMBIENT AIR-092903

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organic Compounds in Air - ug/m3 continued			48 TO-15		1007	10:11	AR
Ethyl Alcohol	ND	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	4.45	ug/m3	1.23				
Methylene chloride	ND	ug/m3	3.47				
4-Methyl-2-pentanone	ND	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	ND	ug/m3	3.52				
Propylene	ND	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	13.2	ug/m3	3.39				
Tetrahydrofuran	2.74	ug/m3	1.47				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	17.1	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				
Volatile Organic Compounds in Air - ppbV			48 TO-15		1007	10:11	AR
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Butadiene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dioxane	ND	ppbV	1.00				
2,2,4-Trimethylpentane	ND	ppbV	0.500				
2-Butanone	1.17	ppbV	0.500				
2-Hexanone	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0309622-01
 AMBIENT AIR-092903

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organic Compounds in Air - ppbV continued				48 TO-15		1007 18-11 AR	
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	3.42	ppbV	2.00				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				
Bromoform	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon disulfide	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	0.542	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Cyclohexane	ND	ppbV	0.500				
Dibromochloromethane	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethyl Alcohol	ND	ppbV	2.00				
Ethyl Acetate	ND	ppbV	0.500				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
iso-Propyl Alcohol	1.81	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
4-Methyl-2-pentanone	ND	ppbV	0.500				
Methyl tert butyl ether	ND	ppbV	0.500				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Heptane	ND	ppbV	0.500				
n-Hexane	ND	ppbV	1.00				
Propylene	ND	ppbV	1.00				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	1.96	ppbV	0.500				
Tetrahydrofuran	0.928	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	3.18	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl acetate	ND	ppbV	0.500				
Vinyl bromide	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0309622

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01 (L0309622-01, WG152753)					
1,1,1-Trichloroethane	ND	ND	ug/m3	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ug/m3	NC	25
1,1,2-Trichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethane	ND	ND	ug/m3	NC	25
1,1-Dichloroethene	ND	ND	ug/m3	NC	25
1,2,4-Trichlorobenzene	ND	ND	ug/m3	NC	25
1,2,4-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,2-Dibromoethane	ND	ND	ug/m3	NC	25
1,2-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,2-Dichloroethane	ND	ND	ug/m3	NC	25
1,2-Dichloropropane	ND	ND	ug/m3	NC	25
1,3,5-Trimethylbenzene	ND	ND	ug/m3	NC	25
1,3-Butadiene	ND	ND	ug/m3	NC	25
1,3-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dichlorobenzene	ND	ND	ug/m3	NC	25
1,4-Dioxane	ND	ND	ug/m3	NC	25
2,2,4-Trimethylpentane	ND	ND	ug/m3	NC	25
2-Butanone	3.44	3.56	ug/m3	3	25
2-Hexanone	ND	ND	ug/m3	NC	25
3-Chloropropene	ND	ND	ug/m3	NC	25
4-Ethyltoluene	ND	ND	ug/m3	NC	25
Acetone	8.12	8.88	ug/m3	9	25
Benzene	ND	ND	ug/m3	NC	25
Benzyl chloride	ND	ND	ug/m3	NC	25
Bromodichloromethane	ND	ND	ug/m3	NC	25
Bromoform	ND	ND	ug/m3	NC	25
Bromomethane	ND	ND	ug/m3	NC	25
Carbon disulfide	ND	ND	ug/m3	NC	25
Carbon tetrachloride	ND	ND	ug/m3	NC	25
Chlorobenzene	ND	ND	ug/m3	NC	25
Chloroethane	ND	ND	ug/m3	NC	25
Chloroform	ND	ND	ug/m3	NC	25
Chloromethane	1.12	1.22	ug/m3	9	25
cis-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
cis-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Cyclohexane	ND	ND	ug/m3	NC	25
Dibromochloromethane	ND	ND	ug/m3	NC	25
Dichlorodifluoromethane	ND	ND	ug/m3	NC	25
Ethyl Alcohol	ND	4.04	ug/m3	NC	25
Ethyl Acetate	ND	ND	ug/m3	NC	25
Ethylbenzene	ND	ND	ug/m3	NC	25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ug/m3	NC	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ug/m3	NC	25
Hexachlorobutadiene	ND	ND	ug/m3	NC	25
iso-Propyl Alcohol	4.45	4.16	ug/m3	7	25
Methylene chloride	ND	ND	ug/m3	NC	25

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0309622

Continued

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Volatile Organic Compounds in Air for sample(s) 01 (L0309622-01, WG152753)					
4-Methyl-2-pentanone	ND	ND	ug/m3	NC	25
Methyl tert butyl ether	ND	ND	ug/m3	NC	25
p/m-Xylene	ND	ND	ug/m3	NC	25
o-Xylene	ND	ND	ug/m3	NC	25
Heptane	ND	ND	ug/m3	NC	25
n-Hexane	ND	ND	ug/m3	NC	25
Propylene	ND	ND	ug/m3	NC	25
Styrene	ND	ND	ug/m3	NC	25
Tetrachloroethene	13.2	15.4	ug/m3	15	25
Tetrahydrofuran	2.74	2.77	ug/m3	1	25
Toluene	ND	ND	ug/m3	NC	25
trans-1,2-Dichloroethene	ND	ND	ug/m3	NC	25
trans-1,3-Dichloropropene	ND	ND	ug/m3	NC	25
Trichloroethene	17.1	18.2	ug/m3	6	25
Trichlorofluoromethane	ND	ND	ug/m3	NC	25
Vinyl acetate	ND	ND	ug/m3	NC	25
Vinyl bromide	ND	ND	ug/m3	NC	25
Vinyl chloride	ND	ND	ug/m3	NC	25

