



engineering and constructing a better tomorrow

June 5, 2008

Mr. Joseph T. Martella II, Senior Engineer  
RIDEIM Office of Waste Management  
Site Remediation Program  
235 Providence Street  
Providence, Rhode Island 02908

**RE: Adelaide Avenue Soil Vapor and Groundwater Investigation  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, Rhode Island  
MACTEC Project No. 3650050041.18**

Dear Mr. Martella:

This letter summarizes the recently completed soil vapor and groundwater investigation activities at Adelaide Avenue on March 21, 2008 and April 17, 2008. These activities are part of a comprehensive investigation at the former Gorham Manufacturing Facility (the Site).

### **OBJECTIVE**

The objective of the soil vapor and groundwater investigation was to evaluate current conditions along Adelaide Avenue adjacent to the Site and determine whether additional soil vapor and/or indoor air testing at nearby residences are recommended.

### **SITE PREPARATION ACTIVITIES**

Work plans were submitted to the Rhode Island Department of Environmental Management (RIDEIM) dated March 7, 2008 and April 14, 2008. These were posted on RIDEIM's project website. MACTEC Engineering and Consulting, Inc. (MACTEC) contacted Dig-Safe to mark underground utilities prior to conducting these investigations. In addition, MACTEC distributed written notification of the proposed work to the homeowners along Adelaide Avenue, abutters, and stakeholders prior to conducting the work. This notification was issued in both English and Spanish in both March 7 and April 14, 2008. In addition, Textron went door to door on April 15, 2008 to coordinate directly with residents in the immediate vicinity of the work to personally inform them about the planned activities.

## **SCOPE OF WORK, ADELAIDE AVENUE SOIL VAPOR AND GROUNDWATER INVESTIGATION**

MACTEC and its subcontractor, Geologic , Inc. of Norfolk, Massachusetts, installed one shallow groundwater monitoring well (MW-229) and seven temporary soil vapor probes (ASG1 – ASG7) in the grass strip in the City of Providence right of way on the south side of Adelaide Avenue (see Figure 1) on March 21, 2008. Two additional temporary soil vapor probes were installed on April 17, 2008: soil vapor probe ASG1 was re-installed on the south side of Adelaide Avenue, and soil vapor probe ASG8 was installed at the north side of Adelaide Avenue, immediately adjacent to the Site, between monitoring wells MW-218S and MW-218D. Also, one direct push grab groundwater sample was co-located with ASG1.

The new groundwater monitoring well MW-229 was installed with a Geoprobe® rig (one-inch diameter well), developed, and sampled on April 2, 2008 for analysis of volatile organic compounds (VOCs) in accordance with the March 7, 2008 work plan. The direct push grab groundwater sample, located near ASG1, was collected using a four ft long stainless steel slotted screen, advanced four feet into groundwater with the Geoprobe®. Groundwater samples were delivered under chain of custody to ESS Laboratory of Cranston, Rhode Island.

The temporary soil vapor probes were installed using the Geoprobe® direct push probe, advanced to approximately 4 ft below ground surface (bgs), and sampled via the post run tubing (PRT) system. The PRT system involves pushing steel rods and an expendable steel tip to the sample depth (4' bgs); pulling the rods back 6 inches while the steel tip remains in place to expose the sampling zone; and inserting polyethylene tubing with an adapter into the tip holder to obtain the soil vapor sample. Temporary soil vapor probes were also installed at approximately 3 ft above the groundwater at ASG1 (20 ft bgs) and ASG8 (22 ft bgs).

After installation of the probes, three sampling train volumes (the volume of the sampling zone and tubing) were purged from each soil vapor point with a syringe at less than 200 milliliters per minute (ml/min) prior to sampling to ensure collection of representative samples. After purging, the soil vapor was screened with a photo-ionization detector (PID). Soil vapor samples were collected with six-liter Summa-type canisters with flow regulators set to 30 minutes per sample. Soil vapor samples were shipped under chain of custody to Con-Test Analytical Laboratory of East Longmeadow, Massachusetts, for VOC analysis (Method TO-15).

The soil vapor sampling locations along Adelaide Avenue were selected because they are between the Gorham Site and the Adelaide Avenue residences. These locations were used to measure potential migration of VOCs in the subsurface from the Site in the direction of the residences. If VOC soil vapor concentrations at those locations are below vapor intrusion screening levels, then vapor intrusion would not be a concern. If measured VOC concentrations in soil vapor samples collected along Adelaide Avenue are higher than the vapor intrusion screening levels, then soil vapor and/or indoor air sampling and analysis at the pertinent residences is appropriate to evaluate the potential vapor intrusion pathway. The soil vapor screening values used in this assessment were derived to be protective at residences.

## RESULTS

### Soil Vapor Survey

Table 1 presents reported soil vapor concentrations of detected compounds in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). The soil vapor concentrations are compared to Connecticut Department of Environmental Protection (CTDEP) Soil Vapor Volatilization Criteria (SVVC). The CTDEP screening values are recommended by RIDEM in the absence of RIDEM screening values. The soil vapor testing results for the samples collected along the south sides of Adelaide Avenue are summarized below:

- None of the Site-related chlorinated VOCs were detected in soil vapor samples ASG504 and ASG604 collected between the Site and residences (Figure 1).
- All concentrations of VOCs (chlorinated and non-chlorinated) in the soil vapor sample ASG704 collected between the Site and the residences were significantly below the SVVC vapor screening values (Table 1).
- Chlorinated VOCs that were previously identified in groundwater at the southern portion of the Site were detected in soil vapor samples ASG104 (shallow), ASG120 (deep), ASG-204, ASG304, and ASG404 (Table 1, Figure 1).
  - Only one chlorinated VOC (vinyl chloride) was detected in soil vapor samples (ASG104 and ASG120) at concentrations above the corresponding CTDEP SVVC; however, vinyl chloride was not detected in the ASG1s grab groundwater sample (Table 2).
- A number of non-chlorinated VOCs that are typically associated with light-weight petroleum products such as gasoline were detected in each of the soil vapor samples collected from the south side of Adelaide Avenue. These compounds have not been associated with the former Gorham manufacturing facility. These compounds include benzene, cyclohexane, ethylbenzene, hexane, n-heptane, o-xylene, m,p-xylene, toluene, and 1,2,4-trimethylbenzene.
  - Only one of the non-chlorinated compounds (benzene) had concentrations in soil vapor samples that were above the corresponding SVVC (sample ASG504).
  - CTDEP did not publish soil vapor volatilization criteria for some of those compounds (cyclohexane, hexane, and n-heptane). These compounds were

- reported in soil vapor samples at concentrations higher than most of the other detected compounds.
- The highest concentrations of these compounds were reported in soil vapor sample ASG504. Indoor air testing was previously conducted by RIDEM in 2005 in the home adjacent to this sample location. RIDEM concluded levels of VOCs in indoor air “are similar to those commonly seen in residences in the state”.

Appendix A includes the analytical results for soil vapor sampling. The weather conditions on the days that soil vapor sampling was conducted (March 21, 2008 and April 17, 2008) are included in Appendix B.

#### Groundwater at MW-229, MW-218S, and Direct Push Location near ASG1

There were no VOCs detected in the direct push grab groundwater sample (GWASG1S) near ASG1 (Table 2 and Figure 1). Only PCE was detected (0.0744 milligrams per liter [mg/l]) in new monitoring well MW-229 and is below the Rhode Island GB groundwater standard (0.15 mg/l) that was published to be protective of vapor intrusion. At existing monitoring well MW-218S (north side of Adelaide Avenue), TCE (0.17 mg/l) was detected below the GB groundwater standard (0.54 mg/l), and cis-1,2-dichloroethene (0.087 mg/l) was detected below the GB groundwater standard (2.4 mg/l). MW-218S was sampled on February 7, 2008, by Shaw Environmental, Inc. (Shaw) as part of a quarterly groundwater sampling program. Appendix C includes the analytical results for groundwater sampling for MW-229 and the direct push grab groundwater sample (GWASG1S) near ASG1. Analytical results for groundwater at MW-218S were obtained from the March 6, 2008 report *Status Report: February 2008 Activities, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI, Site Remediation Case No. 97-030 (Shaw, 2008)*.

## **CONCLUSIONS**

Based on the results of the soil vapor and groundwater investigations along Adelaide Avenue, it is prudent to perform sub-slab soil vapor sampling and indoor air sampling at four residences on Adelaide Avenue to more definitively evaluate the potential for vapor intrusion at those residences. Textron reviewed these results and the proposed monitoring plan with RIDEM on May 2 2008. Textron and MACTEC have since visited each of these houses on multiple occasions to talk with the residents and owners and provided an English and Spanish letter describing the proposed work. Textron continues to work with the owners, RIDEM and residents

to schedule and coordinate the proposed sub-slab soil vapor sampling and indoor air sampling at these four residences.

Feel free to contact either Michael Murphy at (781) 213-5600 or Greg Simpson of Textron at (401) 457-2635 with any questions. We are available either for a conference call or to meet with RIDEM to address any questions you may have on these results and the Work Plan.

Sincerely,  
**MACTEC Engineering and Consulting, Inc.**



Michael Murphy  
Senior Principal Scientist



David E. Heislein  
Principal Engineer

Attachments: Tables  
Figure  
Appendix A – Con-Test Laboratory Report for Soil Vapor Samples  
Appendix B – Weather Data During Soil Vapor Sampling  
Appendix C – ESS Laboratory Report for Groundwater Samples

cc: T. Deller, City of Providence  
P. Grivers, EA Engineering, Science, and Technology  
G. Simpson, Textron, Inc.  
J. Schiff, Textron, Inc.  
Knight Memorial Library Repository  
MACTEC Project File [P:\TEXTRON\GORHAM\Soil Vapor Investigation at Adelaide Ave\Final Report Adelaide Ave Soil Vapor 060508.doc]

## **TABLES**

**Table 1**  
**March/April 2008 Soil Vapor Concentrations for Detected VOC Compounds**  
**Former Gorham Manufacturing Facility**  
**333 Adelaide Avenue**  
**Providence, Rhode Island**

Compound	CTDEP/ RIDEM Residential SVVC ( $\mu\text{g}/\text{m}^3$ )	South of Adelaide Avenue									North of Adelaide Avenue Adjacent to MW-218S/D	
		4' ASG1 ASG104 3/21/2008	4' ASG1 ASG104-02 04/17/2008	20' ASG1 ASG120 04/17/2008	4' ASG2 ASG204 3/21/2008	4' ASG3 ASG304 3/21/2008	4' ASG4 ASG404 3/21/2008	4' ASG5 ASG504 3/21/2008	4' ASG6 ASG604 3/21/2008	4' ASG7 ASG704 3/21/2008	4' ASG8 ASG804 04/17/2008	22' ASG8 ASG822 04/17/2008
<b>Volatile Organics (<math>\mu\text{g}/\text{m}^3</math>)</b>												
1,1,1-Trichloroethane	390000	5.4 U	0.54 U	5.4 U	1.5	1.5	2.8	5.4 U	0.54 U	1.2	5.4 U	85
1,1,2-Trichloroethane	1700	5.4 U	16	5.4 U	0.54 U	0.54 U	0.54 U	5.4 U	0.54 U	0.54 U	5.4 U	5.4 U
1,1-Dichloroethane	58000	5.7	2	4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	8.1	15
1,1-Dichloroethene	7700	98	8.9	35	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	8.3	61
1,2,4-Trimethylbenzene	7000	5 U	5.4	5 U	0.5 U	0.5 U	0.95	7.6	1.7	1.3	26	5 U
1,2-Dichloroethane	54	4 U	2.6	4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	4 U	7.5
1,3,5-Trimethylbenzene	7000	5 U	1.8	5 U	0.5 U	0.5 U	0.5 U	14	0.61	0.5 U	13	5 U
1,3-Butadiene		2.2 U	0.22 U	2.2 U	2.9	1.2	14	2.2 U	5.7	5.2	2.2 U	2.2 U
1,3-Dichlorobenzene	56000	6 U	2.2	6 U	0.6 U	0.6 U	0.6 U	6 U	0.6 U	0.6 U	6 U	6 U
2-Butanone	390000	5.9 U	17	16	3.5	3.7	20	5.9 U	9.1	7.8	67	15
2-Hexanone		4 U	0.4 U	4 U	0.4 U	0.4 U	0.93	4 U	0.4 U	0.4 U	4 U	4 U
4-Ethyltoluene		5 U	1.8	5 U	0.5 U	0.5 U	0.5 U	7	0.58	0.5 U	15	5 U
4-Methyl-2-Pentanone	28000	4 U	0.4 U	4 U	0.4 U	0.4 U	1.5	4 U	0.4 U	0.4 U	4 U	4 U
Acetone	140000	9.6 U	160	2.4 U	16	11	47	9.6 U	44	35	2.4 U	2.4 U
Benzene	2500	70	15	29	0.78	0.48	8.1	<b>39000</b>	80	16	980	3.7
Bromodichloromethane	26	6.6 U	0.66 U	6.6 U	0.66 U	0.66 U	3.9	6.6 U	0.66 U	6.6 U	6.6 U	6.6 U
Carbon disulfide		3.2 U	1.1	3.2 U	1.1	0.42	2.2	3.2 U	1.2	1.9	5.4	3.2 U
Chloroethane	380000	6.7	0.61	8.2	0.53 U	0.53 U	0.53 U	5.3 U	0.53 U	0.53 U	34	5.3 U
Chloroform	390	4.8 U	17	4.8 U	0.48 U	0.48 U	30	4.8 U	0.48 U	0.48 U	4.8 U	4.8 U
Chloromethane	11000	4.2 U	0.2 U	2 U	0.42 U	0.42 U	0.53	4.2 U	0.42 U	0.42 U	2 U	2 U
cis-1,2-Dichloroethene	14000	170	12	110	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	34	810
Cyclohexane		2500	670	130	0.34 U	0.34 U	0.8	27000	27	7	13000	1200
Dichlorodifluoromethane	70000	5 U	1.2	5 U	1.9	2	1.8	5 U	1.9	1.8	5 U	5 U
Ethanol		72	22	36	7.3	3.7	3.9	19 U	5.8	5.8	3.8 U	3.8 U
Ethylbenzene	41000	4.4 U	8.3	10	0.5	0.44 U	1.1	270	2.6	1.1	180	8.3
Hexane		5900	660	170	1.2	0.36 U	6.5	64000	27	9.7	29000	2300
Isopropyl alcohol		2.4 U	26	2.4 U	1.6	0.84	1	2.4 U	1.2	1.4	2.4 U	30
m,p-Xylene	500000	8.6 U	30	28	1.2	0.91	2.7	1200	11	3.9	590	23
Methylene chloride	2300	7 U	1.3	5.8	5.2	0.69	1.1	7 U	1.1	2.3	5.8	5.1
n-Heptane		1400	45	42	0.4 U	0.4 U	3.3	34000	29	8.2	8400	500
o-Xylene	500000	4.4 U	11	8.5	0.44 U	0.44 U	1	170	2.7	1.3	190	6.3
Propylene (Propene)		1.8 U	0.18 U	1.8 U	16	8.4	95	1.8 U	52	41	1.8 U	1.8 U
Styrene	40000	4.2 U	1.6	4.2 U	0.42 U	0.42 U	0.76	4.2 U	1.6	1.3	4.2 U	4.2 U
Tetrachloroethene	3900	58	280	76	1700	1700	220	6.8 U	0.68 U	1.4	53	<b>14000</b>
Toluene	160000	3.8 U	15	25	1.3	0.82	5.9	280	4.7	3.6	880	20
trans-1,2-Dichloroethene	29000	8.9	0.4 U	4.7	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	140	22
Trichloroethene	760	37	31	16	2.2	0.54 U	2.6	5.4 U	0.54 U	0.54 U	5.4 U	460
Trichlorofluoromethane	290000	5.6 U	1.6	5.6 U	15	17	33	5.6 U	1.2	20	5.6 U	700
Vinyl chloride	110	<b>3800</b>	28	<b>1600</b>	0.26 U	0.26 U	0.26 U	2.6 U	0.26 U	0.26 U	<b>15000</b>	<b>1800</b>

U - not detected, value is the detection limit

$\mu\text{g}/\text{m}^3$  - micrograms per cubic meter

SVVC - Soil Vapor Volatilization Criteria

Shaded and bold values exceed the CTDEP SVVC recommended by RIDEM.