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309622

Parameter % Recovery QC Criteria

Volatile Organic Compounds in Air LCS for sample(s) 01 (WG152753)

1,1,1-Trichloroethane	96	70-130
1,1,2,2-Tetrachloroethane	103	70-130
1,1,2-Trichloroethane	91	70-130
1,1-Dichloroethane	91	70-130
1,1-Dichloroethene	81	70-130
1,2,4-Trichlorobenzene	92	70-130
1,2,4-Trimethylbenzene	108	70-130
1,2-Dibromoethane	89	70-130
1,2-Dichlorobenzene	105	70-130
1,2-Dichloroethane	98	70-130
1,2-Dichloropropane	85	70-130
1,3,5-Trimethylbenzene	112	70-130
1,3-Butadiene	95	70-130
1,3-Dichlorobenzene	109	70-130
1,4-Dichlorobenzene	109	70-130
1,4-Dioxane	113	70-130
2,2,4-Trimethylpentane	87	70-130
2-Butanone	116	70-130
2-Hexanone	139	70-130
3-Chloropropene	100	70-130
4-Ethyltoluene	128	70-130
Acetone	106	70-130
Benzene	83	70-130
Benzyl chloride	120	70-130
Bromodichloromethane	92	70-130
Bromoform	112	70-130
Bromomethane	77	70-130
Carbon disulfide	89	70-130
Carbon tetrachloride	90	70-130
Chlorobenzene	92	70-130
Chloroethane	81	70-130
Chloroform	92	70-130
Chloromethane	110	70-130
cis-1,2-Dichloroethene	91	70-130
cis-1,3-Dichloropropene	84	70-130
Cyclohexane	82	70-130
Dibromochloromethane	101	70-130
Dichlorodifluoromethane	91	70-130
Ethyl Alcohol	52	70-130
Ethyl Acetate	116	70-130
Ethylbenzene	102	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	88	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	89	70-130
Hexachlorobutadiene	103	70-130
iso-Propyl Alcohol	116	70-130
Methylene chloride	90	70-130
4-Methyl-2-pentanone	117	70-130
Methyl tert butyl ether	117	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0309622

Continued

Parameter	% Recovery	QC Criteria
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Volatile Organic Compounds in Air LCS for sample(s) 01 (WG152753)

p/m-Xylene	105	70-130
o-Xylene	107	70-130
n-Hexane	88	70-130
Propylene	86	70-130
Styrene	95	70-130
Tetrachloroethene	91	70-130
Tetrahydrofuran	112	70-130
Toluene	90	70-130
trans-1,2-Dichloroethene	87	70-130
trans-1,3-Dichloropropene	89	70-130
Trichloroethene	86	70-130
Trichlorofluoromethane	98	70-130
Vinyl acetate	119	70-130
Vinyl bromide	85	70-130
Vinyl chloride	92	70-130

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309622

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG152753-3)							
Volatile Organic Compounds in Air - ug/m3				48 TD-15		1007 17:35 AR	
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Butadiene	ND	ug/m3	1.10				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dioxane	ND	ug/m3	3.60				
2,2,4-Trimethylpentane	ND	ug/m3	2.33				
2-Butanone	ND	ug/m3	1.47				
2-Hexanone	ND	ug/m3	2.05				
3-Chloropropene	ND	ug/m3	1.56				
4-Ethyltoluene	ND	ug/m3	2.46				
Acetone	ND	ug/m3	4.75				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromodichloromethane	ND	ug/m3	3.35				
Bromoform	ND	ug/m3	5.16				
Bromomethane	ND	ug/m3	1.94				
Carbon disulfide	ND	ug/m3	1.56				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Cyclohexane	ND	ug/m3	1.72				
Dibromochloromethane	ND	ug/m3	4.26				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethyl Alcohol	ND	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	ND	ug/m3	1.23				

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309622

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG152753-3)							
Volatile Organic Compounds in Air - ug/m3 continued 48 TO-15 1007 17:35 AR							
Methylene chloride	ND	ug/m3	3.47				
4-Methyl-2-pentanone	ND	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	ND	ug/m3	3.52				
Propylene	ND	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Tetrahydrofuran	ND	ug/m3	1.47				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				
Blank Analysis for sample(s) 01 (WG152753-3)							
Volatile Organic Compounds in Air - ppbV 48 TO-15 1007 17:35 AR							
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Butadiene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dioxane	ND	ppbV	1.00				
2,2,4-Trimethylpentane	ND	ppbV	0.500				
2-Butanone	ND	ppbV	0.500				
2-Hexanone	ND	ppbV	0.500				
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	ND	ppbV	2.00				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0309622

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG152753-3)							
Volatile Organic Compounds in Air - ppbv continued							
				48 TO-15		1007	17:35 AR
Bromoform	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon disulfide	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Cyclohexane	ND	ppbV	0.500				
Dibromochloromethane	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethyl Alcohol	ND	ppbV	2.00				
Ethyl Acetate	ND	ppbV	0.500				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
iso-Propyl Alcohol	ND	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
4-Methyl-2-pentanone	ND	ppbV	0.500				
Methyl tert butyl ether	ND	ppbV	0.500				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Heptane	ND	ppbV	0.500				
n-Hexane	ND	ppbV	1.00				
Propylene	ND	ppbV	1.00				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Tetrahydrofuran	ND	ppbV	0.500				
Toluene	ND	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl acetate	ND	ppbV	0.500				
Vinyl bromide	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
ADDENDUM I