Prepared by/Date: KJC 05/01/08

Checked by/Date: ARM 05/15/08

Revised by/Date: MJM 060508

**Table 2**  
**Compounds Detected in Select Groundwater Samples**  
**Former Gorham Manufacturing Facility**  
**333 Adelaide Avenue**  
**Providence, Rhode Island**

chemical_name	South of Adelaide Avenue		North of Adelaide Avenue	
	ASGIS GWASGIS 4/17/2008	MW-229S MW 229S01 4/2/2008	MW-218D 2/7/2008	MW-218S 2/7/2008
<b>Volatile Organics (mg/L)</b>				
1,1-Dichloroethene	0.001 U	0.001 U	0.022	0.010 U
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.020 U	0.087
Tetrachloroethene	0.001 U	0.0744 D	1.4	0.170
Trichloroethene	0.001 U	0.001 U	0.580	0.020 U

mg/L - milligrams per liter

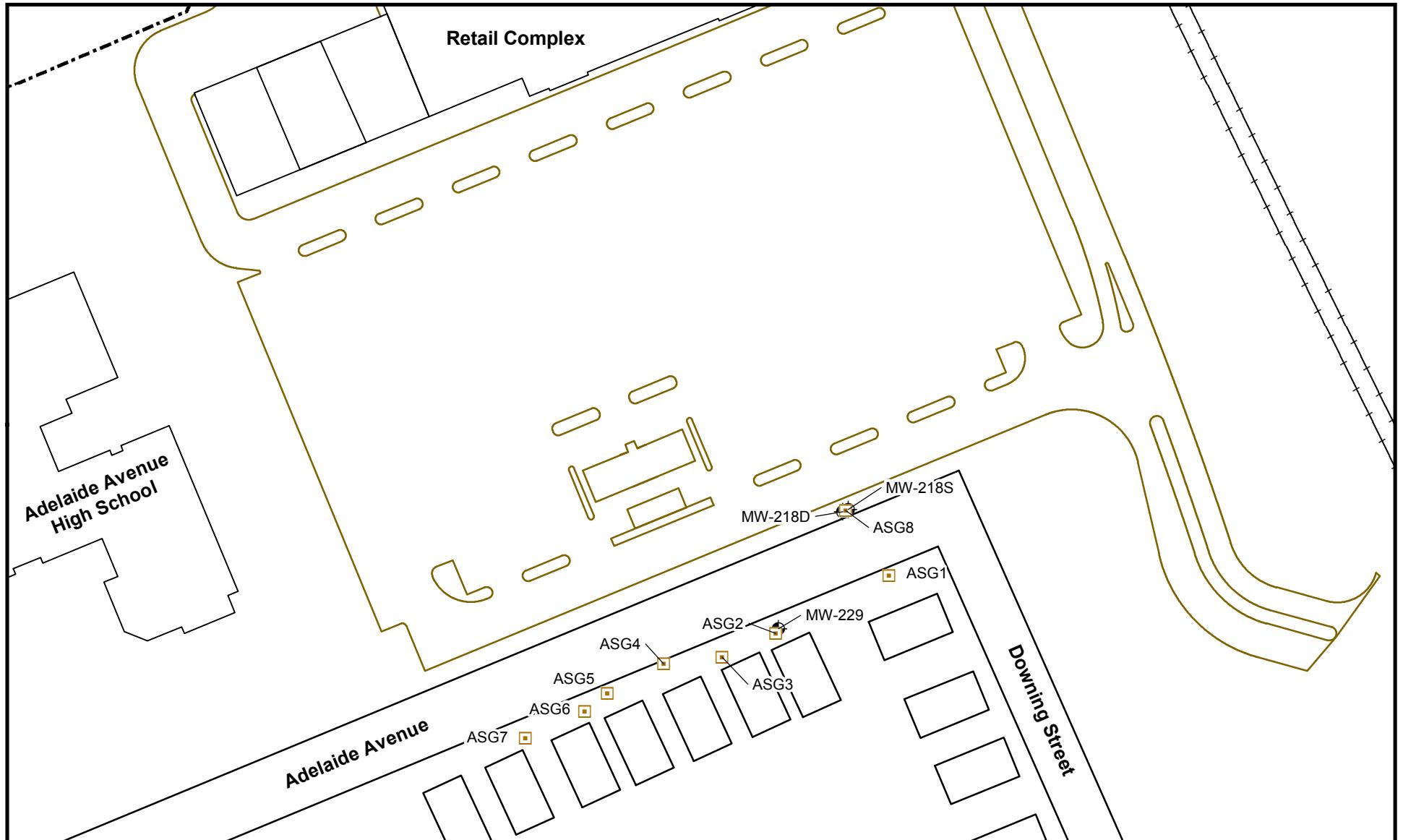
U - not detected, value is the detection limit

D - result for a dilution

Prepared by/Date: KJC 05/13/08

Checked by/Date: ARM 05/15/08

## **FIGURE**



N  
0 50 100  
Feet

Prepared by BJR Checked by PJM

#### Legend

- Monitoring Well
- Temporary Soil Vapor Point
- Current Building
- Pavement Outline

Figure 1  
Temporary Soil Vapor Probes and  
Related Monitoring Wells

Adelaide Avenue Soil Vapor and Groundwater Investigation  
333 Adelaide Avenue  
Providence, Rhode Island

## **Appendix A**

### **Con-Test Laboratory Report for Soil Vapor Samples**



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 4/9/2008

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301  
WAKEFIELD, MA 01880  
ATTN: DAVE HEISLEIN

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER: 3650050041.18

#### ANALYTICAL SUMMARY

LIMS BAT #: LIMT-14601  
JOB NUMBER: 3650050041.18

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.  
Results are based on samples as submitted to the laboratory and relate only to the items collected and tested.

PROJECT LOCATION: PROVIDENCE-RI

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	SUBCONTRACT LAB (IF ANY)
ASG104	08B10366	AIR	NOT SPECIFIED	to-15 ppbv	
ASG104	08B10366	AIR	NOT SPECIFIED	to-15 ug/m3	
ASG204	08B10367	AIR	NOT SPECIFIED	to-15 ppbv	
ASG204	08B10367	AIR	NOT SPECIFIED	to-15 ug/m3	
ASG304	08B10368	AIR	NOT SPECIFIED	to-15 ppbv	
ASG304	08B10368	AIR	NOT SPECIFIED	to-15 ug/m3	
ASG404	08B10369	AIR	NOT SPECIFIED	to-15 ppbv	
ASG404	08B10369	AIR	NOT SPECIFIED	to-15 ug/m3	
ASG504	08B10370	AIR	NOT SPECIFIED	to-15 ppbv	
ASG504	08B10370	AIR	NOT SPECIFIED	to-15 ug/m3	
ASG604	08B10371	AIR	NOT SPECIFIED	to-15 ppbv	
ASG604	08B10371	AIR	NOT SPECIFIED	to-15 ug/m3	
ASG704	08B10372	AIR	NOT SPECIFIED	to-15 ppbv	
ASG704	08B10372	AIR	NOT SPECIFIED	to-15 ug/m3	



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 4/9/2008

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301  
WAKEFIELD, MA 01880  
ATTN: DAVE HEISLEIN

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER: 3650050041.18

#### ANALYTICAL SUMMARY

LIMS BAT #: LIMT-14601  
JOB NUMBER: 3650050041.18

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.  
Results are based on samples as submitted to the laboratory and relate only to the items collected and tested.

Comments :

LIMS BATCH NO. : LIMT-14601

REVISED REPORT - 4/8/08 - Dilution information addeed to narrative.

In method TO-15, any reported result for hexachlorobutadiene is estimated.  
Initial calibration did not meet method-specified criteria.

In method TO-15, any reported result for acetone, ethanol, or isopropanol is estimated and  
likely to be biased on the low side based on continuing calibration bias.

In method TO-15, any reported result for vinyl chloride or chloromethane is likely to be  
biased on the high side based on laboratory fortified blank recovery bias.

In method TO-15, method blank contained acetone at 0.41 ppbv = 0.99 ug/m<sup>3</sup>,  
mek at 0.09 ppbv = 0.29 ug/m<sup>3</sup>, and vinyl acetate at 0.08 ppbv = 0.28 ug/m<sup>3</sup>.

Method blank-115483 is associated with samples 08B10366-08B10372.

LFBLANK-77015 is associated with samples 08B10366-08B10372.

All TO-15 samples were analyzed undiluted unless specified below:

Sample	Dilution	Compound(s)
08B10366	20x	most
	200x	vinyl chloride and hexane
08B10367	2x	most
	20x	tetrachloroethylene
08B10368	2x	most
	20x	tetrachloroethylene
08B10369	2x	all
08B10370	20x	most
	800x	hexane, benzene, cyclohexane, and heptane
08B10371	2x	all
08B10372	2x	all
blank-115483	0.5x = 800 ml sample	all

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA  
accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033	AIHA ELLAP (LEAD) 100033	NORTH CAROLINA CERT. # 652
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	FLORIDA DOH E871027 (AIR)
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction  
according to the approved methodologies listed in this document, and 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.

4/9/08

Tod Kopyscinski  
Director of Operations

Sondra L. Slesinski  
Quality Assurance Officer



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 4/9/2008

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301  
WAKEFIELD, MA 01880  
ATTN: DAVE HEISLEIN

CONTRACT NUMBER:  
PURCHASE ORDER NUMBER:

PROJECT NUMBER: 3650050041.18

---

**ANALYTICAL SUMMARY**

---

LIMS BAT #: LIMT-14601  
JOB NUMBER: 3650050041.18

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.  
Results are based on samples as submitted to the laboratory and relate only to the items collected and tested.

SIGNATURE DATE

Edward Denson  
Technical Director

\* See end of data tabulation for notes and comments pertaining to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 1 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG104

**Sample ID :** 08B10366

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	ND	03/28/08	XC	4.0		
Benzene	PPBv	22	03/28/08	XC	1.0		
Benzyl Chloride	PPBv	ND	03/28/08	XC	1.0		
Bromodichloromethane	PPBv	ND	03/28/08	XC	1.0		
Bromoform	PPBv	ND	03/28/08	XC	1.0		
Bromomethane	PPBv	ND	03/28/08	XC	1.0		
1,3-Butadiene	PPBv	ND	03/28/08	XC	1.0		
2-Butanone (MEK)	PPBv	ND	03/28/08	XC	2.0		
Carbon Disulfide	PPBv	ND	03/28/08	XC	1.0		
Carbon Tetrachloride	PPBv	ND	03/28/08	XC	1.0		
Chlorobenzene	PPBv	ND	03/28/08	XC	1.0		
Chlorodibromomethane	PPBv	ND	03/28/08	XC	1.0		
Chloroethane	PPBv	2.5	03/28/08	XC	1.0		
Chloroform	PPBv	ND	03/28/08	XC	1.0		
Chloromethane	PPBv	ND	03/28/08	XC	2.0		
Cyclohexane	PPBv	730	03/28/08	XC	1.0		
1,2-Dibromoethane	PPBv	ND	03/28/08	XC	1.0		
1,2-Dichlorobenzene	PPBv	ND	03/28/08	XC	1.0		
1,3-Dichlorobenzene	PPBv	ND	03/28/08	XC	1.0		
1,4-Dichlorobenzene	PPBv	ND	03/28/08	XC	1.0		
Dichlorodifluoromethane	PPBv	ND	03/28/08	XC	1.0		
1,1-Dichloroethane	PPBv	1.4	03/28/08	XC	1.0		
1,2-Dichloroethane	PPBv	ND	03/28/08	XC	1.0		
1,1-Dichloroethylene	PPBv	25	03/28/08	XC	1.0		
cis-1,2-Dichloroethylene	PPBv	44	03/28/08	XC	1.0		
t-1,2-Dichloroethylene	PPBv	2.2	03/28/08	XC	1.0		
1,2-Dichloropropane	PPBv	ND	03/28/08	XC	1.0		
cis-1,3-Dichloropropene	PPBv	ND	03/28/08	XC	1.0		
trans-1,3-Dichloropropene	PPBv	ND	03/28/08	XC	1.0		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/28/08	XC	1.0		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 2 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG104

**Sample ID :** 08B10366

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	38	03/28/08	XC	1.0		
Ethyl Acetate	PPBv	ND	03/28/08	XC	1.0		
Ethylbenzene	PPBv	ND	03/28/08	XC	1.0		
4-Ethyl Toluene	PPBv	ND	03/28/08	XC	1.0		
n-Heptane	PPBv	350	03/28/08	XC	1.0		
Hexachlorobutadiene	PPBv	ND	03/28/08	XC	20		
Hexane	PPBv	1700	03/28/08	XC	1.0		
2-Hexanone	PPBv	ND	03/28/08	XC	1.0		
Isopropanol	PPBv	ND	03/28/08	XC	1.0		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/28/08	XC	1.0		
Methylene Chloride	PPBv	ND	03/28/08	XC	2.0		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	03/28/08	XC	1.0		
Propene	PPBv	ND	03/28/08	XC	1.0		
Styrene	PPBv	ND	03/28/08	XC	1.0		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/28/08	XC	1.0		
Tetrachloroethylene	PPBv	8.6	03/28/08	XC	1.0		
Tetrahydrofuran	PPBv	ND	03/28/08	XC	1.0		
Toluene	PPBv	ND	03/28/08	XC	1.0		
1,2,4-Trichlorobenzene	PPBv	ND	03/28/08	XC	20		
1,1,1-Trichloroethane	PPBv	ND	03/28/08	XC	1.0		
1,1,2-Trichloroethane	PPBv	ND	03/28/08	XC	1.0		
Trichloroethylene	PPBv	6.8	03/28/08	XC	1.0		
Trichlorofluoromethane (Freon 11)	PPBv	ND	03/28/08	XC	1.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/28/08	XC	1.0		
1,2,4-Trimethylbenzene	PPBv	ND	03/28/08	XC	1.0		
1,3,5-Trimethylbenzene	PPBv	ND	03/28/08	XC	1.0		
Vinyl Acetate	PPBv	ND	03/28/08	XC	1.0		
Vinyl Chloride	PPBv	1500	03/28/08	XC	1.0		
m/p-Xylene	PPBv	ND	03/28/08	XC	2.0		
o-Xylene	PPBv	ND	03/28/08	XC	1.0		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 3 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # :** ASG104

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 4 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG204

**Sample ID :** 08B10367

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	6.7	03/29/08	XC	0.10		
Benzene	PPBv	0.25	03/29/08	XC	0.10		
Benzyl Chloride	PPBv	ND	03/29/08	XC	0.10		
Bromodichloromethane	PPBv	ND	03/29/08	XC	0.10		
Bromoform	PPBv	ND	03/29/08	XC	0.10		
Bromomethane	PPBv	ND	03/29/08	XC	0.10		
1,3-Butadiene	PPBv	1.3	03/29/08	XC	0.10		
2-Butanone (MEK)	PPBv	1.2	03/29/08	XC	0.10		
Carbon Disulfide	PPBv	0.34	03/29/08	XC	0.10		
Carbon Tetrachloride	PPBv	ND	03/29/08	XC	0.10		
Chlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Chlorodibromomethane	PPBv	ND	03/29/08	XC	0.10		
Chloroethane	PPBv	ND	03/29/08	XC	0.20		
Chloroform	PPBv	ND	03/29/08	XC	0.10		
Chloromethane	PPBv	ND	03/29/08	XC	0.20		
Cyclohexane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dibromoethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,3-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,4-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Dichlorodifluoromethane	PPBv	0.38	03/29/08	XC	0.10		
1,1-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,1-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
t-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloropropane	PPBv	ND	03/29/08	XC	0.10		
cis-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
trans-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 5 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG204

**Sample ID :** 08B10367

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	3.9	03/29/08	XC	0.10		
Ethyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Ethylbenzene	PPBv	0.12	03/29/08	XC	0.10		
4-Ethyl Toluene	PPBv	ND	03/29/08	XC	0.10		
n-Heptane	PPBv	ND	03/29/08	XC	0.10		
Hexachlorobutadiene	PPBv	ND	03/29/08	XC	2.0		
Hexane	PPBv	0.33	03/29/08	XC	0.10		
2-Hexanone	PPBv	ND	03/29/08	XC	0.10		
Isopropanol	PPBv	0.64	03/29/08	XC	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/29/08	XC	0.10		
Methylene Chloride	PPBv	1.5	03/29/08	XC	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	03/29/08	XC	0.10		
Propene	PPBv	9.5	03/29/08	XC	0.10		
Styrene	PPBv	ND	03/29/08	XC	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/29/08	XC	0.10		
Tetrachloroethylene	PPBv	240	03/29/08	XC	0.10		
Tetrahydrofuran	PPBv	ND	03/29/08	XC	0.10		
Toluene	PPBv	0.36	03/29/08	XC	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	03/29/08	XC	2.0		
1,1,1-Trichloroethane	PPBv	0.27	03/29/08	XC	0.10		
1,1,2-Trichloroethane	PPBv	ND	03/29/08	XC	0.10		
Trichloroethylene	PPBv	0.41	03/29/08	XC	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	2.6	03/29/08	XC	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/29/08	XC	0.10		
1,2,4-Trimethylbenzene	PPBv	ND	03/29/08	XC	0.10		
1,3,5-Trimethylbenzene	PPBv	ND	03/29/08	XC	0.10		
Vinyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Vinyl Chloride	PPBv	ND	03/29/08	XC	0.10		
m/p-Xylene	PPBv	0.29	03/29/08	XC	0.20		
o-Xylene	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 6 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # :** ASG204

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 7 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG304

**Sample ID :** 08B10368

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	4.8	03/29/08	XC	0.10		
Benzene	PPBv	0.15	03/29/08	XC	0.10		
Benzyl Chloride	PPBv	ND	03/29/08	XC	0.10		
Bromodichloromethane	PPBv	ND	03/29/08	XC	0.10		
Bromoform	PPBv	ND	03/29/08	XC	0.10		
Bromomethane	PPBv	ND	03/29/08	XC	0.10		
1,3-Butadiene	PPBv	0.54	03/29/08	XC	0.10		
2-Butanone (MEK)	PPBv	1.2	03/29/08	XC	0.10		
Carbon Disulfide	PPBv	0.14	03/29/08	XC	0.10		
Carbon Tetrachloride	PPBv	ND	03/29/08	XC	0.10		
Chlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Chlorodibromomethane	PPBv	ND	03/29/08	XC	0.10		
Chloroethane	PPBv	ND	03/29/08	XC	0.20		
Chloroform	PPBv	ND	03/29/08	XC	0.10		
Chloromethane	PPBv	ND	03/29/08	XC	0.20		
Cyclohexane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dibromoethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,3-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,4-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Dichlorodifluoromethane	PPBv	0.40	03/29/08	XC	0.10		
1,1-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,1-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
t-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloropropane	PPBv	ND	03/29/08	XC	0.10		
cis-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
trans-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 8 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG304

**Sample ID :** 08B10368

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	2.0	03/29/08	XC	0.10		
Ethyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Ethylbenzene	PPBv	ND	03/29/08	XC	0.10		
4-Ethyl Toluene	PPBv	ND	03/29/08	XC	0.10		
n-Heptane	PPBv	ND	03/29/08	XC	0.10		
Hexachlorobutadiene	PPBv	ND	03/29/08	XC	2.0		
Hexane	PPBv	ND	03/29/08	XC	0.10		
2-Hexanone	PPBv	ND	03/29/08	XC	0.10		
Isopropanol	PPBv	0.34	03/29/08	XC	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/29/08	XC	0.10		
Methylene Chloride	PPBv	0.20	03/29/08	XC	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	03/29/08	XC	0.10		
Propene	PPBv	4.9	03/29/08	XC	0.10		
Styrene	PPBv	ND	03/29/08	XC	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/29/08	XC	0.10		
Tetrachloroethylene	PPBv	250	03/29/08	XC	0.10		
Tetrahydrofuran	PPBv	ND	03/29/08	XC	0.10		
Toluene	PPBv	0.22	03/29/08	XC	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	03/29/08	XC	2.0		
1,1,1-Trichloroethane	PPBv	0.28	03/29/08	XC	0.10		
1,1,2-Trichloroethane	PPBv	ND	03/29/08	XC	0.10		
Trichloroethylene	PPBv	ND	03/29/08	XC	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	3.0	03/29/08	XC	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/29/08	XC	0.10		
1,2,4-Trimethylbenzene	PPBv	ND	03/29/08	XC	0.10		
1,3,5-Trimethylbenzene	PPBv	ND	03/29/08	XC	0.10		
Vinyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Vinyl Chloride	PPBv	ND	03/29/08	XC	0.10		
m/p-Xylene	PPBv	0.21	03/29/08	XC	0.20		
o-Xylene	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 9 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # :** ASG304

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 10 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG404

**Sample ID :** 08B10369

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	20	03/29/08	XC	0.10		
Benzene	PPBv	2.5	03/29/08	XC	0.10		
Benzyl Chloride	PPBv	ND	03/29/08	XC	0.10		
Bromodichloromethane	PPBv	0.58	03/29/08	XC	0.10		
Bromoform	PPBv	ND	03/29/08	XC	0.10		
Bromomethane	PPBv	ND	03/29/08	XC	0.10		
1,3-Butadiene	PPBv	6.5	03/29/08	XC	0.10		
2-Butanone (MEK)	PPBv	7.0	03/29/08	XC	0.10		
Carbon Disulfide	PPBv	0.70	03/29/08	XC	0.10		
Carbon Tetrachloride	PPBv	ND	03/29/08	XC	0.10		
Chlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Chlorodibromomethane	PPBv	ND	03/29/08	XC	0.10		
Chloroethane	PPBv	ND	03/29/08	XC	0.20		
Chloroform	PPBv	6.1	03/29/08	XC	0.10		
Chloromethane	PPBv	0.26	03/29/08	XC	0.10		
Cyclohexane	PPBv	0.23	03/29/08	XC	0.10		
1,2-Dibromoethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,3-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,4-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Dichlorodifluoromethane	PPBv	0.36	03/29/08	XC	0.10		
1,1-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,1-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
t-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloropropane	PPBv	ND	03/29/08	XC	0.10		
cis-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
trans-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 11 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG404

**Sample ID :** 08B10369

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	2.1	03/29/08	XC	0.10		
Ethyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Ethylbenzene	PPBv	0.25	03/29/08	XC	0.10		
4-Ethyl Toluene	PPBv	ND	03/29/08	XC	0.10		
n-Heptane	PPBv	0.80	03/29/08	XC	0.10		
Hexachlorobutadiene	PPBv	ND	03/29/08	XC	2.0		
Hexane	PPBv	1.9	03/29/08	XC	0.10		
2-Hexanone	PPBv	0.23	03/29/08	XC	0.10		
Isopropanol	PPBv	0.42	03/29/08	XC	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/29/08	XC	0.10		
Methylene Chloride	PPBv	0.31	03/29/08	XC	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	0.37	03/29/08	XC	0.10		
Propene	PPBv	55	03/29/08	XC	0.10		
Styrene	PPBv	0.18	03/29/08	XC	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/29/08	XC	0.10		
Tetrachloroethylene	PPBv	32	03/29/08	XC	0.10		
Tetrahydrofuran	PPBv	ND	03/29/08	XC	0.10		
Toluene	PPBv	1.6	03/29/08	XC	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	03/29/08	XC	2.0		
1,1,1-Trichloroethane	PPBv	0.51	03/29/08	XC	0.10		
1,1,2-Trichloroethane	PPBv	ND	03/29/08	XC	0.10		
Trichloroethylene	PPBv	0.48	03/29/08	XC	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	5.8	03/29/08	XC	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/29/08	XC	0.10		
1,2,4-Trimethylbenzene	PPBv	0.19	03/29/08	XC	0.10		
1,3,5-Trimethylbenzene	PPBv	ND	03/29/08	XC	0.10		
Vinyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Vinyl Chloride	PPBv	ND	03/29/08	XC	0.10		
m/p-Xylene	PPBv	0.62	03/29/08	XC	0.20		
o-Xylene	PPBv	0.24	03/29/08	XC	0.10		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 12 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # : ASG404**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 13 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG504

**Sample ID :** 08B10370

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	ND	03/28/08	XC	4.0		
Benzene	PPBv	12000	03/28/08	XC	1.0		
Benzyl Chloride	PPBv	ND	03/28/08	XC	1.0		
Bromodichloromethane	PPBv	ND	03/28/08	XC	1.0		
Bromoform	PPBv	ND	03/28/08	XC	1.0		
Bromomethane	PPBv	ND	03/28/08	XC	1.0		
1,3-Butadiene	PPBv	ND	03/28/08	XC	1.0		
2-Butanone (MEK)	PPBv	ND	03/28/08	XC	2.0		
Carbon Disulfide	PPBv	ND	03/28/08	XC	1.0		
Carbon Tetrachloride	PPBv	ND	03/28/08	XC	1.0		
Chlorobenzene	PPBv	ND	03/28/08	XC	1.0		
Chlorodibromomethane	PPBv	ND	03/28/08	XC	1.0		
Chloroethane	PPBv	ND	03/28/08	XC	2.0		
Chloroform	PPBv	ND	03/28/08	XC	1.0		
Chloromethane	PPBv	ND	03/28/08	XC	2.0		
Cyclohexane	PPBv	7800	03/28/08	XC	1.0		
1,2-Dibromoethane	PPBv	ND	03/28/08	XC	1.0		
1,2-Dichlorobenzene	PPBv	ND	03/28/08	XC	1.0		
1,3-Dichlorobenzene	PPBv	ND	03/28/08	XC	1.0		
1,4-Dichlorobenzene	PPBv	ND	03/28/08	XC	1.0		
Dichlorodifluoromethane	PPBv	ND	03/28/08	XC	1.0		
1,1-Dichloroethane	PPBv	ND	03/28/08	XC	1.0		
1,2-Dichloroethane	PPBv	ND	03/28/08	XC	1.0		
1,1-Dichloroethylene	PPBv	ND	03/28/08	XC	1.0		
cis-1,2-Dichloroethylene	PPBv	ND	03/28/08	XC	1.0		
t-1,2-Dichloroethylene	PPBv	ND	03/28/08	XC	1.0		
1,2-Dichloropropane	PPBv	ND	03/28/08	XC	1.0		
cis-1,3-Dichloropropene	PPBv	ND	03/28/08	XC	1.0		
trans-1,3-Dichloropropene	PPBv	ND	03/28/08	XC	1.0		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/28/08	XC	1.0		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 14 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG504

**Sample ID :** 08B10370

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	ND	03/28/08	XC	10		
Ethyl Acetate	PPBv	ND	03/28/08	XC	1.0		
Ethylbenzene	PPBv	61	03/28/08	XC	1.0		
4-Ethyl Toluene	PPBv	1.4	03/28/08	XC	1.0		
n-Heptane	PPBv	8300	03/28/08	XC	1.0		
Hexachlorobutadiene	PPBv	ND	03/28/08	XC	20		
Hexane	PPBv	18000	03/28/08	XC	1.0		
2-Hexanone	PPBv	ND	03/28/08	XC	1.0		
Isopropanol	PPBv	ND	03/28/08	XC	1.0		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/28/08	XC	1.0		
Methylene Chloride	PPBv	ND	03/28/08	XC	2.0		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	03/28/08	XC	1.0		
Propene	PPBv	ND	03/28/08	XC	1.0		
Styrene	PPBv	ND	03/28/08	XC	1.0		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/28/08	XC	1.0		
Tetrachloroethylene	PPBv	ND	03/28/08	XC	1.0		
Tetrahydrofuran	PPBv	ND	03/28/08	XC	1.0		
Toluene	PPBv	74	03/28/08	XC	1.0		
1,2,4-Trichlorobenzene	PPBv	ND	03/28/08	XC	20		
1,1,1-Trichloroethane	PPBv	ND	03/28/08	XC	1.0		
1,1,2-Trichloroethane	PPBv	ND	03/28/08	XC	1.0		
Trichloroethylene	PPBv	ND	03/28/08	XC	1.0		
Trichlorofluoromethane (Freon 11)	PPBv	ND	03/28/08	XC	1.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/28/08	XC	1.0		
1,2,4-Trimethylbenzene	PPBv	1.5	03/28/08	XC	1.0		
1,3,5-Trimethylbenzene	PPBv	2.9	03/28/08	XC	1.0		
Vinyl Acetate	PPBv	ND	03/28/08	XC	1.0		
Vinyl Chloride	PPBv	ND	03/28/08	XC	1.0		
m/p-Xylene	PPBv	270	03/28/08	XC	2.0		
o-Xylene	PPBv	39	03/28/08	XC	1.0		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 15 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # : ASG504**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 16 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG604

**Sample ID :** 08B10371

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	19	03/29/08	XC	0.10		
Benzene	PPBv	25	03/29/08	XC	0.10		
Benzyl Chloride	PPBv	ND	03/29/08	XC	0.10		
Bromodichloromethane	PPBv	ND	03/29/08	XC	0.10		
Bromoform	PPBv	ND	03/29/08	XC	0.10		
Bromomethane	PPBv	ND	03/29/08	XC	0.10		
1,3-Butadiene	PPBv	2.6	03/29/08	XC	0.10		
2-Butanone (MEK)	PPBv	3.1	03/29/08	XC	0.10		
Carbon Disulfide	PPBv	0.38	03/29/08	XC	0.10		
Carbon Tetrachloride	PPBv	ND	03/29/08	XC	0.10		
Chlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Chlorodibromomethane	PPBv	ND	03/29/08	XC	0.10		
Chloroethane	PPBv	ND	03/29/08	XC	0.20		
Chloroform	PPBv	ND	03/29/08	XC	0.10		
Chloromethane	PPBv	ND	03/29/08	XC	0.20		
Cyclohexane	PPBv	7.8	03/29/08	XC	0.10		
1,2-Dibromoethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,3-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,4-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Dichlorodifluoromethane	PPBv	0.38	03/29/08	XC	0.10		
1,1-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,1-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
t-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloropropane	PPBv	ND	03/29/08	XC	0.10		
cis-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
trans-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 17 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG604

**Sample ID :** 08B10371

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	3.1	03/29/08	XC	0.10		
Ethyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Ethylbenzene	PPBv	0.61	03/29/08	XC	0.10		
4-Ethyl Toluene	PPBv	0.12	03/29/08	XC	0.10		
n-Heptane	PPBv	7.0	03/29/08	XC	0.10		
Hexachlorobutadiene	PPBv	ND	03/29/08	XC	2.0		
Hexane	PPBv	7.5	03/29/08	XC	0.10		
2-Hexanone	PPBv	ND	03/29/08	XC	0.10		
Isopropanol	PPBv	0.50	03/29/08	XC	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/29/08	XC	0.10		
Methylene Chloride	PPBv	0.31	03/29/08	XC	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	03/29/08	XC	0.10		
Propene	PPBv	30	03/29/08	XC	0.10		
Styrene	PPBv	0.38	03/29/08	XC	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/29/08	XC	0.10		
Tetrachloroethylene	PPBv	ND	03/29/08	XC	0.10		
Tetrahydrofuran	PPBv	ND	03/29/08	XC	0.10		
Toluene	PPBv	1.3	03/29/08	XC	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	03/29/08	XC	2.0		
1,1,1-Trichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,1,2-Trichloroethane	PPBv	ND	03/29/08	XC	0.10		
Trichloroethylene	PPBv	ND	03/29/08	XC	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	0.22	03/29/08	XC	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/29/08	XC	0.10		
1,2,4-Trimethylbenzene	PPBv	0.34	03/29/08	XC	0.10		
1,3,5-Trimethylbenzene	PPBv	0.12	03/29/08	XC	0.10		
Vinyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Vinyl Chloride	PPBv	ND	03/29/08	XC	0.10		
m/p-Xylene	PPBv	2.6	03/29/08	XC	0.20		
o-Xylene	PPBv	0.62	03/29/08	XC	0.10		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 18 of 43

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # : ASG604**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 19 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG704

**Sample ID :** 08B10372

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	PPBv	15	03/29/08	XC	0.10		
Benzene	PPBv	5.2	03/29/08	XC	0.10		
Benzyl Chloride	PPBv	ND	03/29/08	XC	0.10		
Bromodichloromethane	PPBv	ND	03/29/08	XC	0.10		
Bromoform	PPBv	ND	03/29/08	XC	0.10		
Bromomethane	PPBv	ND	03/29/08	XC	0.10		
1,3-Butadiene	PPBv	2.3	03/29/08	XC	0.10		
2-Butanone (MEK)	PPBv	2.6	03/29/08	XC	0.10		
Carbon Disulfide	PPBv	0.62	03/29/08	XC	0.10		
Carbon Tetrachloride	PPBv	ND	03/29/08	XC	0.10		
Chlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Chlorodibromomethane	PPBv	ND	03/29/08	XC	0.10		
Chloroethane	PPBv	ND	03/29/08	XC	0.20		
Chloroform	PPBv	ND	03/29/08	XC	0.10		
Chloromethane	PPBv	ND	03/29/08	XC	0.20		
Cyclohexane	PPBv	2.0	03/29/08	XC	0.10		
1,2-Dibromoethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,3-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
1,4-Dichlorobenzene	PPBv	ND	03/29/08	XC	0.10		
Dichlorodifluoromethane	PPBv	0.36	03/29/08	XC	0.10		
1,1-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloroethane	PPBv	ND	03/29/08	XC	0.10		
1,1-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
cis-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
t-1,2-Dichloroethylene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichloropropane	PPBv	ND	03/29/08	XC	0.10		
cis-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
trans-1,3-Dichloropropene	PPBv	ND	03/29/08	XC	0.10		
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	03/29/08	XC	0.10		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 20 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG704

**Sample ID :** 08B10372

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	PPBv	3.1	03/29/08	XC	0.10		
Ethyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Ethylbenzene	PPBv	0.26	03/29/08	XC	0.10		
4-Ethyl Toluene	PPBv	ND	03/29/08	XC	0.10		
n-Heptane	PPBv	2.0	03/29/08	XC	0.10		
Hexachlorobutadiene	PPBv	ND	03/29/08	XC	2.0		
Hexane	PPBv	2.8	03/29/08	XC	0.10		
2-Hexanone	PPBv	ND	03/29/08	XC	0.10		
Isopropanol	PPBv	0.58	03/29/08	XC	0.10		
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	03/29/08	XC	0.10		
Methylene Chloride	PPBv	0.67	03/29/08	XC	0.10		
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	03/29/08	XC	0.10		
Propene	PPBv	24	03/29/08	XC	0.10		
Styrene	PPBv	0.31	03/29/08	XC	0.10		
1,1,2,2-Tetrachloroethane	PPBv	ND	03/29/08	XC	0.10		
Tetrachloroethylene	PPBv	0.21	03/29/08	XC	0.10		
Tetrahydrofuran	PPBv	ND	03/29/08	XC	0.10		
Toluene	PPBv	0.96	03/29/08	XC	0.10		
1,2,4-Trichlorobenzene	PPBv	ND	03/29/08	XC	2.0		
1,1,1-Trichloroethane	PPBv	0.22	03/29/08	XC	0.10		
1,1,2-Trichloroethane	PPBv	ND	03/29/08	XC	0.10		
Trichloroethylene	PPBv	ND	03/29/08	XC	0.10		
Trichlorofluoromethane (Freon 11)	PPBv	3.6	03/29/08	XC	0.10		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	03/29/08	XC	0.10		
1,2,4-Trimethylbenzene	PPBv	0.26	03/29/08	XC	0.10		
1,3,5-Trimethylbenzene	PPBv	ND	03/29/08	XC	0.10		
Vinyl Acetate	PPBv	ND	03/29/08	XC	0.10		
Vinyl Chloride	PPBv	ND	03/29/08	XC	0.10		
m/p-Xylene	PPBv	0.89	03/29/08	XC	0.20		
o-Xylene	PPBv	0.30	03/29/08	XC	0.10		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 21 of 43

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # : ASG704**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 22 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG104

**Sample ID :** 08B10366

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	ug/m3	ND	03/28/08	XC	9.6		
Benzene	ug/m3	70	03/28/08	XC	3.2		
Benzyl Chloride	ug/m3	ND	03/28/08	XC	5.2		
Bromodichloromethane	ug/m3	ND	03/28/08	XC	6.6		
Bromoform	ug/m3	ND	03/28/08	XC	11		
Bromomethane	ug/m3	ND	03/28/08	XC	3.8		
1,3-Butadiene	ug/m3	ND	03/28/08	XC	2.2		
2-Butanone (MEK)	ug/m3	ND	03/28/08	XC	5.9		
Carbon Disulfide	ug/m3	ND	03/28/08	XC	3.2		
Carbon Tetrachloride	ug/m3	ND	03/28/08	XC	6.2		
Chlorobenzene	ug/m3	ND	03/28/08	XC	4.6		
Chlorodibromomethane	ug/m3	ND	03/28/08	XC	8.6		
Chloroethane	ug/m3	6.7	03/28/08	XC	2.6		
Chloroform	ug/m3	ND	03/28/08	XC	4.8		
Chloromethane	ug/m3	ND	03/28/08	XC	4.2		
Cyclohexane	ug/m3	2500	03/28/08	XC	3.4		
1,2-Dibromoethane	ug/m3	ND	03/28/08	XC	7.6		
1,2-Dichlorobenzene	ug/m3	ND	03/28/08	XC	6.0		
1,3-Dichlorobenzene	ug/m3	ND	03/28/08	XC	6.0		
1,4-Dichlorobenzene	ug/m3	ND	03/28/08	XC	6.0		
Dichlorodifluoromethane	ug/m3	ND	03/28/08	XC	5.0		
1,1-Dichloroethane	ug/m3	5.7	03/28/08	XC	4.0		
1,2-Dichloroethane	ug/m3	ND	03/28/08	XC	4.0		
1,1-Dichloroethylene	ug/m3	98	03/28/08	XC	4.0		
cis-1,2-Dichloroethylene	ug/m3	170	03/28/08	XC	4.0		
t-1,2-Dichloroethylene	ug/m3	8.9	03/28/08	XC	4.0		
1,2-Dichloropropane	ug/m3	ND	03/28/08	XC	4.6		
cis-1,3-Dichloropropene	ug/m3	ND	03/28/08	XC	4.4		
trans-1,3-Dichloropropene	ug/m3	ND	03/28/08	XC	4.4		
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/28/08	XC	7.0		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 23 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG104