REFERENCES

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: TRC Environmental Corporation Laboratory Job Number: L0310425
Address: Boots Mills South
Foot of John Street
Lowell, MA 01852 Date Received: 21-OCT-2003
Attn: Mr. Ken Cormier Date Reported: 29-OCT-2003
Project Number: E9202-9402-09400 Delivery Method: Alpha
Site: FORMER LOCKHEED MARTIN FACILIT

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0310425-01	AA-101-10.20.03	WILMINGTON, MA
L0310425-02	AA-102-10.20.03	WILMINGTON, MA
L0310425-03	AA-103-10.20.03	WILMINGTON, MA
L0310425-04	AA-104-10.20.03	WILMINGTON, MA

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean

This document electronically signed

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0310425

TO-15

The value for Total HC as Hexane was reported in ug/m3 only, and not in ppbv because the molecular weight for Total Hydrocarbons cannot be determined. The molecular weight for Total Hydrocarbons is needed to convert ug/m3 to ppbv.

Organic Compounds in Air

In order to comply with various regulatory requirements, the results for the analysis of Organic Compounds in Air by EPA TO-14A or TO-15 are provided in ug/m3 as well as ppbv for each sample in a sequential format.

The LCS % recovery for Benzyl Chloride at 136% is above the acceptance criteria for the method. All associated samples are non-detect for this compound.

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0310425-01 Date Collected: 20-OCT-2003 16:12
 AA-101-10.20.03 Date Received : 21-OCT-2003
 Sample Matrix: AIR Date Reported : 29-OCT-2003
 Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 1-Can

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organic Compounds in Air - ug/m3							
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Butadiene	ND	ug/m3	1.10				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dioxane	ND	ug/m3	3.60				
2,2,4-Trimethylpentane	ND	ug/m3	2.33				
2-Butanone	9.17	ug/m3	1.47				
2-Hexanone	ND	ug/m3	2.05				
3-Chloropropene	ND	ug/m3	1.56				
4-Ethyltoluene	ND	ug/m3	2.46				
Acetone	9.95	ug/m3	4.75				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromodichloromethane	ND	ug/m3	3.35				
Bromoform	ND	ug/m3	5.16				
Bromomethane	ND	ug/m3	1.94				
Carbon disulfide	ND	ug/m3	1.56				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Cyclohexane	ND	ug/m3	1.72				
Dibromochloromethane	ND	ug/m3	4.26				
Dichlorodifluoromethane	ND	ug/m3	4.94				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-01
 AA-101-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatiles Organic Compounds in Air - ug/m3							
Ethyl Alcohol	4.34	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	3.91	ug/m3	1.23				
Methylene chloride	ND	ug/m3	3.47				
4-Methyl-2-pentanone	ND	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	ND	ug/m3	3.52				
Propylene	ND	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	15.0	ug/m3	3.39				
Tetrahydrofuran	ND	ug/m3	1.47				
Toluene	1.97	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	22.9	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				

Volatiles Organic Compounds In Air - ppbv				48 TO-15	1026 10/07 AR
1,1,1-Trichloroethane	ND	ppbv	0.500		
1,1,2,2-Tetrachloroethane	ND	ppbv	0.500		
1,1,2-Trichloroethane	ND	ppbv	0.500		
1,1-Dichloroethane	ND	ppbv	0.500		
1,1-Dichloroethene	ND	ppbv	0.500		
1,2,4-Trichlorobenzene	ND	ppbv	0.500		
1,2,4-Trimethylbenzene	ND	ppbv	0.500		
1,2-Dibromoethane	ND	ppbv	0.500		
1,2-Dichlorobenzene	ND	ppbv	0.500		
1,2-Dichloroethane	ND	ppbv	0.500		
1,2-Dichloropropane	ND	ppbv	0.500		
1,3,5-Trimethylbenzene	ND	ppbv	0.500		
1,3-Butadiene	ND	ppbv	0.500		
1,3-Dichlorobenzene	ND	ppbv	0.500		
1,4-Dichlorobenzene	ND	ppbv	0.500		
1,4-Dioxane	ND	ppbv	1.00		
2,2,4-Trimethylpentane	ND	ppbv	0.500		
2-Butanone	3.11	ppbv	0.500		
2-Hexanone	ND	ppbv	0.500		

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-01
 AA-101-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organic Compounds (VOCs) - ppbV (per liter)							
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	4.19	ppbV	2.00				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				
Bromoform	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon disulfide	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	ND	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Cyclohexane	ND	ppbV	0.500				
Dibromochloromethane	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethyl Alcohol	2.30	ppbV	2.00				
Ethyl Acetate	ND	ppbV	0.500				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
iso-Propyl Alcohol	1.59	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
4-Methyl-2-pentanone	ND	ppbV	0.500				
Methyl tert butyl ether	ND	ppbV	0.500				
p/m-Xylene	ND	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Heptane	ND	ppbV	0.500				
n-Hexane	ND	ppbV	1.00				
Propylene	ND	ppbV	1.00				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	2.22	ppbV	0.500				
Tetrahydrofuran	ND	ppbV	0.500				
Toluene	0.523	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	4.27	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl acetate	ND	ppbV	0.500				
Vinyl bromide	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-02
 AA-102-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatiles Organic Compounds in Air - ug/m3 continued							
Ethyl Alcohol	16.6	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	3.17	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	67.6	ug/m3	1.23				
Methylene chloride	5.02	ug/m3	3.47				
4-Methyl-2-pentanone	2.19	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	12.3	ug/m3	2.17				
o-Xylene	2.83	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	3.70	ug/m3	3.52				
Propylene	9.99	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Tetrahydrofuran	ND	ug/m3	1.47				
Toluene	66.7	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	5.94	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				