**Sample ID :** 08B10366

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Ethanol	ug/m3	72	03/28/08	XC	1.8			
Ethyl Acetate	ug/m3	ND	03/28/08	XC	3.6			
Ethylbenzene	ug/m3	ND	03/28/08	XC	4.4			
4-Ethyl Toluene	ug/m3	ND	03/28/08	XC	5.0			
n-Heptane	ug/m3	1400	03/28/08	XC	4.0			
Hexachlorobutadiene	ug/m3	ND	03/28/08	XC	220			
Hexane	ug/m3	5900	03/28/08	XC	3.6			
2-Hexanone	ug/m3	ND	03/28/08	XC	4.0			
Isopropanol	ug/m3	ND	03/28/08	XC	2.4			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/28/08	XC	3.6			
Methylene Chloride	ug/m3	ND	03/28/08	XC	7.0			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	03/28/08	XC	4.0			
Propene	ug/m3	ND	03/28/08	XC	1.8			
Styrene	ug/m3	ND	03/28/08	XC	4.2			
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/28/08	XC	6.8			
Tetrachloroethylene	ug/m3	58	03/28/08	XC	6.8			
Tetrahydrofuran	ug/m3	ND	03/28/08	XC	3.0			
Toluene	ug/m3	ND	03/28/08	XC	3.8			
1,2,4-Trichlorobenzene	ug/m3	ND	03/28/08	XC	150			
1,1,1-Trichloroethane	ug/m3	ND	03/28/08	XC	5.4			
1,1,2-Trichloroethane	ug/m3	ND	03/28/08	XC	5.4			
Trichloroethylene	ug/m3	37	03/28/08	XC	5.4			
Trichlorofluoromethane	ug/m3	ND	03/28/08	XC	5.6			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/28/08	XC	7.6			
1,2,4-Trimethylbenzene	ug/m3	ND	03/28/08	XC	5.0			
1,3,5-Trimethylbenzene	ug/m3	ND	03/28/08	XC	5.0			
Vinyl Acetate	ug/m3	ND	03/28/08	XC	3.6			
Vinyl Chloride	ug/m3	3800	03/28/08	XC	2.6			
m/p-Xylene	ug/m3	ND	03/28/08	XC	8.6			
o-Xylene	ug/m3	ND	03/28/08	XC	4.4			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 24 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # :** ASG104

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 25 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG204

**Sample ID :** 08B10367

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	ug/m3	16	03/29/08	XC	0.24		
Benzene	ug/m3	0.78	03/29/08	XC	0.32		
Benzyl Chloride	ug/m3	ND	03/29/08	XC	0.52		
Bromodichloromethane	ug/m3	ND	03/29/08	XC	0.66		
Bromoform	ug/m3	ND	03/29/08	XC	1.1		
Bromomethane	ug/m3	ND	03/29/08	XC	0.38		
1,3-Butadiene	ug/m3	2.9	03/29/08	XC	0.22		
2-Butanone (MEK)	ug/m3	3.5	03/29/08	XC	0.46		
Carbon Disulfide	ug/m3	1.1	03/29/08	XC	0.32		
Carbon Tetrachloride	ug/m3	ND	03/29/08	XC	0.62		
Chlorobenzene	ug/m3	ND	03/29/08	XC	0.46		
Chlorodibromomethane	ug/m3	ND	03/29/08	XC	0.86		
Chloroethane	ug/m3	ND	03/29/08	XC	0.53		
Chloroform	ug/m3	ND	03/29/08	XC	0.48		
Chloromethane	ug/m3	ND	03/29/08	XC	0.42		
Cyclohexane	ug/m3	ND	03/29/08	XC	0.34		
1,2-Dibromoethane	ug/m3	ND	03/29/08	XC	0.76		
1,2-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,3-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,4-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
Dichlorodifluoromethane	ug/m3	1.9	03/29/08	XC	0.50		
1,1-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,1-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
cis-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
t-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloropropane	ug/m3	ND	03/29/08	XC	0.46		
cis-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
trans-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/29/08	XC	0.70		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 26 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG204

**Sample ID :** 08B10367

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Ethanol	ug/m3	7.3	03/29/08	XC	0.18			
Ethyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Ethylbenzene	ug/m3	0.50	03/29/08	XC	0.44			
4-Ethyl Toluene	ug/m3	ND	03/29/08	XC	0.50			
n-Heptane	ug/m3	ND	03/29/08	XC	0.40			
Hexachlorobutadiene	ug/m3	ND	03/29/08	XC	22			
Hexane	ug/m3	1.2	03/29/08	XC	0.36			
2-Hexanone	ug/m3	ND	03/29/08	XC	0.40			
Isopropanol	ug/m3	1.6	03/29/08	XC	0.24			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/29/08	XC	0.36			
Methylene Chloride	ug/m3	5.2	03/29/08	XC	0.34			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	03/29/08	XC	0.40			
Propene	ug/m3	16	03/29/08	XC	0.18			
Styrene	ug/m3	ND	03/29/08	XC	0.42			
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/29/08	XC	0.68			
Tetrachloroethylene	ug/m3	1700	03/29/08	XC	0.68			
Tetrahydrofuran	ug/m3	ND	03/29/08	XC	0.30			
Toluene	ug/m3	1.3	03/29/08	XC	0.38			
1,2,4-Trichlorobenzene	ug/m3	ND	03/29/08	XC	15			
1,1,1-Trichloroethane	ug/m3	1.5	03/29/08	XC	0.54			
1,1,2-Trichloroethane	ug/m3	ND	03/29/08	XC	0.54			
Trichloroethylene	ug/m3	2.2	03/29/08	XC	0.54			
Trichlorofluoromethane	ug/m3	15	03/29/08	XC	0.56			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/29/08	XC	0.76			
1,2,4-Trimethylbenzene	ug/m3	ND	03/29/08	XC	0.50			
1,3,5-Trimethylbenzene	ug/m3	ND	03/29/08	XC	0.50			
Vinyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Vinyl Chloride	ug/m3	ND	03/29/08	XC	0.26			
m/p-Xylene	ug/m3	1.2	03/29/08	XC	0.86			
o-Xylene	ug/m3	ND	03/29/08	XC	0.44			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

Purchase Order No.:

4/9/2008

Page 27 of 43

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # :** ASG204

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 28 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG304

**Sample ID :** 08B10368

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	ug/m3	11	03/29/08	XC	0.24		
Benzene	ug/m3	0.48	03/29/08	XC	0.32		
Benzyl Chloride	ug/m3	ND	03/29/08	XC	0.52		
Bromodichloromethane	ug/m3	ND	03/29/08	XC	0.66		
Bromoform	ug/m3	ND	03/29/08	XC	1.1		
Bromomethane	ug/m3	ND	03/29/08	XC	0.38		
1,3-Butadiene	ug/m3	1.2	03/29/08	XC	0.22		
2-Butanone (MEK)	ug/m3	3.7	03/29/08	XC	0.46		
Carbon Disulfide	ug/m3	0.42	03/29/08	XC	0.32		
Carbon Tetrachloride	ug/m3	ND	03/29/08	XC	0.62		
Chlorobenzene	ug/m3	ND	03/29/08	XC	0.46		
Chlorodibromomethane	ug/m3	ND	03/29/08	XC	0.86		
Chloroethane	ug/m3	ND	03/29/08	XC	0.53		
Chloroform	ug/m3	ND	03/29/08	XC	0.48		
Chloromethane	ug/m3	ND	03/29/08	XC	0.42		
Cyclohexane	ug/m3	ND	03/29/08	XC	0.34		
1,2-Dibromoethane	ug/m3	ND	03/29/08	XC	0.76		
1,2-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,3-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,4-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
Dichlorodifluoromethane	ug/m3	2.0	03/29/08	XC	0.50		
1,1-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,1-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
cis-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
t-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloropropane	ug/m3	ND	03/29/08	XC	0.46		
cis-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
trans-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/29/08	XC	0.70		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 29 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG304

**Sample ID :** 08B10368

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Ethanol	ug/m3	3.7	03/29/08	XC	0.18			
Ethyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Ethylbenzene	ug/m3	ND	03/29/08	XC	0.44			
4-Ethyl Toluene	ug/m3	ND	03/29/08	XC	0.50			
n-Heptane	ug/m3	ND	03/29/08	XC	0.40			
Hexachlorobutadiene	ug/m3	ND	03/29/08	XC	22			
Hexane	ug/m3	ND	03/29/08	XC	0.36			
2-Hexanone	ug/m3	ND	03/29/08	XC	0.40			
Isopropanol	ug/m3	0.84	03/29/08	XC	0.24			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/29/08	XC	0.36			
Methylene Chloride	ug/m3	0.69	03/29/08	XC	0.34			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	03/29/08	XC	0.40			
Propene	ug/m3	8.4	03/29/08	XC	0.18			
Styrene	ug/m3	ND	03/29/08	XC	0.42			
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/29/08	XC	0.68			
Tetrachloroethylene	ug/m3	1700	03/29/08	XC	0.68			
Tetrahydrofuran	ug/m3	ND	03/29/08	XC	0.30			
Toluene	ug/m3	0.82	03/29/08	XC	0.38			
1,2,4-Trichlorobenzene	ug/m3	ND	03/29/08	XC	15			
1,1,1-Trichloroethane	ug/m3	1.5	03/29/08	XC	0.54			
1,1,2-Trichloroethane	ug/m3	ND	03/29/08	XC	0.54			
Trichloroethylene	ug/m3	ND	03/29/08	XC	0.54			
Trichlorofluoromethane	ug/m3	17	03/29/08	XC	0.56			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/29/08	XC	0.76			
1,2,4-Trimethylbenzene	ug/m3	ND	03/29/08	XC	0.50			
1,3,5-Trimethylbenzene	ug/m3	ND	03/29/08	XC	0.50			
Vinyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Vinyl Chloride	ug/m3	ND	03/29/08	XC	0.26			
m/p-Xylene	ug/m3	0.91	03/29/08	XC	0.86			
o-Xylene	ug/m3	ND	03/29/08	XC	0.44			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 30 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # :** ASG304

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 31 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG404

**Sample ID :** 08B10369

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Acetone	ug/m3	47	03/29/08	XC	0.24			
Benzene	ug/m3	8.1	03/29/08	XC	0.32			
Benzyl Chloride	ug/m3	ND	03/29/08	XC	0.52			
Bromodichloromethane	ug/m3	3.9	03/29/08	XC	0.66			
Bromoform	ug/m3	ND	03/29/08	XC	1.1			
Bromomethane	ug/m3	ND	03/29/08	XC	0.38			
1,3-Butadiene	ug/m3	14	03/29/08	XC	0.22			
2-Butanone (MEK)	ug/m3	20	03/29/08	XC	0.46			
Carbon Disulfide	ug/m3	2.2	03/29/08	XC	0.32			
Carbon Tetrachloride	ug/m3	ND	03/29/08	XC	0.62			
Chlorobenzene	ug/m3	ND	03/29/08	XC	0.46			
Chlorodibromomethane	ug/m3	ND	03/29/08	XC	0.86			
Chloroethane	ug/m3	ND	03/29/08	XC	0.53			
Chloroform	ug/m3	30	03/29/08	XC	0.48			
Chloromethane	ug/m3	0.53	03/29/08	XC	0.20			
Cyclohexane	ug/m3	0.80	03/29/08	XC	0.34			
1,2-Dibromoethane	ug/m3	ND	03/29/08	XC	0.76			
1,2-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60			
1,3-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60			
1,4-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60			
Dichlorodifluoromethane	ug/m3	1.8	03/29/08	XC	0.50			
1,1-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40			
1,2-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40			
1,1-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40			
cis-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40			
t-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40			
1,2-Dichloropropane	ug/m3	ND	03/29/08	XC	0.46			
cis-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44			
trans-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44			
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/29/08	XC	0.70			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 32 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG404

**Sample ID :** 08B10369

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Ethanol	ug/m3	3.9	03/29/08	XC	0.18		
Ethyl Acetate	ug/m3	ND	03/29/08	XC	0.36		
Ethylbenzene	ug/m3	1.1	03/29/08	XC	0.44		
4-Ethyl Toluene	ug/m3	ND	03/29/08	XC	0.50		
n-Heptane	ug/m3	3.3	03/29/08	XC	0.40		
Hexachlorobutadiene	ug/m3	ND	03/29/08	XC	22		
Hexane	ug/m3	6.5	03/29/08	XC	0.36		
2-Hexanone	ug/m3	0.93	03/29/08	XC	0.40		
Isopropanol	ug/m3	1.0	03/29/08	XC	0.24		
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/29/08	XC	0.36		
Methylene Chloride	ug/m3	1.1	03/29/08	XC	0.34		
4-Methyl-2-Pentanone (MIBK)	ug/m3	1.5	03/29/08	XC	0.40		
Propene	ug/m3	95	03/29/08	XC	0.18		
Styrene	ug/m3	0.76	03/29/08	XC	0.42		
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/29/08	XC	0.68		
Tetrachloroethylene	ug/m3	220	03/29/08	XC	0.68		
Tetrahydrofuran	ug/m3	ND	03/29/08	XC	0.30		
Toluene	ug/m3	5.9	03/29/08	XC	0.38		
1,2,4-Trichlorobenzene	ug/m3	ND	03/29/08	XC	15		
1,1,1-Trichloroethane	ug/m3	2.8	03/29/08	XC	0.54		
1,1,2-Trichloroethane	ug/m3	ND	03/29/08	XC	0.54		
Trichloroethylene	ug/m3	2.6	03/29/08	XC	0.54		
Trichlorofluoromethane	ug/m3	33	03/29/08	XC	0.56		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/29/08	XC	0.76		
1,2,4-Trimethylbenzene	ug/m3	0.95	03/29/08	XC	0.50		
1,3,5-Trimethylbenzene	ug/m3	ND	03/29/08	XC	0.50		
Vinyl Acetate	ug/m3	ND	03/29/08	XC	0.36		
Vinyl Chloride	ug/m3	ND	03/29/08	XC	0.26		
m/p-Xylene	ug/m3	2.7	03/29/08	XC	0.86		
o-Xylene	ug/m3	1.0	03/29/08	XC	0.44		

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 33 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # : ASG404**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 34 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG504

**Sample ID :** 08B10370

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	ug/m3	ND	03/28/08	XC	9.6		
Benzene	ug/m3	39000	03/28/08	XC	3.2		
Benzyl Chloride	ug/m3	ND	03/28/08	XC	5.2		
Bromodichloromethane	ug/m3	ND	03/28/08	XC	6.6		
Bromoform	ug/m3	ND	03/28/08	XC	11		
Bromomethane	ug/m3	ND	03/28/08	XC	3.8		
1,3-Butadiene	ug/m3	ND	03/28/08	XC	2.2		
2-Butanone (MEK)	ug/m3	ND	03/28/08	XC	5.9		
Carbon Disulfide	ug/m3	ND	03/28/08	XC	3.2		
Carbon Tetrachloride	ug/m3	ND	03/28/08	XC	6.2		
Chlorobenzene	ug/m3	ND	03/28/08	XC	4.6		
Chlorodibromomethane	ug/m3	ND	03/28/08	XC	8.6		
Chloroethane	ug/m3	ND	03/28/08	XC	5.3		
Chloroform	ug/m3	ND	03/28/08	XC	4.8		
Chloromethane	ug/m3	ND	03/28/08	XC	4.2		
Cyclohexane	ug/m3	27000	03/28/08	XC	3.4		
1,2-Dibromoethane	ug/m3	ND	03/28/08	XC	7.6		
1,2-Dichlorobenzene	ug/m3	ND	03/28/08	XC	6.0		
1,3-Dichlorobenzene	ug/m3	ND	03/28/08	XC	6.0		
1,4-Dichlorobenzene	ug/m3	ND	03/28/08	XC	6.0		
Dichlorodifluoromethane	ug/m3	ND	03/28/08	XC	5.0		
1,1-Dichloroethane	ug/m3	ND	03/28/08	XC	4.0		
1,2-Dichloroethane	ug/m3	ND	03/28/08	XC	4.0		
1,1-Dichloroethylene	ug/m3	ND	03/28/08	XC	4.0		
cis-1,2-Dichloroethylene	ug/m3	ND	03/28/08	XC	4.0		
t-1,2-Dichloroethylene	ug/m3	ND	03/28/08	XC	4.0		
1,2-Dichloropropane	ug/m3	ND	03/28/08	XC	4.6		
cis-1,3-Dichloropropene	ug/m3	ND	03/28/08	XC	4.4		
trans-1,3-Dichloropropene	ug/m3	ND	03/28/08	XC	4.4		
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/28/08	XC	7.0		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 35 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG504

**Sample ID :** 08B10370

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Ethanol	ug/m3	ND	03/28/08	XC	19			
Ethyl Acetate	ug/m3	ND	03/28/08	XC	3.6			
Ethylbenzene	ug/m3	270	03/28/08	XC	4.4			
4-Ethyl Toluene	ug/m3	7.0	03/28/08	XC	5.0			
n-Heptane	ug/m3	34000	03/28/08	XC	4.0			
Hexachlorobutadiene	ug/m3	ND	03/28/08	XC	220			
Hexane	ug/m3	64000	03/28/08	XC	3.6			
2-Hexanone	ug/m3	ND	03/28/08	XC	4.0			
Isopropanol	ug/m3	ND	03/28/08	XC	2.4			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/28/08	XC	3.6			
Methylene Chloride	ug/m3	ND	03/28/08	XC	7.0			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	03/28/08	XC	4.0			
Propene	ug/m3	ND	03/28/08	XC	1.8			
Styrene	ug/m3	ND	03/28/08	XC	4.2			
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/28/08	XC	6.8			
Tetrachloroethylene	ug/m3	ND	03/28/08	XC	6.8			
Tetrahydrofuran	ug/m3	ND	03/28/08	XC	3.0			
Toluene	ug/m3	280	03/28/08	XC	3.8			
1,2,4-Trichlorobenzene	ug/m3	ND	03/28/08	XC	150			
1,1,1-Trichloroethane	ug/m3	ND	03/28/08	XC	5.4			
1,1,2-Trichloroethane	ug/m3	ND	03/28/08	XC	5.4			
Trichloroethylene	ug/m3	ND	03/28/08	XC	5.4			
Trichlorofluoromethane	ug/m3	ND	03/28/08	XC	5.6			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/28/08	XC	7.6			
1,2,4-Trimethylbenzene	ug/m3	7.6	03/28/08	XC	5.0			
1,3,5-Trimethylbenzene	ug/m3	14	03/28/08	XC	5.0			
Vinyl Acetate	ug/m3	ND	03/28/08	XC	3.6			
Vinyl Chloride	ug/m3	ND	03/28/08	XC	2.6			
m/p-Xylene	ug/m3	1200	03/28/08	XC	8.6			
o-Xylene	ug/m3	170	03/28/08	XC	4.4			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

Purchase Order No.:

4/9/2008

Page 36 of 43

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # : ASG504**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 37 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG604