Volatiles Organic Compounds in Air - ppbV							
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	0.825	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Butadiene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dioxane	ND	ppbV	1.00				
2,2,4-Trimethylpentane	ND	ppbV	0.500				
2-Butanone	6.09	ppbV	0.500				
2-Hexanone	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-02
AA-102-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Table of Organic Compounds in Air - ppbV, continued							
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	42.4	ppbV	2.00				
Benzene	2.67	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				
Bromoform	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon disulfide	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	0.699	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Cyclohexane	ND	ppbV	0.500				
Dibromochloromethane	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethyl Alcohol	8.83	ppbV	2.00				
Ethyl Acetate	ND	ppbV	0.500				
Ethylbenzene	0.731	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
iso-Propyl Alcohol	27.5	ppbV	0.500				
Methylene chloride	1.44	ppbV	1.00				
4-Methyl-2-pentanone	0.535	ppbV	0.500				
Methyl tert butyl ether	ND	ppbV	0.500				
p/m-Xylene	2.84	ppbV	0.500				
o-Xylene	0.653	ppbV	0.500				
Heptane	ND	ppbV	0.500				
n-Hexane	1.05	ppbV	1.00				
Propylene	5.81	ppbV	1.00				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Tetrahydrofuran	ND	ppbV	0.500				
Toluene	17.7	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	1.11	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl acetate	ND	ppbV	0.500				
Vinyl bromide	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0310425-03
AA-103-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatiles Organic Compounds in Air - ug/m3 continued							
Ethyl Alcohol	5.48	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	11.9	ug/m3	1.23				
Methylene chloride	ND	ug/m3	3.47				
4-Methyl-2-pentanone	ND	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	3.14	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	ND	ug/m3	3.52				
Propylene	2.21	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Tetrahydrofuran	ND	ug/m3	1.47				
Toluene	13.5	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	6.45	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				
Volatiles Organic Compounds in Air - ppbV							
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Butadiene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dioxane	ND	ppbV	1.00				
2,2,4-Trimethylpentane	ND	ppbV	0.500				
2-Butanone	7.37	ppbV	0.500				
2-Hexanone	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-03
 AA-103-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatiles, Organic Compounds in Air - ppbV continued							
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	11.4	ppbV	2.00				
Benzene	1.18	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				
Bromoform	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon disulfide	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	0.512	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Cyclohexane	ND	ppbV	0.500				
Dibromochloromethane	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethyl Alcohol	2.91	ppbV	2.00				
Ethyl Acetate	ND	ppbV	0.500				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
iso-Propyl Alcohol	4.84	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
4-Methyl-2-pentanone	ND	ppbV	0.500				
Methyl tert butyl ether	ND	ppbV	0.500				
p/m-Xylene	0.724	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Heptane	ND	ppbV	0.500				
n-Hexane	ND	ppbV	1.00				
Propylene	1.28	ppbV	1.00				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Tetrahydrofuran	ND	ppbV	0.500				
Toluene	3.59	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	1.20	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl acetate	ND	ppbV	0.500				
Vinyl bromide	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-04
 AA-104-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatiles Organic Compounds in Air - ug/m3 continued							
Ethyl Alcohol	7.80	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	16.4	ug/m3	1.23				
Methylene chloride	ND	ug/m3	3.47				
4-Methyl-2-pentanone	ND	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	4.11	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	ND	ug/m3	3.52				
Propylene	2.21	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Tetrahydrofuran	ND	ug/m3	1.47				
Toluene	16.1	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				
Volatiles Organic Compounds in Air - ppbV							
1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Butadiene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dioxane	ND	ppbV	1.00				
2,2,4-Trimethylpentane	ND	ppbV	0.500				
2-Butanone	1.36	ppbV	0.500				
2-Hexanone	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0310425-04
 AA-104-10.20.03