**Sample ID :** 08B10371

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	ug/m3	44	03/29/08	XC	0.24		
Benzene	ug/m3	80	03/29/08	XC	0.32		
Benzyl Chloride	ug/m3	ND	03/29/08	XC	0.52		
Bromodichloromethane	ug/m3	ND	03/29/08	XC	0.66		
Bromoform	ug/m3	ND	03/29/08	XC	1.1		
Bromomethane	ug/m3	ND	03/29/08	XC	0.38		
1,3-Butadiene	ug/m3	5.7	03/29/08	XC	0.22		
2-Butanone (MEK)	ug/m3	9.1	03/29/08	XC	0.46		
Carbon Disulfide	ug/m3	1.2	03/29/08	XC	0.32		
Carbon Tetrachloride	ug/m3	ND	03/29/08	XC	0.62		
Chlorobenzene	ug/m3	ND	03/29/08	XC	0.46		
Chlorodibromomethane	ug/m3	ND	03/29/08	XC	0.86		
Chloroethane	ug/m3	ND	03/29/08	XC	0.53		
Chloroform	ug/m3	ND	03/29/08	XC	0.48		
Chloromethane	ug/m3	ND	03/29/08	XC	0.42		
Cyclohexane	ug/m3	27	03/29/08	XC	0.34		
1,2-Dibromoethane	ug/m3	ND	03/29/08	XC	0.76		
1,2-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,3-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,4-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
Dichlorodifluoromethane	ug/m3	1.9	03/29/08	XC	0.50		
1,1-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,1-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
cis-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
t-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloropropane	ug/m3	ND	03/29/08	XC	0.46		
cis-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
trans-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/29/08	XC	0.70		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 38 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG604

**Sample ID :** 08B10371

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Ethanol	ug/m3	5.8	03/29/08	XC	0.18			
Ethyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Ethylbenzene	ug/m3	2.6	03/29/08	XC	0.44			
4-Ethyl Toluene	ug/m3	0.58	03/29/08	XC	0.50			
n-Heptane	ug/m3	29	03/29/08	XC	0.40			
Hexachlorobutadiene	ug/m3	ND	03/29/08	XC	22			
Hexane	ug/m3	27	03/29/08	XC	0.36			
2-Hexanone	ug/m3	ND	03/29/08	XC	0.40			
Isopropanol	ug/m3	1.2	03/29/08	XC	0.24			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/29/08	XC	0.36			
Methylene Chloride	ug/m3	1.1	03/29/08	XC	0.34			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	03/29/08	XC	0.40			
Propene	ug/m3	52	03/29/08	XC	0.18			
Styrene	ug/m3	1.6	03/29/08	XC	0.42			
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/29/08	XC	0.68			
Tetrachloroethylene	ug/m3	ND	03/29/08	XC	0.68			
Tetrahydrofuran	ug/m3	ND	03/29/08	XC	0.30			
Toluene	ug/m3	4.7	03/29/08	XC	0.38			
1,2,4-Trichlorobenzene	ug/m3	ND	03/29/08	XC	15			
1,1,1-Trichloroethane	ug/m3	ND	03/29/08	XC	0.54			
1,1,2-Trichloroethane	ug/m3	ND	03/29/08	XC	0.54			
Trichloroethylene	ug/m3	ND	03/29/08	XC	0.54			
Trichlorofluoromethane	ug/m3	1.2	03/29/08	XC	0.56			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/29/08	XC	0.76			
1,2,4-Trimethylbenzene	ug/m3	1.7	03/29/08	XC	0.50			
1,3,5-Trimethylbenzene	ug/m3	0.61	03/29/08	XC	0.50			
Vinyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Vinyl Chloride	ug/m3	ND	03/29/08	XC	0.26			
m/p-Xylene	ug/m3	11	03/29/08	XC	0.86			
o-Xylene	ug/m3	2.7	03/29/08	XC	0.44			

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 39 of 43

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # : ASG604**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 40 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG704

**Sample ID :** 08B10372

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F
Acetone	ug/m3	35	03/29/08	XC	0.24		
Benzene	ug/m3	16	03/29/08	XC	0.32		
Benzyl Chloride	ug/m3	ND	03/29/08	XC	0.52		
Bromodichloromethane	ug/m3	ND	03/29/08	XC	0.66		
Bromoform	ug/m3	ND	03/29/08	XC	1.1		
Bromomethane	ug/m3	ND	03/29/08	XC	0.38		
1,3-Butadiene	ug/m3	5.2	03/29/08	XC	0.22		
2-Butanone (MEK)	ug/m3	7.8	03/29/08	XC	0.46		
Carbon Disulfide	ug/m3	1.9	03/29/08	XC	0.32		
Carbon Tetrachloride	ug/m3	ND	03/29/08	XC	0.62		
Chlorobenzene	ug/m3	ND	03/29/08	XC	0.46		
Chlorodibromomethane	ug/m3	ND	03/29/08	XC	0.86		
Chloroethane	ug/m3	ND	03/29/08	XC	0.53		
Chloroform	ug/m3	ND	03/29/08	XC	0.48		
Chloromethane	ug/m3	ND	03/29/08	XC	0.42		
Cyclohexane	ug/m3	7.0	03/29/08	XC	0.34		
1,2-Dibromoethane	ug/m3	ND	03/29/08	XC	0.76		
1,2-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,3-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
1,4-Dichlorobenzene	ug/m3	ND	03/29/08	XC	0.60		
Dichlorodifluoromethane	ug/m3	1.8	03/29/08	XC	0.50		
1,1-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloroethane	ug/m3	ND	03/29/08	XC	0.40		
1,1-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
cis-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
t-1,2-Dichloroethylene	ug/m3	ND	03/29/08	XC	0.40		
1,2-Dichloropropane	ug/m3	ND	03/29/08	XC	0.46		
cis-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
trans-1,3-Dichloropropene	ug/m3	ND	03/29/08	XC	0.44		
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	03/29/08	XC	0.70		

RL = Reporting Limit

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA  
107 AUDUBON ROAD, BLDG. 2, SUITE 301

4/9/2008

Page 41 of 43

WAKEFIELD, MA 01880

Purchase Order No.:

Project Number: 3650050041.18

Project Location: PROVIDENCE-RI

LIMS-BAT #: LIMT-14601

Date Received: 3/25/2008

Job Number: 3650050041.18

**Field Sample # :** ASG704

**Sample ID :** 08B10372

Sampled : 3/21/2008

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : SUMMA

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo	P/F	SPEC Limit Hi
Ethanol	ug/m3	5.8	03/29/08	XC	0.18			
Ethylbenzene	ug/m3	1.1	03/29/08	XC	0.44			
4-Ethyl Toluene	ug/m3	ND	03/29/08	XC	0.50			
n-Heptane	ug/m3	8.2	03/29/08	XC	0.40			
Hexachlorobutadiene	ug/m3	ND	03/29/08	XC	22			
Hexane	ug/m3	9.7	03/29/08	XC	0.36			
2-Hexanone	ug/m3	ND	03/29/08	XC	0.40			
Isopropanol	ug/m3	1.4	03/29/08	XC	0.24			
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	03/29/08	XC	0.36			
Methylene Chloride	ug/m3	2.3	03/29/08	XC	0.34			
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	03/29/08	XC	0.40			
Propene	ug/m3	41	03/29/08	XC	0.18			
Styrene	ug/m3	1.3	03/29/08	XC	0.42			
1,1,2,2-Tetrachloroethane	ug/m3	ND	03/29/08	XC	0.68			
Tetrachloroethylene	ug/m3	1.4	03/29/08	XC	0.68			
Tetrahydrofuran	ug/m3	ND	03/29/08	XC	0.30			
Toluene	ug/m3	3.6	03/29/08	XC	0.38			
1,2,4-Trichlorobenzene	ug/m3	ND	03/29/08	XC	15			
1,1,1-Trichloroethane	ug/m3	1.2	03/29/08	XC	0.54			
1,1,2-Trichloroethane	ug/m3	ND	03/29/08	XC	0.54			
Trichloroethylene	ug/m3	ND	03/29/08	XC	0.54			
Trichlorofluoromethane	ug/m3	20	03/29/08	XC	0.56			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	03/29/08	XC	0.76			
1,2,4-Trimethylbenzene	ug/m3	1.3	03/29/08	XC	0.50			
1,3,5-Trimethylbenzene	ug/m3	ND	03/29/08	XC	0.50			
Vinyl Acetate	ug/m3	ND	03/29/08	XC	0.36			
Vinyl Chloride	ug/m3	ND	03/29/08	XC	0.26			
m/p-Xylene	ug/m3	3.9	03/29/08	XC	0.86			
o-Xylene	ug/m3	1.3	03/29/08	XC	0.44			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

\* = See end of report for comments and notes applying to this sample



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 42 of 43

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

**Field Sample # : ASG704**

Analytical Method:

EPA TO-15

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



---

39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

DAVE HEISLEIN

MACTEC ENGINEERING & CONSULTING - MA

107 AUDUBON ROAD, BLDG. 2, SUITE 301

WAKEFIELD, MA 01880

4/9/2008

Page 43 of 43

Project Location: PROVIDENCE-RI

Date Received: 3/25/2008

Purchase Order No.:

Project Number: 3650050041.18

LIMS-BAT #: LIMT-14601

Job Number: 3650050041.18

\*\* END OF REPORT \*\*

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

\* = See end of report for comments and notes applying to this sample

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat # :	LIMT-14601			Page 1 of 11
QC Batch Number:	BATCH-14094					
Sample Id	Analysis	QC Analysis	Values	Units	Limits	
08B10366	4-Bromofluorobenzene	Surrogate Recovery	99.12	%	70-130	
08B10367	4-Bromofluorobenzene	Surrogate Recovery	105.75	%	70-130	
08B10368	4-Bromofluorobenzene	Surrogate Recovery	102.50	%	70-130	
08B10369	4-Bromofluorobenzene	Surrogate Recovery	104.62	%	70-130	
08B10370	4-Bromofluorobenzene	Surrogate Recovery	106.12	%	70-130	
08B10371	4-Bromofluorobenzene	Surrogate Recovery	103.12	%	70-130	
08B10372	Acetone	Sample Amount	34.75	ug/m3		
		Duplicate Value	34.47	ug/m3		
		Duplicate RPD	0.79	%		
	Benzene	Sample Amount	16.43	ug/m3		
		Duplicate Value	16.14	ug/m3		
		Duplicate RPD	1.80	%		
	Ethylbenzene	Sample Amount	1.10	ug/m3		
		Duplicate Value	1.10	ug/m3		
		Duplicate RPD	0.00	%		
	Hexane	Sample Amount	9.70	ug/m3		
		Duplicate Value	9.61	ug/m3		
		Duplicate RPD	0.94	%		
	Isopropanol	Sample Amount	1.41	ug/m3		
		Duplicate Value	1.36	ug/m3		
		Duplicate RPD	3.53	%		
	2-Butanone (MEK)	Sample Amount	7.77	ug/m3		
		Duplicate Value	7.58	ug/m3		
		Duplicate RPD	2.45	%		
	Styrene	Sample Amount	1.31	ug/m3		
		Duplicate Value	1.31	ug/m3		
		Duplicate RPD	0.00	%		
	Tetrachloroethylene	Sample Amount	1.42	ug/m3		
		Duplicate Value	1.34	ug/m3		
		Duplicate RPD	5.88	%		
	Toluene	Sample Amount	3.62	ug/m3		
		Duplicate Value	3.54	ug/m3		
		Duplicate RPD	2.30	%		
	1,1,1-Trichloroethane	Sample Amount	1.20	ug/m3		
		Duplicate Value	1.15	ug/m3		
		Duplicate RPD	3.70	%		
	Trichlorofluoromethane	Sample Amount	20.38	ug/m3		



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat # :	LIMT-14601	Page 2 of 11
QC Batch Number:	BATCH-14094			
Sample Id	Analysis	QC Analysis	Values	Units
08B10372	Trichlorofluoromethane	Duplicate Value	20.18	ug/m3
		Duplicate RPD	0.99	%
	o-Xylene	Sample Amount	1.28	ug/m3
		Duplicate Value	1.26	ug/m3
		Duplicate RPD	1.36	%
	m/p-Xylene	Sample Amount	3.85	ug/m3
		Duplicate Value	3.71	ug/m3
		Duplicate RPD	3.66	%
	Ethanol	Sample Amount	5.81	ug/m3
		Duplicate Value	5.55	ug/m3
		Duplicate RPD	4.44	%
	Methylene Chloride	Sample Amount	2.31	ug/m3
		Duplicate Value	2.27	ug/m3
		Duplicate RPD	1.81	%
	1,2,4-Trimethylbenzene	Sample Amount	1.25	ug/m3
		Duplicate Value	1.24	ug/m3
		Duplicate RPD	0.78	%
	Cyclohexane	Sample Amount	6.97	ug/m3
		Duplicate Value	6.91	ug/m3
		Duplicate RPD	0.89	%
	Dichlorodifluoromethane	Sample Amount	1.80	ug/m3
		Duplicate Value	1.48	ug/m3
		Duplicate RPD	19.27	%
	Carbon Disulfide	Sample Amount	1.93	ug/m3
		Duplicate Value	1.89	ug/m3
		Duplicate RPD	2.27	%
	4-Bromofluorobenzene	Surrogate Recovery	103.62	%
	n-Heptane	Sample Amount	8.23	ug/m3
		Duplicate Value	7.97	ug/m3
		Duplicate RPD	3.23	%
	Propene	Sample Amount	40.98	ug/m3
		Duplicate Value	39.21	ug/m3
		Duplicate RPD	4.40	%
	1,3-Butadiene	Sample Amount	5.18	ug/m3
		Duplicate Value	5.41	ug/m3
		Duplicate RPD	4.42	%
BLANK-115483	Acetone	Blank	0.99	ug/m3
	Benzene	Blank	<0.08	ug/m3
	Carbon Tetrachloride	Blank	<0.16	ug/m3
	Chloroform	Blank	<0.12	ug/m3
	1,2-Dichloroethane	Blank	<0.10	ug/m3
	1,4-Dichlorobenzene	Blank	<0.15	ug/m3



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 4/9/2008

Lims Bat #: LIMT-14601

Page 3 of 11

QC Batch Number: BATCH-14094

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-115483					
	Ethyl Acetate	Blank	<0.09	ug/m3	
	Ethylbenzene	Blank	<0.11	ug/m3	
	Hexane	Blank	<0.09	ug/m3	
	Isopropanol	Blank	<0.06	ug/m3	
	2-Butanone (MEK)	Blank	0.29	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Blank	<0.10	ug/m3	
	Naphthalene	Blank	<0.32	ug/m3	
	Styrene	Blank	<0.11	ug/m3	
	Tetrachloroethylene	Blank	<0.17	ug/m3	
	Toluene	Blank	<0.10	ug/m3	
	1,1,1-Trichloroethane	Blank	<0.14	ug/m3	
	Trichloroethylene	Blank	<0.14	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.19	ug/m3	
	Trichlorofluoromethane	Blank	<0.14	ug/m3	
	o-Xylene	Blank	<0.11	ug/m3	
	m/p-Xylene	Blank	<0.22	ug/m3	
	1,2-Dichlorobenzene	Blank	<0.15	ug/m3	
	1,3-Dichlorobenzene	Blank	<0.15	ug/m3	
	1,1-Dichloroethane	Blank	<0.10	ug/m3	
	1,1-Dichloroethylene	Blank	<0.10	ug/m3	
	Ethanol	Blank	<0.48	ug/m3	
	4-Ethyl Toluene	Blank	<0.13	ug/m3	
	Methyl tert-Butyl Ether (MTBE)	Blank	<0.09	ug/m3	
	t-1,2-Dichloroethylene	Blank	<0.10	ug/m3	
	Vinyl Chloride	Blank	<0.07	ug/m3	
	Methylene Chloride	Blank	<0.18	ug/m3	
	Chlorobenzene	Blank	<0.12	ug/m3	
	Chloromethane	Blank	<0.11	ug/m3	
	Bromomethane	Blank	<0.10	ug/m3	
	Chloroethane	Blank	<0.14	ug/m3	
	cis-1,3-Dichloropropene	Blank	<0.11	ug/m3	
	trans-1,3-Dichloropropene	Blank	<0.11	ug/m3	
	Chlorodibromomethane	Blank	<0.22	ug/m3	
	1,1,2-Trichloroethane	Blank	<0.14	ug/m3	
	Bromoform	Blank	<0.26	ug/m3	
	1,1,2,2-Tetrachloroethane	Blank	<0.17	ug/m3	
	Hexachlorobutadiene	Blank	<5.4	ug/m3	
	Isopropylbenzene	Blank	<0.32	ug/m3	
	p-Isoproptyltoluene	Blank	<0.32	ug/m3	
	sec-Butylbenzene	Blank	<0.32	ug/m3	
	1,2,4-Trichlorobenzene	Blank	<3.8	ug/m3	
	1,2,4-Trimethylbenzene	Blank	<0.13	ug/m3	
	1,3,5-Trimethylbenzene	Blank	<0.13	ug/m3	



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 4/9/2008

Lims Bat #: LIMT-14601

Page 4 of 11

QC Batch Number: BATCH-14094

Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-115483	Cyclohexane	Blank	<0.09	ug/m3	
	cis-1,2-Dichloroethylene	Blank	<0.10	ug/m3	
	1,2-Dichloropropane	Blank	<0.12	ug/m3	
	1,3-Dichloropropane	Blank	<0.31	ug/m3	
	1,1,1,2-Tetrachloroethane	Blank	<0.32	ug/m3	
	n-Butylbenzene	Blank	<0.32	ug/m3	
	Dichlorodifluoromethane	Blank	<0.13	ug/m3	
	Benzyl Chloride	Blank	<0.13	ug/m3	
	Acrylonitrile	Blank	<0.32	ug/m3	
	Carbon Disulfide	Blank	<0.08	ug/m3	
	Vinyl Acetate	Blank	0.28	ug/m3	
	2-Hexanone	Blank	<0.10	ug/m3	
	Bromodichloromethane	Blank	<0.17	ug/m3	
	1,2-Dibromoethane	Blank	<0.19	ug/m3	
	n-Heptane	Blank	<0.10	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<0.18	ug/m3	
	Tetrahydrofuran	Blank	<0.08	ug/m3	
	Propene	Blank	<0.05	ug/m3	
	1,3-Butadiene	Blank	<0.06	ug/m3	
BLANK-115548	Acetone	Blank	1.29	ug/m3	
	Toluene	Blank	<0.10	ug/m3	
	Ethanol	Blank	<0.05	ug/m3	
LFBLANK-77015	Acetone	Lab Fort Blank Amt.	11.87	ug/m3	
		Lab Fort Blk. Found	8.32	ug/m3	
		Lab Fort Blk. % Rec.	70.08	%	50-150
	Benzene	Lab Fort Blank Amt.	15.95	ug/m3	
		Lab Fort Blk. Found	15.48	ug/m3	
		Lab Fort Blk. % Rec.	97.09	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	31.45	ug/m3	
		Lab Fort Blk. Found	30.66	ug/m3	
		Lab Fort Blk. % Rec.	97.50	%	70-130
	Chloroform	Lab Fort Blank Amt.	24.33	ug/m3	
		Lab Fort Blk. Found	21.95	ug/m3	
		Lab Fort Blk. % Rec.	90.22	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	17.67	ug/m3	
		Lab Fort Blk. % Rec.	87.28	%	70-130
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	29.19	ug/m3	
		Lab Fort Blk. % Rec.	97.12	%	70-130
	Ethyl Acetate	Lab Fort Blank Amt.	18.01	ug/m3	