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Halogenated Organic Compounds - ppbV continued							
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	12.2	ppbV	2.00				
Benzene	2.30	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				
Bromoform	ND	ppbV	0.500				
Bromomethane	ND	ppbV	0.500				
Carbon disulfide	ND	ppbV	0.500				
Carbon tetrachloride	ND	ppbV	0.500				
Chlorobenzene	ND	ppbV	0.500				
Chloroethane	ND	ppbV	0.500				
Chloroform	ND	ppbV	0.500				
Chloromethane	0.560	ppbV	0.500				
cis-1,2-Dichloroethene	ND	ppbV	0.500				
cis-1,3-Dichloropropene	ND	ppbV	0.500				
Cyclohexane	ND	ppbV	0.500				
Dibromochloromethane	ND	ppbV	0.500				
Dichlorodifluoromethane	ND	ppbV	1.00				
Ethyl Alcohol	4.14	ppbV	2.00				
Ethyl Acetate	ND	ppbV	0.500				
Ethylbenzene	ND	ppbV	0.500				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500				
Hexachlorobutadiene	ND	ppbV	0.500				
iso-Propyl Alcohol	6.67	ppbV	0.500				
Methylene chloride	ND	ppbV	1.00				
4-Methyl-2-pentanone	ND	ppbV	0.500				
Methyl tert butyl ether	ND	ppbV	0.500				
p/m-Xylene	0.948	ppbV	0.500				
o-Xylene	ND	ppbV	0.500				
Heptane	ND	ppbV	0.500				
n-Hexane	ND	ppbV	1.00				
Propylene	1.29	ppbV	1.00				
Styrene	ND	ppbV	0.500				
Tetrachloroethene	ND	ppbV	0.500				
Tetrahydrofuran	ND	ppbV	0.500				
Toluene	4.26	ppbV	0.500				
trans-1,2-Dichloroethene	ND	ppbV	0.500				
trans-1,3-Dichloropropene	ND	ppbV	0.500				
Trichloroethene	ND	ppbV	0.500				
Trichlorofluoromethane	ND	ppbV	0.500				
Vinyl acetate	ND	ppbV	0.500				
Vinyl bromide	ND	ppbV	0.500				
Vinyl chloride	ND	ppbV	0.500				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0310425

Parameter % Recovery QC Criteria

Parameter	% Recovery	QC Criteria
Volatiles Organic Compounds in Air - LCS for sample(s) 31404 (WGP54881)		
1,1,1-Trichloroethane	98	70-130
1,1,2,2-Tetrachloroethane	109	70-130
1,1,2-Trichloroethane	91	70-130
1,1-Dichloroethane	91	70-130
1,1-Dichloroethene	86	70-130
1,2,4-Trichlorobenzene	94	70-130
1,2,4-Trimethylbenzene	117	70-130
1,2-Dibromoethane	84	70-130
1,2-Dichlorobenzene	116	70-130
1,2-Dichloroethane	99	70-130
1,2-Dichloropropane	83	70-130
1,3,5-Trimethylbenzene	115	70-130
1,3-Butadiene	95	70-130
1,3-Dichlorobenzene	113	70-130
1,4-Dichlorobenzene	112	70-130
1,4-Dioxane	129	70-130
2,2,4-Trimethylpentane	84	70-130
2-Butanone	109	70-130
2-Hexanone	126	70-130
3-Chloropropene	98	70-130
4-Ethyltoluene	117	70-130
Acetone	80	70-130
Benzene	81	70-130
Benzyl chloride	136	70-130
Bromodichloromethane	90	70-130
Bromoform	104	70-130
Bromomethane	83	70-130
Carbon disulfide	90	70-130
Carbon tetrachloride	97	70-130
Chlorobenzene	89	70-130
Chloroethane	82	70-130
Chloroform	94	70-130
Chloromethane	114	70-130
cis-1,2-Dichloroethene	91	70-130
cis-1,3-Dichloropropene	83	70-130
Cyclohexane	80	70-130
Dibromochloromethane	93	70-130
Dichlorodifluoromethane	96	70-130
Ethyl Alcohol	112	70-130
Ethyl Acetate	107	70-130
Ethylbenzene	98	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane	94	70-130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	96	70-130
Hexachlorobutadiene	114	70-130
iso-Propyl Alcohol	125	70-130
Methylene chloride	90	70-130
4-Methyl-2-pentanone	121	70-130
Methyl tert butyl ether	106	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0310425

Continued

Parameter	% Recovery	QC Criteria
Volatiles Organic Compounds in Air LCS for sample 7-01-01 (wg. 5488)		
p/m-Xylene	102	70-130
o-Xylene	104	70-130
n-Hexane	87	70-130
Propylene	91	70-130
Styrene	92	70-130
Tetrachloroethene	89	70-130
Tetrahydrofuran	105	70-130
Toluene	86	70-130
trans-1,2-Dichloroethene	83	70-130
trans-1,3-Dichloropropene	89	70-130
Trichloroethene	84	70-130
Trichlorofluoromethane	97	70-130
Vinyl acetate	114	70-130
Vinyl bromide	81	70-130
Vinyl chloride	96	70-130