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat # :	LIMT-14601	Page 5 of 11
QC Batch Number:	BATCH-14094			
Sample Id	Analysis	QC Analysis	Values	Units
LFBLANK-77015				
	Ethyl Acetate	Lab Fort Blk. Found	18.21	ug/m3
		Lab Fort Blk. % Rec.	101.12	%
	Ethylbenzene	Lab Fort Blank Amt.	21.67	ug/m3
		Lab Fort Blk. Found	22.50	ug/m3
		Lab Fort Blk. % Rec.	103.80	%
	Hexane	Lab Fort Blank Amt.	17.62	ug/m3
		Lab Fort Blk. Found	14.41	ug/m3
		Lab Fort Blk. % Rec.	81.81	%
	Isopropanol	Lab Fort Blank Amt.	12.28	ug/m3
		Lab Fort Blk. Found	7.07	ug/m3
		Lab Fort Blk. % Rec.	57.56	%
	2-Butanone (MEK)	Lab Fort Blank Amt.	14.74	ug/m3
		Lab Fort Blk. Found	14.55	ug/m3
		Lab Fort Blk. % Rec.	98.72	%
	4-Methyl-2-Pentanone (MIBK)	Lab Fort Blank Amt.	20.48	ug/m3
		Lab Fort Blk. Found	25.11	ug/m3
		Lab Fort Blk. % Rec.	122.64	%
	Naphthalene	Lab Fort Blank Amt.	12.50	ug/m3
		Lab Fort Blk. Found	11.08	ug/m3
		Lab Fort Blk. % Rec.	88.67	%
	Styrene	Lab Fort Blank Amt.	21.26	ug/m3
		Lab Fort Blk. Found	18.31	ug/m3
		Lab Fort Blk. % Rec.	86.10	%
	Tetrachloroethylene	Lab Fort Blank Amt.	33.90	ug/m3
		Lab Fort Blk. Found	29.83	ug/m3
		Lab Fort Blk. % Rec.	87.99	%
	Toluene	Lab Fort Blank Amt.	18.81	ug/m3
		Lab Fort Blk. Found	16.65	ug/m3
		Lab Fort Blk. % Rec.	88.54	%
	1,1,1-Trichloroethane	Lab Fort Blank Amt.	27.28	ug/m3
		Lab Fort Blk. Found	25.37	ug/m3
		Lab Fort Blk. % Rec.	93.02	%
	Trichloroethylene	Lab Fort Blank Amt.	26.87	ug/m3
		Lab Fort Blk. Found	27.30	ug/m3
		Lab Fort Blk. % Rec.	101.60	%
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Lab Fort Blank Amt.	38.31	ug/m3
		Lab Fort Blk. Found	36.46	ug/m3
		Lab Fort Blk. % Rec.	95.15	%
	Trichlorofluoromethane	Lab Fort Blank Amt.	28.09	ug/m3
		Lab Fort Blk. Found	27.63	ug/m3
		Lab Fort Blk. % Rec.	98.36	%
	o-Xylene	Lab Fort Blank Amt.	21.71	ug/m3
		Lab Fort Blk. Found	22.97	ug/m3



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat #:	LIMT-14601	Page 6 of 11
QC Batch Number:	BATCH-14094			
Sample Id	Analysis	QC Analysis	Values	Units
LFBLANK-77015				
	o-Xylene	Lab Fort Blk. % Rec.	105.80	%
	m/p-Xylene	Lab Fort Blank Amt.	43.43	ug/m3
		Lab Fort Blk. Found	46.77	ug/m3
		Lab Fort Blk. % Rec.	107.68	%
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3
		Lab Fort Blk. Found	27.46	ug/m3
		Lab Fort Blk. % Rec.	91.36	%
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3
		Lab Fort Blk. Found	29.65	ug/m3
		Lab Fort Blk. % Rec.	98.64	%
	1,1-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3
		Lab Fort Blk. Found	18.45	ug/m3
		Lab Fort Blk. % Rec.	91.18	%
	1,1-Dichloroethylene	Lab Fort Blank Amt.	19.83	ug/m3
		Lab Fort Blk. Found	18.09	ug/m3
		Lab Fort Blk. % Rec.	91.20	%
	Ethanol	Lab Fort Blank Amt.	9.42	ug/m3
		Lab Fort Blk. Found	6.15	ug/m3
		Lab Fort Blk. % Rec.	65.33	%
	4-Ethyl Toluene	Lab Fort Blank Amt.	24.58	ug/m3
		Lab Fort Blk. Found	24.52	ug/m3
		Lab Fort Blk. % Rec.	99.75	%
	Methyl tert-Butyl Ether (MTBE)	Lab Fort Blank Amt.	18.02	ug/m3
		Lab Fort Blk. Found	15.26	ug/m3
		Lab Fort Blk. % Rec.	84.69	%
	t-1,2-Dichloroethylene	Lab Fort Blank Amt.	19.82	ug/m3
		Lab Fort Blk. Found	17.59	ug/m3
		Lab Fort Blk. % Rec.	88.77	%
	Vinyl Chloride	Lab Fort Blank Amt.	12.78	ug/m3
		Lab Fort Blk. Found	17.90	ug/m3
		Lab Fort Blk. % Rec.	140.06	%
	Methylene Chloride	Lab Fort Blank Amt.	17.36	ug/m3
		Lab Fort Blk. Found	14.41	ug/m3
		Lab Fort Blk. % Rec.	83.04	%
	Chlorobenzene	Lab Fort Blank Amt.	23.02	ug/m3
		Lab Fort Blk. Found	23.97	ug/m3
		Lab Fort Blk. % Rec.	104.10	%
	Chloromethane	Lab Fort Blank Amt.	10.32	ug/m3
		Lab Fort Blk. Found	15.66	ug/m3
		Lab Fort Blk. % Rec.	151.72	%
	Bromomethane	Lab Fort Blank Amt.	19.40	ug/m3
		Lab Fort Blk. Found	23.97	ug/m3
		Lab Fort Blk. % Rec.	123.54	%



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat # :	LIMT-14601	Page 7 of 11
QC Batch Number:	BATCH-14094			
Sample Id	Analysis	QC Analysis	Values	Units
LFBLANK-77015				Limits
	Chloroethane	Lab Fort Blank Amt.	13.19	ug/m3
		Lab Fort Blk. Found	16.12	ug/m3
		Lab Fort Blk. % Rec.	122.27	%
	cis-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3
		Lab Fort Blk. Found	23.36	ug/m3
		Lab Fort Blk. % Rec.	102.92	%
	trans-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3
		Lab Fort Blk. Found	22.93	ug/m3
		Lab Fort Blk. % Rec.	101.02	%
	Chlorodibromomethane	Lab Fort Blank Amt.	42.59	ug/m3
		Lab Fort Blk. Found	45.16	ug/m3
		Lab Fort Blk. % Rec.	106.04	%
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	27.28	ug/m3
		Lab Fort Blk. Found	26.19	ug/m3
		Lab Fort Blk. % Rec.	96.04	%
	Bromoform	Lab Fort Blank Amt.	51.69	ug/m3
		Lab Fort Blk. Found	54.43	ug/m3
		Lab Fort Blk. % Rec.	105.30	%
	1,1,2,2-Tetrachloroethane	Lab Fort Blank Amt.	34.33	ug/m3
		Lab Fort Blk. Found	40.52	ug/m3
		Lab Fort Blk. % Rec.	118.02	%
	Hexachlorobutadiene	Lab Fort Blank Amt.	53.33	ug/m3
		Lab Fort Blk. Found	96.68	ug/m3
		Lab Fort Blk. % Rec.	181.28	%
	Isopropylbenzene	Lab Fort Blank Amt.	12.50	ug/m3
		Lab Fort Blk. Found	11.09	ug/m3
		Lab Fort Blk. % Rec.	88.75	%
	p-Isoproptytoluene	Lab Fort Blank Amt.	12.49	ug/m3
		Lab Fort Blk. Found	11.70	ug/m3
		Lab Fort Blk. % Rec.	93.67	%
	sec-Butylbenzene	Lab Fort Blank Amt.	12.49	ug/m3
		Lab Fort Blk. Found	11.41	ug/m3
		Lab Fort Blk. % Rec.	91.34	%
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	37.10	ug/m3
		Lab Fort Blk. Found	33.56	ug/m3
		Lab Fort Blk. % Rec.	90.45	%
	1,2,4-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3
		Lab Fort Blk. Found	22.87	ug/m3
		Lab Fort Blk. % Rec.	93.08	%
	1,3,5-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3
		Lab Fort Blk. Found	23.87	ug/m3
		Lab Fort Blk. % Rec.	97.14	%
	Cyclohexane	Lab Fort Blank Amt.	17.21	ug/m3



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat # :	LIMT-14601	Page 8 of 11
QC Batch Number:	BATCH-14094			
Sample Id	Analysis	QC Analysis	Values	Units
LFBLANK-77015	Cyclohexane	Lab Fort Blk. Found	16.94	ug/m3
		Lab Fort Blk. % Rec.	98.43	%
	cis-1,2-Dichloroethylene	Lab Fort Blank Amt.	19.82	ug/m3
		Lab Fort Blk. Found	17.94	ug/m3
		Lab Fort Blk. % Rec.	90.51	%
	1,2-Dichloropropane	Lab Fort Blank Amt.	23.10	ug/m3
		Lab Fort Blk. Found	25.05	ug/m3
		Lab Fort Blk. % Rec.	108.42	%
	1,3-Dichloropropane	Lab Fort Blank Amt.	12.50	ug/m3
		Lab Fort Blk. Found	11.05	ug/m3
		Lab Fort Blk. % Rec.	88.46	%
	1,1,1,2-Tetrachloroethane	Lab Fort Blank Amt.	12.50	ug/m3
		Lab Fort Blk. Found	10.79	ug/m3
		Lab Fort Blk. % Rec.	86.38	%
	n-Butylbenzene	Lab Fort Blank Amt.	12.49	ug/m3
		Lab Fort Blk. Found	13.28	ug/m3
		Lab Fort Blk. % Rec.	106.28	%
	Dichlorodifluoromethane	Lab Fort Blank Amt.	24.72	ug/m3
		Lab Fort Blk. Found	26.72	ug/m3
		Lab Fort Blk. % Rec.	108.08	%
	Benzyl Chloride	Lab Fort Blank Amt.	25.88	ug/m3
		Lab Fort Blk. Found	26.25	ug/m3
		Lab Fort Blk. % Rec.	101.44	%
	Acrylonitrile	Lab Fort Blank Amt.	12.50	ug/m3
		Lab Fort Blk. Found	6.17	ug/m3
		Lab Fort Blk. % Rec.	49.39	%
	Carbon Disulfide	Lab Fort Blank Amt.	15.57	ug/m3
		Lab Fort Blk. Found	13.56	ug/m3
		Lab Fort Blk. % Rec.	87.09	%
	Vinyl Acetate	Lab Fort Blank Amt.	17.60	ug/m3
		Lab Fort Blk. Found	16.91	ug/m3
		Lab Fort Blk. % Rec.	96.09	%
	2-Hexanone	Lab Fort Blank Amt.	20.48	ug/m3
		Lab Fort Blk. Found	24.93	ug/m3
		Lab Fort Blk. % Rec.	121.76	%
	Bromodichloromethane	Lab Fort Blank Amt.	33.50	ug/m3
		Lab Fort Blk. Found	36.10	ug/m3
		Lab Fort Blk. % Rec.	107.78	%
	1,2-Dibromoethane	Lab Fort Blank Amt.	38.42	ug/m3
		Lab Fort Blk. Found	40.05	ug/m3
		Lab Fort Blk. % Rec.	104.24	%
	n-Heptane	Lab Fort Blank Amt.	20.49	ug/m3
		Lab Fort Blk. Found	22.77	ug/m3



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:	4/9/2008	Lims Bat # :	LIMT-14601	Page 9 of 11
QC Batch Number: BATCH-14094				
Sample Id	Analysis	QC Analysis	Values	Units
LFBANK-77015				Limits
n-Heptane		Lab Fort Blk. % Rec.	111.14	%
1,2-Dichlorotetrafluoroethane (114)		Lab Fort Blank Amt.	34.95	ug/m3
		Lab Fort Blk. Found	62.33	ug/m3
		Lab Fort Blk. % Rec.	178.32	%
Tetrahydrofuran		Lab Fort Blank Amt.	14.74	ug/m3
		Lab Fort Blk. Found	14.75	ug/m3
		Lab Fort Blk. % Rec.	100.10	%
Propene		Lab Fort Blank Amt.	8.60	ug/m3
		Lab Fort Blk. Found	7.54	ug/m3
		Lab Fort Blk. % Rec.	87.64	%
1,3-Butadiene		Lab Fort Blank Amt.	11.06	ug/m3
		Lab Fort Blk. Found	12.38	ug/m3
		Lab Fort Blk. % Rec.	111.94	%
LFBANK-77093				70-130
Acetone		Lab Fort Blank Amt.	11.87	ug/m3
		Lab Fort Blk. Found	7.01	ug/m3
		Lab Fort Blk. % Rec.	59.10	%
Toluene		Lab Fort Blank Amt.	18.81	ug/m3
		Lab Fort Blk. Found	15.86	ug/m3
		Lab Fort Blk. % Rec.	84.30	%
Ethanol		Lab Fort Blank Amt.	9.42	ug/m3
		Lab Fort Blk. Found	4.56	ug/m3
		Lab Fort Blk. % Rec.	48.44	%
				50-150



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 4/9/2008

Lims Bat #: LIMT-14601

Page 10 of 11

#### NOTES:

QC Batch No. : BATCH-14094

Sample ID : LFBLANK-77015

Analysis : 1,2-Dichlorotetrafluoroethane (114)

LABORATORY FORTIFIED BLANK RECOVERY OUTSIDE OF CONTROL LIMITS. DATA VALIDATION IS NOT AFFECTED SINCE ALL RESULTS ARE "NOT DETECTED" FOR ALL SAMPLES IN THIS BATCH FOR THIS COMPOUND AND BIAS IS ON THE HIGH SIDE.

QC Batch No. : BATCH-14094

Sample ID : LFBLANK-77015

Analysis : Acrylonitrile

LABORATORY FORTIFIED BLANK RECOVERY OUTSIDE OF CONTROL LIMITS. ANY REPORTED RESULT FOR THIS COMPOUND IN THIS BATCH IS LIKELY TO BE BIASED ON THE LOW SIDE.

QC Batch No. : BATCH-14094

Sample ID : LFBLANK-77015

Analysis : Chloromethane

LABORATORY FORTIFIED BLANK RECOVERY IS OUTSIDE OF CONTROL LIMITS. ANY REPORTED VALUE FOR THIS COMPOUND IS LIKELY TO BE BIASED ON THE HIGH SIDE.

QC Batch No. : BATCH-14094

Sample ID : LFBLANK-77015

Analysis : Hexachlorobutadiene

LABORATORY FORTIFIED BLANK RECOVERY OUTSIDE OF CONTROL LIMITS. DATA VALIDATION IS NOT AFFECTED SINCE ALL RESULTS ARE "NOT DETECTED" FOR ALL SAMPLES IN THIS BATCH FOR THIS COMPOUND AND BIAS IS ON THE HIGH SIDE.

QC Batch No. : BATCH-14094

Sample ID : LFBLANK-77015

Analysis : Vinyl Chloride

LABORATORY FORTIFIED BLANK RECOVERY IS OUTSIDE OF CONTROL LIMITS. ANY REPORTED VALUE FOR THIS COMPOUND IS LIKELY TO BE BIASED ON THE HIGH SIDE.

QC Batch No. : BATCH-14094

Sample ID : LFBLANK-77093

Analysis : Ethanol

LABORATORY FORTIFIED BLANK RECOVERY IS OUTSIDE OF CONTROL LIMITS AND BIASED ON THE HIGH SIDE. REPORTED RESULTS IN ASSOCIATED SAMPLES ARE LIKELY TO BE BIASED ON THE HIGH SIDE.



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

#### QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date:

4/9/2008

Lims Bat #: LIMT-14601

Page 11 of 11

#### QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

##### QC BATCH NUMBER

This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.

##### LIMITS

Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.

##### Sample Amount

Amount of analyte found in a sample.

##### Blank

Method Blank that has been taken though all the steps of the analysis.

##### LFBLANK

Laboratory Fortified Blank (a control sample)

##### STDADD

Standard Added (a laboratory control sample)

##### Matrix Spk Amt Added MS Amt Measured Matrix Spike % Rec.

Amount of analyte spiked into a sample  
Amount of analyte found including amount that was spiked  
% Recovery of spiked amount in sample.

##### Duplicate Value Duplicate RPD

The result from the Duplicate analysis of the sample.  
The Relative Percent Difference between two Duplicate Analyses.

##### Surrogate Recovery

The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.

##### Sur. Recovery (ELCD) Sur. Recovery (PID)

Surrogate Recovery on the Electrolytic Conductivity Detector.  
Surrogate Recovery on the Photoionization Detector.

##### Standard Measured Standard Amt Added Standard % Recovery

Amount measured for a laboratory control sample  
Known value for a laboratory control sample  
% recovered for a laboratory control sample with a known value.

##### Lab Fort Blank Amt Lab Fort Blk. Found Lab Fort Blk % Rec Dup Lab Fort Bl Amt Dup Lab Fort Bl Fnd Dup Lab Fort Bl % Rec Lab Fort Blank Range

Laboratory Fortified Blank Amount Added  
Laboratory Fortified Blank Amount Found  
Laboratory Fortified Blank % Recovered  
Duplicate Laboratory Fortified Blank Amount Added  
Duplicate Laboratory Fortified Blank Amount Found  
Duplicate Laboratory Fortified Blank % Recovery  
Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).

##### Lab Fort Bl. Av. Rec.

Laboratory Fortified Blank Average Recovery

##### Duplicate Sample Amt MSD Amount Added MSD Amt Measured MSD % Recovery MSD Range

Sample Value for Duplicate used with Matrix Spike Duplicate  
Matrix Spike Duplicate Amount Added (Spiked)  
Matrix Spike Duplicate Amount Measured  
Matrix Spike Duplicate % Recovery  
Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries



CONTEST

Phone: 413-525-2333  
Fax: 413-525-6405  
Email: [info@conciac.org](mailto:info@conciac.org)

**AIR SAMPLE CHAN OF CUSTODY  
RECORD**

39 SPRUCE ST  
EAST LONGMEADOW, MA 01028

Page 1 of 1

Company Name: <b>MACTEC</b>		www.contestlabs.com	
Address: <b>107 Audubon Rd.</b>		Telephone: <b>(781) 245-6666</b>	
Project # <b>365005ac4-18</b>		FAX: <b>365005ac4-18</b>	
Project Location: <b>Dave Heisken</b> , RI Wakefield, MA 01880		Client PO #	
Sampled By: <b>Phil Miller</b>		Proposal Provided? (For Billing purposes)	
<input checked="" type="checkbox"/> yes <b>3-5-08</b> proposal date		<input type="checkbox"/> no	
<b>DATA DELIVERY</b> (check one): <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> WEBSITE CLIENT Email: <b>deheisken@mactec.com</b> Format: <input type="checkbox"/> EXCEL <input type="checkbox"/> PDF <input type="checkbox"/> GIS KEY <input checked="" type="checkbox"/> OTHER <b>Date Sampled</b> ONLY USE WHEN USING PUMPS			
Field ID	Sample Description	Media	Lab #
<b>AS4104</b>	<b>S</b>	<b>08810366</b>	<b>3-21-08 3-21-08</b>
<b>AS4204</b>	<b>S</b>	<b>b7</b>	<b>3-21-08 3-21-08</b>
<b>AS4304</b>	<b>S</b>	<b>68</b>	<b>3-21-08 3-21-08</b>
<b>AS4404</b>	<b>S</b>	<b>6a</b>	<b>3-21-08 3-21-08</b>
<b>AS4504</b>	<b>S</b>	<b>70</b>	<b>3-21-08 3-21-08</b>
<b>AS4604</b>	<b>S</b>	<b>71</b>	<b>3-21-08 3-21-08</b>
<b>AS4704</b>	<b>S</b>	<b>72</b>	<b>3-21-08 3-21-08</b>
Laboratory Comments:			
<b>CLIENT COMMENTS:</b>  Relinquished by: (signature) <b>J. Miller</b> Date/Time: <b>3-24-08 / 1030</b> Turnaround ** <b>R</b> 7-Day Received by: (signature) <b>J. Miller</b> Date/Time: <b>3-25-08 / 1030</b> <input checked="" type="checkbox"/> 10-Day Relinquished by: (signature) <b>J. Miller</b> Date/Time: <b>3-25-08 / 1030</b> <input checked="" type="checkbox"/> Other _____ RUSH * <b>Y</b> Received by: (signature) <b>J. Miller</b> Date/Time: <b>3-25-08 / 1030</b> <input type="checkbox"/> *24-Hr <input type="checkbox"/> *48-Hr Required Detection Limits: <b>Stand.</b> *Approval Required			
<b>ANALYSIS REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b>F</b> <input type="checkbox"/> <b>R</b> <input type="checkbox"/> <b>P</b> <input type="checkbox"/> <b>T</b> <input type="checkbox"/> <b>U</b> <input type="checkbox"/> <b>S</b> <input type="checkbox"/> <b>G</b> <input type="checkbox"/> <b>Hg</b> <input type="checkbox"/> <b>n</b> <input type="checkbox"/> <b>i</b> <input type="checkbox"/> <b>h</b> <input type="checkbox"/> <b>a</b> <input type="checkbox"/> <b>e</b> <input type="checkbox"/> <b>p</b> <input type="checkbox"/> <b>t</b> <input type="checkbox"/> <b>u</b> <input type="checkbox"/> <b>s</b> <input type="checkbox"/> <b>o</b> <input type="checkbox"/> <b>Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.</b>			
<b>ANALYSIS</b> <b>REQUESTED</b> <b>I</b> <input type="checkbox"/> <b			



www.contestlabs.com

39 Spruce Street  
East Longmeadow, MA  
Phone: 1-413-525-2332  
Fax: 1-413-525-6405

SAMPLE RECEIPT CHECKLIST

CLIENT NAME: *MACTEC*  
RECEIVED BY: *Km*

DATE: *03/25/08*

1. Was chain of custody relinquished and signed?  
2. Does Chain agree with samples?

YES  
YES

NO  
NO

If not, explain:

3. All Samples in good condition?

YES

NO

If not, explain:

4. Were samples received in compliance with
- 
- Temperature 0-6 degrees C?

YES

NO

Degrees by temp  
blank *n/a*Degrees by temp  
gun *n/a*

5. Are there any dissolved samples for the lab to filter? YES

NO

Who was notified?

Date:

Time:

6. Are there any on hold samples?

YES

NO

STORED WHERE:

7. Are there any short holding time samples and who was notified? Date: Time:

8. Location where samples are stored:

CONTAINERS SENT IN TO CON-TEST	# of container
1 liter amber	
500 ml amber	
250 ml amber (8oz. Amber)	
1 liter plastic	
500 ml plastic	
250 ml plastic	
40 ml vial—which kind—list below	
Colisure bottle	
Dissolved oxygen bottle	
Flashpoint bottle	

CONTAINERS SENT TO CON-TEST	# of containers
Air Cassettes	
8 oz clear jar	
4 oz clear jar	
2 oz clear jar	
Plastic bag	
Encore	
Brass Sleeves	
Tubes	
Summa cans	
Other	<i>restr. bags</i>
	8
	8

Laboratory comments:

# of HCL Vial \_\_\_\_\_ # of Methanol vials \_\_\_\_\_ # of Sodium Bisulfate vials \_\_\_\_\_

# of DI water(to be frozen) vials \_\_\_\_\_ Time and Date when frozen \_\_\_\_\_

Do all the samples have the correct pH levels? YES NO If no, please explain above

## **Appendix B**

### **Weather Data During Soil Vapor Sampling**

## History for Providence, RI

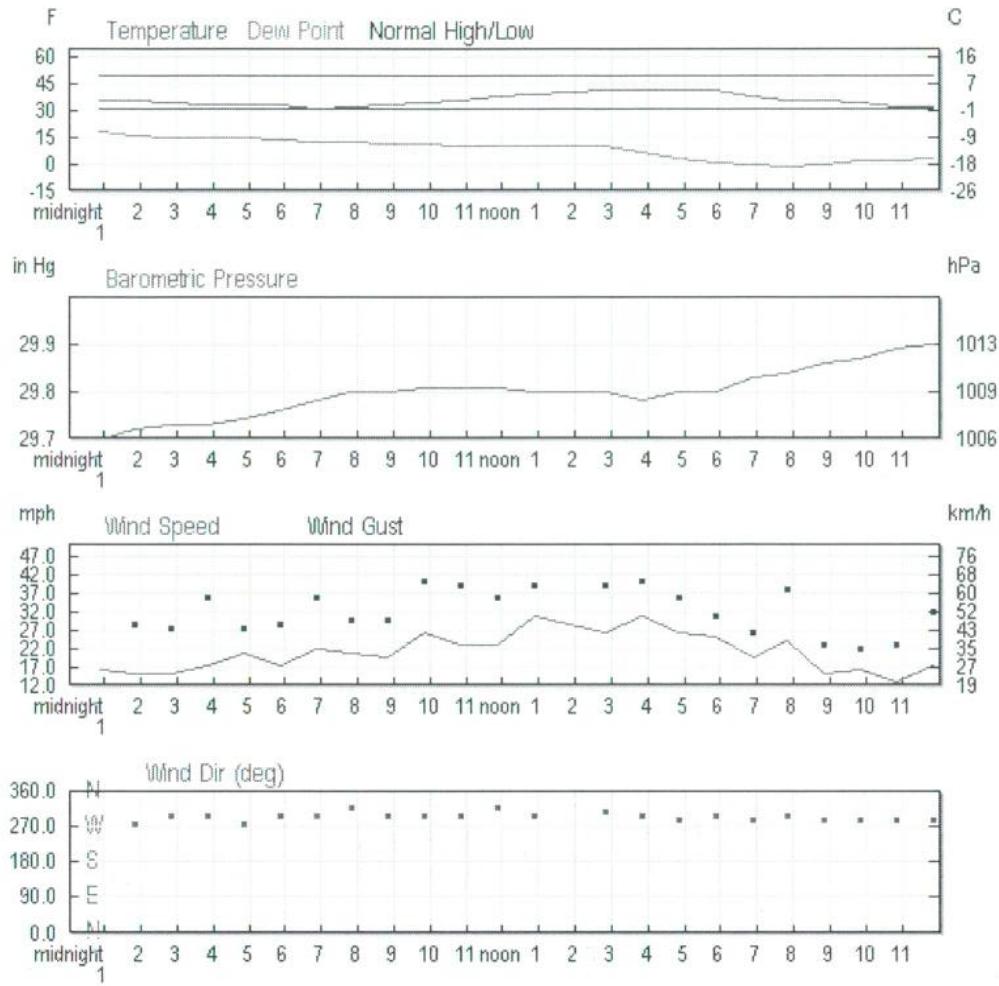
Friday, March 21, 2008

### Daily Summary

	Actual:	Average :	Record :
<b>Temperature:</b>			
Mean Temperature	37 °F / 2 °C	40 °F / 4 °C	
Max Temperature	42 °F / 5 °C	49 °F / 9 °C	84 °F / 28 °C (1921)
Min Temperature	31 °F / 0 °C	31 °F / 0 °C	12 °F / -11 °C (1986)
<b>Degree Days:</b>			
Heating Degree Days	28	25	
Month to date heating degree days	521	587	
Since 1 July heating degree days	4321	4765	
Cooling Degree Days	0	0	
Month to date cooling degree days	0	0	
Year to date cooling degree days	0	0	
<b>Moisture:</b>			
Dew Point	10 °F / -12 °C		
Average Humidity	33		
Maximum Humidity	47		
Minimum Humidity	18		
<b>Precipitation:</b>			
Precipitation	0.00 in / 0.00 cm	0.15 in / 0.38 cm	2.02 in / 5.13 cm (1974)
Month to date precipitation	6.08	2.93	
Year to date precipitation	16.05	10.75	
<b>Snow:</b>			
Snow	0.00 in / 0.00 cm	0.20 in / 0.51 cm	4.60 in / 11.68 cm (1912)
Month to date snowfall	1.2	4.7	
Since 1 July snowfall	24.5	33.8	
Snow Depth	0.00 in / 0.00 cm		
<b>Sea Level Pressure:</b>			
Sea Level Pressure	29.79 in / 1009 hPa		
<b>Wind:</b>			
Wind Speed	21 mph / 33 km/h (WNW)		
Max Wind Speed	32 mph / 52 km/h		
Max Gust Speed	43 mph / 69 km/h		
Visibility	10 miles / 16 kilometers		
Events			

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summary



## Hourly Observations

Time (EDT):	Temp.: / °C	Dew Point: / °C	Humidity:	Sea Level Pressure: / hPa	Visibility: / kilometers	Wind Dir:	Wind Speed: / mph / km/h / m/s	Gust Speed: / mph / km/h	Precip:	Events:	Conditions:
12:51 AM	36.0 / 2.2	18.0 / -7.8	48%	29.70 / 1005.8	10.0 miles / 16.1 kilometers	West	16.1 / 25.9 / 7.2	23.0 / 37.0 / 10.3	N/A		Partly Cloudy
1:51 AM	35.1 / 1.7	16.0 / -8.9	46%	29.72 / 1006.4	10.0 miles / 16.1 kilometers	West	15.0 / 24.1 / 6.7	28.8 / 46.3 / 12.9	N/A		Scattered Clouds
2:51 AM	34.0 / 1.1	15.1 / -9.4	46%	29.73 / 1006.7	10.0 miles / 16.1 kilometers	WNW	15.0 / 24.1 / 6.7	27.6 / 44.4 / 12.3	N/A		Partly Cloudy
3:51 AM	33.1 / 0.6	15.1 / -9.4	48%	29.73 / 1006.7	10.0 miles / 16.1 kilometers	WNW	17.3 / 27.8 / 7.7	35.7 / 57.4 / 15.9	N/A		Partly Cloudy
4:51 AM	33.1 / 0.6	15.1 / -9.4	48%	29.74 / 1007.0	10.0 miles / 16.1 kilometers	West	20.7 / 33.3 / 9.3	27.6 / 44.4 / 12.3	N/A		Scattered Clouds
5:51 AM	33.1 / 0.6	14.0 / -10.0	46%	29.76 / 1007.8	10.0 miles / 16.1 kilometers	WNW	17.3 / 27.8 / 7.7	28.8 / 46.3 / 12.9	N/A		Scattered Clouds
6:51 AM	30.9 /	12.0 / -11.1	46%	29.78 / 1008.3	10.0 miles / 16.1 kilometers	WNW	21.9 / 35.2	35.7 / 57.4	N/A		Partly Cloudy

<b>-0.6 °C</b>				<b>/ 9.8 m/s</b>	<b>/ 15.9 m/s</b>					
7:51 AM	32.0 °F / 0.0 °C	12.0 °F / -11.1 °C	44%	29.80 in / 1009.1 hPa	10.0 miles / 16.1 kilometers	NW	20.7 mph / 33.3 km/h / 9.3 m/s	29.9 mph / 48.2 km/h / 13.4 m/s	N/A	Partly Cloudy
8:51 AM	33.1 °F / 0.6 °C	10.9 °F / -11.7 °C	40%	29.80 in / 1008.9 hPa	10.0 miles / 16.1 kilometers	WNW	19.6 mph / 31.5 km/h / 8.7 m/s	29.9 mph / 48.2 km/h / 13.4 m/s	N/A	Partly Cloudy
9:51 AM	34.0 °F / 1.1 °C	10.9 °F / -11.7 °C	38%	29.81 in / 1009.3 hPa	10.0 miles / 16.1 kilometers	WNW	26.5 mph / 42.6 km/h / 11.8 m/s	40.3 mph / 64.8 km/h / 18.0 m/s	N/A	Partly Cloudy
10:51 AM	36.0 °F / 2.2 °C	10.0 °F / -12.2 °C	34%	29.81 in / 1009.4 hPa	10.0 miles / 16.1 kilometers	WNW	23.0 mph / 37.0 km/h / 10.3 m/s	39.1 mph / 63.0 km/h / 17.5 m/s	N/A	Scattered Clouds
11:51 AM	37.9 °F / 3.3 °C	10.0 °F / -12.2 °C	32%	29.81 in / 1009.2 hPa	10.0 miles / 16.1 kilometers	NW	23.0 mph / 37.0 km/h / 10.3 m/s	35.7 mph / 57.4 km/h / 15.9 m/s	N/A	Scattered Clouds
12:51 PM	39.0 °F / 3.9 °C	10.0 °F / -12.2 °C	30%	29.80 in / 1008.9 hPa	10.0 miles / 16.1 kilometers	WNW	31.1 mph / 50.0 km/h / 13.9 m/s	39.1 mph / 63.0 km/h / 17.5 m/s	N/A	Scattered Clouds
2:51 PM	41.0 °F / 5.0 °C	10.0 °F / -12.2 °C	28%	29.80 in / 1008.9 hPa	10.0 miles / 16.1 kilometers	NW	26.5 mph / 42.6 km/h / 11.8 m/s	39.1 mph / 63.0 km/h / 17.5 m/s	N/A	Scattered Clouds
3:51 PM	41.0 °F / 5.0 °C	7.0 °F / -13.9 °C	25%	29.78 in / 1008.5 hPa	10.0 miles / 16.1 kilometers	WNW	31.1 mph / 50.0 km/h / 13.9 m/s	40.3 mph / 64.8 km/h / 18.0 m/s	N/A	Partly Cloudy
4:51 PM	41.0 °F / 5.0 °C	3.0 °F / -16.1 °C	21%	29.80 in / 1008.9 hPa	10.0 miles / 16.1 kilometers	WNW	26.5 mph / 42.6 km/h / 11.8 m/s	35.7 mph / 57.4 km/h / 15.9 m/s	N/A	Partly Cloudy
5:51 PM	41.0 °F / 5.0 °C	1.0 °F / -17.2 °C	19%	29.80 in / 1009.0 hPa	10.0 miles / 16.1 kilometers	WNW	25.3 mph / 40.7 km/h / 11.3 m/s	31.1 mph / 50.0 km/h / 13.9 m/s	N/A	Partly Cloudy
6:51 PM	37.9 °F / 3.3 °C	-0.0 °F / -17.8 °C	20%	29.83 in / 1010.1 hPa	10.0 miles / 16.1 kilometers	WNW	19.6 mph / 31.5 km/h / 8.7 m/s	26.5 mph / 42.6 km/h / 11.8 m/s	N/A	Scattered Clouds
7:51 PM	36.0 °F / 2.2 °C	-2.0 °F / -18.9 °C	20%	29.84 in / 1010.3 hPa	10.0 miles / 16.1 kilometers	WNW	24.2 mph / 38.9 km/h / 10.8 m/s	38.0 mph / 61.1 km/h / 17.0 m/s	N/A	Partly Cloudy
8:51 PM	35.1 °F / 1.7 °C	-0.0 °F / -17.8 °C	23%	29.86 in / 1011.1 hPa	10.0 miles / 16.1 kilometers	WNW	15.0 mph / 24.1 km/h / 6.7 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Partly Cloudy
9:51 PM	34.0 °F / 1.1 °C	1.9 °F / -16.7 °C	26%	29.87 in / 1011.5 hPa	10.0 miles / 16.1 kilometers	WNW	16.1 mph / 25.9 km/h / 7.2 m/s	21.9 mph / 35.2 km/h / 9.8 m/s	N/A	Partly Cloudy
10:51 PM	32.0 °F / 0.0 °C	1.9 °F / -16.7 °C	28%	29.89 in / 1012.0 hPa	10.0 miles / 16.1 kilometers	WNW	12.7 mph / 20.4 km/h / 5.7 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Partly Cloudy
11:51 PM	32.0 °F / 0.0 °C	3.0 °F / -16.1 °C	29%	29.90 in / 1012.5 hPa	10.0 miles / 16.1 kilometers	WNW	17.3 mph / 27.8 km/h / 7.7 m/s	32.2 mph / 51.9 km/h / 14.4 m/s	N/A	Partly Cloudy