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0310425

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-04 (WGI54881-3)							
Volatile Organic Compounds in Air ug/m3 -48 TO-15 21028.11:54 AR							
1,1,1-Trichloroethane	ND	ug/m3	2.72				
1,1,2,2-Tetrachloroethane	ND	ug/m3	3.43				
1,1,2-Trichloroethane	ND	ug/m3	2.72				
1,1-Dichloroethane	ND	ug/m3	2.02				
1,1-Dichloroethene	ND	ug/m3	1.98				
1,2,4-Trichlorobenzene	ND	ug/m3	3.71				
1,2,4-Trimethylbenzene	ND	ug/m3	2.46				
1,2-Dibromoethane	ND	ug/m3	3.84				
1,2-Dichlorobenzene	ND	ug/m3	3.00				
1,2-Dichloroethane	ND	ug/m3	2.02				
1,2-Dichloropropane	ND	ug/m3	2.31				
1,3,5-Trimethylbenzene	ND	ug/m3	2.46				
1,3-Butadiene	ND	ug/m3	1.10				
1,3-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dichlorobenzene	ND	ug/m3	3.00				
1,4-Dioxane	ND	ug/m3	3.60				
2,2,4-Trimethylpentane	ND	ug/m3	2.33				
2-Butanone	ND	ug/m3	1.47				
2-Hexanone	ND	ug/m3	2.05				
3-Chloropropene	ND	ug/m3	1.56				
4-Ethyltoluene	ND	ug/m3	2.46				
Acetone	ND	ug/m3	4.75				
Benzene	ND	ug/m3	1.60				
Benzyl chloride	ND	ug/m3	2.59				
Bromodichloromethane	ND	ug/m3	3.35				
Bromoform	ND	ug/m3	5.16				
Bromomethane	ND	ug/m3	1.94				
Carbon disulfide	ND	ug/m3	1.56				
Carbon tetrachloride	ND	ug/m3	3.14				
Chlorobenzene	ND	ug/m3	2.30				
Chloroethane	ND	ug/m3	1.32				
Chloroform	ND	ug/m3	2.44				
Chloromethane	ND	ug/m3	1.03				
cis-1,2-Dichloroethene	ND	ug/m3	1.98				
cis-1,3-Dichloropropene	ND	ug/m3	2.27				
Cyclohexane	ND	ug/m3	1.72				
Dibromochloromethane	ND	ug/m3	4.26				
Dichlorodifluoromethane	ND	ug/m3	4.94				
Ethyl Alcohol	ND	ug/m3	3.76				
Ethyl Acetate	ND	ug/m3	1.80				
Ethylbenzene	ND	ug/m3	2.17				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/m3	3.83				
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	3.49				
Hexachlorobutadiene	ND	ug/m3	5.33				
iso-Propyl Alcohol	ND	ug/m3	1.23				

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0310425

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	

Blank Analysis for sample(s) 01-04 (WG154861-6)
 Volatile Organic Compounds in Air - ug/m3 continued

Methylene chloride	ND	ug/m3	3.47				
4-Methyl-2-pentanone	ND	ug/m3	2.05				
Methyl tert butyl ether	ND	ug/m3	1.80				
p/m-Xylene	ND	ug/m3	2.17				
o-Xylene	ND	ug/m3	2.17				
Heptane	ND	ug/m3	2.05				
n-Hexane	ND	ug/m3	3.52				
Propylene	ND	ug/m3	1.72				
Styrene	ND	ug/m3	2.13				
Tetrachloroethene	ND	ug/m3	3.39				
Tetrahydrofuran	ND	ug/m3	1.47				
Toluene	ND	ug/m3	1.88				
trans-1,2-Dichloroethene	ND	ug/m3	1.98				
trans-1,3-Dichloropropene	ND	ug/m3	2.27				
Trichloroethene	ND	ug/m3	2.68				
Trichlorofluoromethane	ND	ug/m3	2.81				
Vinyl acetate	ND	ug/m3	1.76				
Vinyl bromide	ND	ug/m3	2.18				
Vinyl chloride	ND	ug/m3	1.28				

Blank Analysis for sample(s) 01-04 (WG154861-6)
 Volatile Organic Compounds in Air - ppbV

1,1,1-Trichloroethane	ND	ppbV	0.500				
1,1,2,2-Tetrachloroethane	ND	ppbV	0.500				
1,1,2-Trichloroethane	ND	ppbV	0.500				
1,1-Dichloroethane	ND	ppbV	0.500				
1,1-Dichloroethene	ND	ppbV	0.500				
1,2,4-Trichlorobenzene	ND	ppbV	0.500				
1,2,4-Trimethylbenzene	ND	ppbV	0.500				
1,2-Dibromoethane	ND	ppbV	0.500				
1,2-Dichlorobenzene	ND	ppbV	0.500				
1,2-Dichloroethane	ND	ppbV	0.500				
1,2-Dichloropropane	ND	ppbV	0.500				
1,3,5-Trimethylbenzene	ND	ppbV	0.500				
1,3-Butadiene	ND	ppbV	0.500				
1,3-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dichlorobenzene	ND	ppbV	0.500				
1,4-Dioxane	ND	ppbV	1.00				
2,2,4-Trimethylpentane	ND	ppbV	0.500				
2-Butanone	ND	ppbV	0.500				
2-Hexanone	ND	ppbV	0.500				
3-Chloropropene	ND	ppbV	0.500				
4-Ethyltoluene	ND	ppbV	0.500				
Acetone	ND	ppbV	2.00				
Benzene	ND	ppbV	0.500				
Benzyl chloride	ND	ppbV	0.500				
Bromodichloromethane	ND	ppbV	0.500				

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0310425

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL
Blank Analysis for sample(s) 01-04 (WG154881-3)						
Volatile Organic Compounds: An. Al. - ppbV. Contained: 48 TO 15 1028-11-24-AR						
Bromoform	ND	ppbV	0.500			
Bromomethane	ND	ppbV	0.500			
Carbon disulfide	ND	ppbV	0.500			
Carbon tetrachloride	ND	ppbV	0.500			
Chlorobenzene	ND	ppbV	0.500			
Chloroethane	ND	ppbV	0.500			
Chloroform	ND	ppbV	0.500			
Chloromethane	ND	ppbV	0.500			
cis-1,2-Dichloroethene	ND	ppbV	0.500			
cis-1,3-Dichloropropene	ND	ppbV	0.500			
Cyclohexane	ND	ppbV	0.500			
Dibromochloromethane	ND	ppbV	0.500			
Dichlorodifluoromethane	ND	ppbV	1.00			
Ethyl Alcohol	ND	ppbV	2.00			
Ethyl Acetate	ND	ppbV	0.500			
Ethylbenzene	ND	ppbV	0.500			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ppbV	0.500			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ppbV	0.500			
Hexachlorobutadiene	ND	ppbV	0.500			
iso-Propyl Alcohol	ND	ppbV	0.500			
Methylene chloride	ND	ppbV	1.00			
4-Methyl-2-pentanone	ND	ppbV	0.500			
Methyl tert butyl ether	ND	ppbV	0.500			
p/m-Xylene	ND	ppbV	0.500			
o-Xylene	ND	ppbV	0.500			
Heptane	ND	ppbV	0.500			
n-Hexane	ND	ppbV	1.00			
Propylene	ND	ppbV	1.00			
Styrene	ND	ppbV	0.500			
Tetrachloroethene	ND	ppbV	0.500			
Tetrahydrofuran	ND	ppbV	0.500			
Toluene	ND	ppbV	0.500			
trans-1,2-Dichloroethene	ND	ppbV	0.500			
trans-1,3-Dichloropropene	ND	ppbV	0.500			
Trichloroethene	ND	ppbV	0.500			
Trichlorofluoromethane	ND	ppbV	0.500			
Vinyl acetate	ND	ppbV	0.500			
Vinyl bromide	ND	ppbV	0.500			
Vinyl chloride	ND	ppbV	0.500			

ALPHA ANALYTICAL LABORATORIES
ADDENDUM I

REFERENCES

48. Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

APPENDIX G

**GROUNDWATER SOURCE CONTROL AREA -
FIELD MONITORING FORMS**

Groundwater Remediation System OM&M Field Monitoring Form
 Wilmington, Ma

Monitored Parameters Explanation

GROUNDWATER PARAMETERS

Parameter		Normal Range	Explanation
Total GW pumped, gallons		NA	Reading taken from the influent flowmeter-totalizer.
Average pumping rate, gpm		2 to 5	Value calculated based on time interval and total gallons pumped between monitoring.
Treated GW pH at discharge point		6 to 8	Value measured directly at the sampling port.
Pressure, psi	Bag filter inlet pressure (PG-201)	7 to 20	Change filter when inlet pressure reaches 20 psi. Alarm set-point for system shutdown is set at 30 psi.
	LGAC-201 inlet pressure (PG-202)	5 to 10	Max pressure shall be less than 11 psi. PG-202 pressure shall be lower than PG-201.
	LGAC-202 inlet pressure (PG-203)	5 to 10	Max pressure shall be less than 11 psi. PG-203 pressure shall be lower than PG-202.
	Discharge pressure (PG-204)	5 to 10	PG-204 pressure shall be lower than PG-203.
	TRC-202R packer pressure	80 to 200	Packer shall be inflated to 200 psi if pressure drops below 80 psi.

VAPOR STREAM PARAMETERS

Parameter		Normal Range	Explanation
Pressure, in. w.c.	Air Stripper (PG-301)	10 to 25	Air stripper vacuum. Values above 25" w.c. indicates clogging and need for cleaning.
	Blower Inlet (PG-302)	15 to 30	Blower inlet vacuum. Consists of PG-301 vacuum + losses in piping. Suspect clogging in piping if PG-302 - PG-301 greater than 8" w.c.
	VGAC-301 (PG-303)	5 to 15	Combined backpressure of two GAC vessels and the discharge stack. Suspect clogging downstream if PG-303 greater than 15" w.c.
	VGAC-302 (PG-304)	3 to 10	Combined backpressure of the second GAC vessel and the discharge stack. Suspect clogging downstream if PG-304 greater than 10" w.c.
	VGAC-302 (PG-305)	2 to 7	Backpressure of the discharge stack. Suspect clogging downstream if PG-305 greater than 5" w.c.
	Pitot Tube Differential (PG-306)	0.2 to 0.4	Corresponds to 156 CFM (cubic feet per minute) to 220 CFM air flow. Minimum design air flow is 150 cfm
Vapors, ppm	VGAC-301 Inlet (SP-301)	0 to 5	Inlet vapor concentration is not expected to exceed 2 ppmv. Higher than 2ppm readings need to be double-checked.
	VGAC-302 Inlet (SP-302)	<1	Greater than 1 ppm reading signifies a breakthrough in GAC-301. GAC vessel rotation and carbon replacement shall be scheduled.
	Discharge (SP-303)	<1	Treated discharge is expected to be below 1ppm. Shut down the system if greater than 1 ppm reading is detected.
Temp, °F	Air dryer Inlet, (TG-301)	50 to 70	Typical seasonal variation 50 to 65 deg F.
	Air dryer Outlet, (TG-302)	40 to 70	Approximately 15 deg. F temperature reduction is expected in hot periods when dryer is "on". Values of TG-301 and TG-302 shall be approximately the same in cool periods when the dryer is "off"
	VGAC-301 Inlet, (TG-303)	60 to 90	TG-303 is greater than TG302 due to temperature rise across the blower. Approximately 30 deg F temperature rise across the blower is expected.

Field forms were not utilized prior to the February 25, 2004 site visit.

Groundwater Remediation System OM&M Field Monitoring Form
Wilmington, Ma

Date: 2-25-04

Name: B. Osullivan

GROUNDWATER PARAMETERS

Parameter	As Measured	Adjusted	Normal Range	Comments
Total GW pumped, gallons	426, 134	NA	NA	
Average pumping rate, gpm			2 to 5	Calculated in spreadsheet.
Treated GW pH at discharge point	7.22		6 to 8	
Pressure, psi	Bag filter inlet pressure (PG-201)	8.0	7 to 20	
	LGAC-201 inlet pressure (PG-202)	7.0	5 to 10	
	LGAC-202 inlet pressure (PG-203)	6.5	5 to 10	
	Discharge pressure (PG-204)	6.0	5 to 10	
	TRC-202R packer pressure	120		80 to 200

Notes

Noticed a very small leak. Melted snow? Condensed GAC?
Could not find the source. Installed a small automatic sump pump to pump water from floor sump back into the air stripper. Collected 6/8 samples of the system.

VAPOR STREAM PARAMETERS

Parameter	As Measured	Adjusted	Normal Range	Comments
Pressure, in. w. c.	Air Stripper (PG-301)	13	10 to 25	
	Blower Inlet (PG-302)	17	15 to 30	
	VGAC-301 (PG-303)	8	5 to 15	
	VGAC-302 (PG-304)	4.5	3 to 10	
	VGAC-302 (PG-305)	2.7	2 to 7	
	Pitot Tube Differential (PG-306)	0.28		0.2 to 0.4
Vapors, ppm	VGAC-301 Inlet (SP-301)	1	0 to 5	
	VGAC-302 Inlet (SP-302)	ND	<1	
	Discharge (SP-303)	ND	<1	
Temp, °F	Air dryer Inlet, (TG-301)	52	50 to 70	
	Air dryer Outlet, (TG-302)	51	40 to 70	
	VGAC-301 Inlet, (TG-303)	79	60 to 90	

Notes

Groundwater Remediation System OM&M Field Monitoring Form
 Wilmington, Ma

Date: 3/10/09

Name: A. Dyukin

GROUNDWATER PARAMETERS

Parameter		As Measured	Adjusted	Normal Range	Comments
Total GW pumped, gallons		460137	NA	NA	
Average pumping rate, gpm		NA		2 to 5	Flow meter at 2.03 gpm
Treated GW pH at discharge point		NA		6 to 8	Not measured
Pressure, psi	Bag filter inlet pressure (PG-201)	9.0		7 to 20	
	LGAC-201 inlet pressure (PG-202)	7.5		5 to 10	
	LGAC-202 inlet pressure (PG-203)	6.0		5 to 10	
	Discharge pressure (PG-204)	5.5		5 to 10	
	TRC-202R packer pressure	115 psi		80 to 200	ADD pressure next time

Notes

System running normally, no adjustments necessary.
 No samples is collected.
 Well gauging and sampling next site visit.

VAPOR STREAM PARAMETERS

Parameter		As Measured	Adjusted	Normal Range	Comments
Pressure, in. w.c.	Air Stripper (PG-301)	13.0		10 to 25	
	Blower Inlet (PG-302)	18.0		15 to 30	
	VGAC-301 (PG-303)	8.0		5 to 15	
	VGAC-302 (PG-304)	4.8		3 to 10	
	VGAC-302 (PG-305)	2.8		2 to 7	
	Pitot Tube Differential (PG-306)	0.28		0.2 to 0.4	
Vapors, ppm	VGAC-301 Inlet (SP-301)	1		0 to 5	
	VGAC-302 Inlet (SP-302)	ND		<1	
	Discharge (SP-303)	ND		<1	
Temp, °F	Air dryer Inlet, (TG-301)	52		50 to 70	
	Air dryer Outlet, (TG-302)	51		40 to 70	
	VGAC-301 Inlet, (TG-303)	79		60 to 90	

Notes

Groundwater Remediation System OM&M Field Monitoring Form

Wilmington, Ma

Date: 3-24-04

Name: A. D'Guzin

GROUNDWATER PARAMETERS

Parameter	As Measured	Adjusted	Normal Range	Comments
Total GW pumped, gallons	493888	NA	NA	
Average pumping rate, gpm	NA		2 to 5	Flow at 2.05 gpm
Treated GW pH at discharge point	7.73		6 to 8	
Pressure, psi	Bag filter inlet pressure (PG-201)	9.5		7 to 20
	LGAC-201 inlet pressure (PG-202)	7.5		5 to 10
	LGAC-202 inlet pressure (PG-203)	6.0		5 to 10
	Discharge pressure (PG-204)	5.5		5 to 10
	TRC-202R packer pressure	115	115	80 to 200

Notes

* Could not inflate packer above 115 psi. Suspect possible damage. Need to inspect the packer and replace it if needed.

System was "ON" upon arrival

VAPOR STREAM PARAMETERS

Parameter	As Measured	Adjusted	Normal Range	Comments
Air Stripper (PG-301)	13.0		10 to 25	
Blower Inlet (PG-302)	17.0		15 to 30	
VGAC-301 (PG-303)	9.0		5 to 15	
VGAC-302 (PG-304)	5.0		3 to 10	
VGAC-302 (PG-305)	2.7		2 to 7	
Pitot Tube Differential (PG-306)	0.7		0.2 to 0.4	
Vapors, ppm	VGAC-301 Inlet (SP-301)	1.0		0 to 5
	VGAC-302 Inlet (SP-302)	ND		<1
	Discharge (SP-303)	ND		<1
Temp, °F	Air dryer Inlet, (TG-301)	54		50 to 70
	Air dryer Outlet, (TG-302)	54		40 to 70
	VGAC-301 Inlet, (TG-303)	88		60 to 90

Notes

1. GW samples collected as required.
2. Sample wells gaugings performed.
3. LNAPL well gaugings performed.