## History for Providence, RI

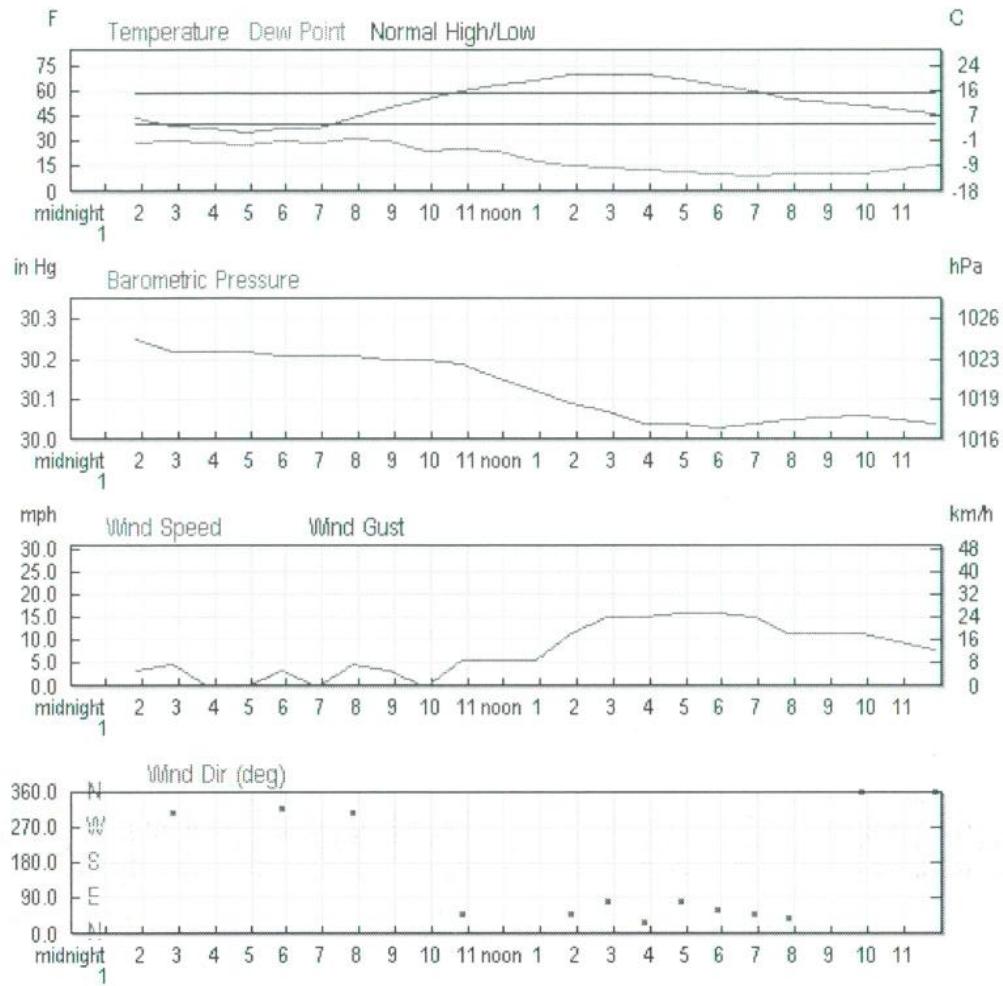
Thursday, April 17, 2008

### Daily Summary

	Actual:	Average :	Record :
<b>Temperature:</b>			
Mean Temperature	53 °F / 11 °C	49 °F / 9 °C	
Max Temperature	71 °F / 21 °C	59 °F / 15 °C	93 °F / 33 °C (2002)
Min Temperature	34 °F / 1 °C	40 °F / 4 °C	23 °F / -5 °C (1908)
<b>Degree Days:</b>			
Heating Degree Days	12	16	
Month to date heating degree days	285	316	
Since 1 July heating degree days	4867	5311	
Cooling Degree Days	0	0	
Month to date cooling degree days	0	0	
Year to date cooling degree days	0	0	
Growing Degree Days	2 (Base 50)		
<b>Moisture:</b>			
Dew Point	20 °F / -6 °C		
Average Humidity	44		
Maximum Humidity	76		
Minimum Humidity	11		
<b>Precipitation:</b>			
Precipitation	0.00 in / 0.00 cm	0.14 in / 0.36 cm	2.33 in / 5.92 cm (1954)
Month to date precipitation	1.77	2.43	
Year to date precipitation	18.21	14.68	
<b>Snow:</b>			
Snow	0.00 in / 0.00 cm	T in / T cm	0.50 in / 1.27 cm (1935)
Month to date snowfall	0.0	0.9	
Since 1 July snowfall	24.5	35.6	
Snow Depth	0.00 in / 0.00 cm		
<b>Sea Level Pressure:</b>			
Sea Level Pressure	30.14 in / 1021 hPa		
<b>Wind:</b>			
Wind Speed	8 mph / 12 km/h (NNE)		
Max Wind Speed	16 mph / 26 km/h		
Max Gust Speed	21 mph / 34 km/h		
Visibility	10 miles / 16 kilometers		
Events			

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summary



## Hourly Observations

Time (EDT):	Temp.:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions:
1:51 AM	44.1 °F / 6.7 °C	28.9 °F / -1.7 °C	55%	30.25 in / 1024.2 hPa	10.0 miles / 16.1 kilometers	NW	3.5 mph / 5.6 km/h / - 1.5 m/s	-	N/A		Clear
2:51 AM	39.9 °F / 4.4 °C	30.0 °F / -1.1 °C	68%	30.22 in / 1023.4 hPa	10.0 miles / 16.1 kilometers	NW	4.6 mph / 7.4 km/h / - 2.1 m/s	-	N/A		Clear
3:51 AM	37.9 °F / 3.3 °C	28.9 °F / -1.7 °C	70%	30.22 in / 1023.2 hPa	10.0 miles / 16.1 kilometers	Calm	Calm	-	N/A		Clear
4:51 AM	35.1 °F / 1.7 °C	28.0 °F / -2.2 °C	76%	30.22 in / 1023.2 hPa	9.0 miles / 14.5 kilometers	Calm	Calm	-	N/A		Clear
5:51 AM	37.9 °F / 3.3 °C	30.0 °F / -1.1 °C	73%	30.21 in / 1023.0 hPa	10.0 miles / 16.1 kilometers	NW	3.5 mph / 5.6 km/h / - 1.5 m/s	-	N/A		Partly Cloudy
6:51 AM	37.9 °F / 3.3 °C	28.9 °F / -1.7 °C	70%	30.21 in / 1022.9 hPa	10.0 miles / 16.1 kilometers	Calm	Calm	-	N/A		Scattered Clouds
7:51 AM	44.6 °F / 7.0 °C	32.0 °F / 0.0 °C	61%	30.21 in / 1022.8 hPa	10.0 miles / 16.1 kilometers	NW	4.6 mph / 7.4 km/h / - 2.1 m/s	-	N/A		Scattered Clouds
8:51	51.1 °F /	30.0 °F	44%	30.20 in /	10.0 miles /	Variable	3.5 mph / 5.6 km/h /	-	N/A		Scattered

AM	10.6 °C / -1.1 °C	1022.7 hPa	16.1 kilometers	1.5 m/s		Clouds				
9:51 AM	55.9 °F / 13.3 °C	24.1 °F / -4.4 °C	29%	30.20 in / 1022.6 hPa	10.0 miles / 16.1 kilometers	Calm	Calm	-	N/A	Scattered Clouds
10:51 AM	60.1 °F / 15.6 °C	25.0 °F / -3.9 °C	26%	30.19 in / 1022.1 hPa	10.0 miles / 16.1 kilometers	NE	5.8 mph / 9.3 km/h / 2.6 m/s	-	N/A	Partly Cloudy
11:51 AM	64.0 °F / 17.8 °C	24.1 °F / -4.4 °C	22%	30.15 in / 1020.9 hPa	10.0 miles / 16.1 kilometers	Variable	5.8 mph / 9.3 km/h / 2.6 m/s	-	N/A	Scattered Clouds
12:51 PM	66.9 °F / 19.4 °C	18.0 °F / -7.8 °C	15%	30.12 in / 1019.7 hPa	10.0 miles / 16.1 kilometers	Variable	5.8 mph / 9.3 km/h / 2.6 m/s	-	N/A	Scattered Clouds
1:51 PM	70.0 °F / 21.1 °C	15.1 °F / -9.4 °C	12%	30.09 in / 1019.0 hPa	10.0 miles / 16.1 kilometers	NE	11.5 mph / 18.5 km/h / 5.1 m/s	-	N/A	Scattered Clouds
2:51 PM	70.0 °F / 21.1 °C	14.0 °F / -10.0 °C	12%	30.07 in / 1018.1 hPa	10.0 miles / 16.1 kilometers	East	15.0 mph / 24.1 km/h / 6.7 m/s	-	N/A	Scattered Clouds
3:51 PM	70.0 °F / 21.1 °C	12.9 °F / -10.6 °C	11%	30.04 in / 1017.0 hPa	10.0 miles / 16.1 kilometers	NNE	15.0 mph / 24.1 km/h / 6.7 m/s	-	N/A	Scattered Clouds
4:51 PM	68.0 °F / 20.0 °C	12.2 °F / -11.0 °C	12%	30.04 in / 1017.1 hPa	10.0 miles / 16.1 kilometers	East	16.1 mph / 25.9 km/h / 7.2 m/s	20.7 mph / 33.3 km/h / 9.3 m/s	N/A	Scattered Clouds
5:51 PM	64.0 °F / 17.8 °C	10.9 °F / -11.7 °C	13%	30.03 in / 1016.8 hPa	10.0 miles / 16.1 kilometers	ENE	16.1 mph / 25.9 km/h / 7.2 m/s	-	N/A	Scattered Clouds
6:51 PM	60.1 °F / 15.6 °C	9.0 °F / -12.8 °C	13%	30.04 in / 1017.1 hPa	10.0 miles / 16.1 kilometers	NE	15.0 mph / 24.1 km/h / 6.7 m/s	-	N/A	Scattered Clouds
7:51 PM	55.0 °F / 12.8 °C	10.9 °F / -11.7 °C	17%	30.05 in / 1017.5 hPa	10.0 miles / 16.1 kilometers	NE	11.5 mph / 18.5 km/h / 5.1 m/s	-	N/A	Scattered Clouds
9:51 PM	52.0 °F / 11.1 °C	10.9 °F / -11.7 °C	19%	30.06 in / 1017.8 hPa	10.0 miles / 16.1 kilometers	North	11.5 mph / 18.5 km/h / 5.1 m/s	-	N/A	Scattered Clouds
11:51 PM	46.9 °F / 8.3 °C	15.1 °F / -9.4 °C	28%	30.04 in / 1017.0 hPa	10.0 miles / 16.1 kilometers	North	8.1 mph / 13.0 km/h / 3.6 m/s	-	N/A	Scattered Clouds



Copyright © 2008 The Weather Underground, Inc.

## **Appendix C**

### **Shaw 2008 Groundwater Data and ESS Laboratory Report for Groundwater Samples**

**Table 3**  
**Groundwater Analytical Results**  
**February 2008**  
Former Gorham Manufacturing Facility  
Providence, Rhode Island

CONSTITUENT	MW-116D 2/7/2008 Primary	MW-116S 2/7/2008 Primary	MW-201D 2/7/2008 Primary	MW-202D 2/7/2008 Primary	MW-202S 2/7/2008 Primary	MW-207D 2/7/2008 Primary	MW-207S 2/7/2008 Primary	MW-209D 2/7/2008 Primary	MW-216D 2/7/2008 Primary	MW-216S 2/7/2008 Primary	MW-217D 2/7/2008 Primary	MW-217S 2/7/2008 Primary	MW-218D 2/7/2008 Primary	MW-218S 2/7/2008 Primary
<b>VOCs (ug/l)</b>														
1,1-Dichloroethane	<2	<2	<200	<400	<400	<2	<40	<2	<2	2.1	<2	<2	<20	<20
1,1-Dichloroethene	<1	<1	<100	<200	<200	<1	<20	<1	<1	<1	<1	<1	22	<10
1,2,4-Trimethylbenzene	<2	<2	<200	<400	<400	<2	<40	<2	<2	11	<2	<2	<20	<20
1,3,5-Trimethylbenzene	<2	<2	<200	<400	<400	<2	<40	<2	<2	8.4	<2	<2	<20	<20
Bromodichloromethane	3.1	2.9	<200	<400	<400	<2	<40	<2	<2	<2	<2	<2	<20	<20
Chloroform	35	28	<200	<400	<400	<2	<40	<2	<2	<2	<2	<2	<20	<20
cis-1,2-Dichloroethene	<2	<2	<200	<400	<400	19	<40	2.3	<2	58	42	25	<20	87
Ethylbenzene	<2	<2	<200	<400	<400	<2	<40	<2	<2	2.2	<2	<2	<20	<20
m/p-xylene	<2	<2	<200	<400	<400	<2	<40	<2	<2	5.8	<2	<2	<20	<20
Methyltert-butylether	<2	<2	<200	<400	<400	<2	<40	2.5	<2	<2	<2	<2	<20	<20
Naphthalene	<5	<5	<500	<1000	<1000	<5	<100	<5	<5	21	<5	<5	<50	<50
o-Xylene	<2	<2	<200	<400	<400	<2	<40	<2	<2	8.3	<2	<2	<20	<20
Tetrachloroethylene	<2	<2	7000	9500	25000	1600	1300	74	<2	<2	<2	7.8	1400	170
Toluene	<2	<2	<200	<400	<400	<2	<40	<2	<2	2.7	<2	<2	<20	<20
Trichloroethylene	<2	<2	870	<400	<400	76	73	24	<2	23	<2	580	<20	<20
Vinyl chloride	<2	<2	<200	<400	<400	<2	<40	<2	<2	<2	<2	<2	<20	<20
Xylene (total)	<2	<2	<200	<400	<400	<2	<40	<2	<2	14	<2	<2	<20	<20
<b>TPH (mg/l)</b>														
Unidentified TPH	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Metals 6010B (ug/l)</b>														
Dissolved Lead	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<p><b>Notes:</b></p> <p>&lt; = Less than the laboratory reporting limit</p> <p>ug/l = Micro grams per liter, parts per billion</p> <p>mg/l = Milligrams per liter, parts per million</p> <p>TPH = Total Petroleum Hydrocarbons</p> <p>--- = Not analyzed for.</p>														

Source: Status Report: February 2008 Activities, Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, RI.

Prepared by Shaw, 2008: Site Remediation Case No. 97-030 (Shaw, 2008).



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

## PROJECT NARRATIVE

David Heislein  
MACTEC Engineering & Consulting, Inc.  
107 Audubon Road  
Wakefield, MA 01880

**RE: Providence Gorham Site**  
**ESS Laboratory Work Order Number: 0804037**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this Project Narrative, the entire report has been paginated. The ESS Laboratory Certifications sheet is the final report page. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard  
Laboratory Director

Date: April 09, 2008

### Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration may be used instead of automated integration because it produces more accurate results. All ICP Metals were analyzed using the established linear dynamic range to determine acceptable analytical results.

ESS Laboratory certifies that the test results meet the requirements of NELAC, except where noted within this project narrative.

### Sample Receipt

The following sample(s) were received on April 02, 2008 for the analyses specified on the enclosed Chain of Custody Record.

Laboratory ID	Matrix	Client SampleID
0804037-01	Ground Water	MW 227D01
0804037-02	Ground Water	MW 227S01
0804037-03	Ground Water	MW 227S01 Dup
0804037-04	Ground Water	MW 220S01
0804037-05	Ground Water	MW 221S01
0804037-06	Ground Water	MW 228D01
0804037-07	Ground Water	MW 228S01
0804037-08	Ground Water	MW 228S01 Dup
0804037-09	Ground Water	MW 230D01
0804037-10	Ground Water	MW 230S01

0804037-11	Ground Water	MW 226S01
0804037-12	Ground Water	MW 229S01
0804037-13	Ground Water	MW 226D01
0804037-14	Ground Water	Equipment Blank



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## PROJECT NARRATIVE

### 8260B Volatile Organic Compounds

BD80709-BS1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BD80807-BS1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BD80807-BS1	<b>Blank Spike recovery is below lower control limit.</b> Tetrahydrofuran
BD80807-BSD1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BD80807-MS1	<b>Due to high target values, matrix spike is masked.</b> 1,1,1-Trichloroethane, Tetrachloroethene, Trichloroethene
BD80807-MS1	<b>Matrix Spike recovery is above upper control limit.</b> Diethyl Ether, Vinyl Chloride
BD80807-MS1	<b>Matrix Spike recovery is below lower control limit.</b> 1,1-Dichloroethane
BD80807-MSD1	<b>Due to high target values, matrix spike is masked.</b> 1,1,1-Trichloroethane, Tetrachloroethene, Trichloroethene
BD80807-MSD1	<b>Matrix Spike recovery is above upper control limit.</b> Diethyl Ether, Vinyl Chloride
BD80807-MSD1	<b>Matrix Spike recovery is below lower control limit.</b> 1,1-Dichloroethane
BD80807-MSD1	<b>Relative percent difference for duplicate is outside of criteria.</b> 1,1,1-Trichloroethane
BD80909-BSD1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BRD0073-CCV1	<b>Continuing Calibration recovery is below lower control limit.</b> 1,4-Dioxane - Screen, Bromomethane
BRD0085-CCV1	<b>Continuing Calibration recovery is below lower control limit.</b> 1,4-Dioxane - Screen

No other observations noted.

End of Project Narrative.



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227D01

Date Sampled: 03/31/08 10:18

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-01

Sample Matrix: Ground Water

Analyst: MD

## 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	RI - GA		<u>Analyzed</u>
				<u>Limit</u>	<u>DF</u>	
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/07/08
<b>1,1,1-Trichloroethane</b>	<b>0.224</b>	mg/L	0.0500	0.2	50	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/07/08
<b>1,1,2-Trichloroethane</b>	<b>0.0033</b>	mg/L	0.0010	0.005	1	04/07/08
<b>1,1-Dichloroethane</b>	<b>0.0143</b>	mg/L	0.0010		1	04/07/08
<b>1,1-Dichloroethene</b>	<b>0.158</b>	mg/L	0.0500	0.007	50	04/08/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/07/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/07/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/07/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/07/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/07/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/07/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
<b>1,2-Dichloroethane</b>	<b>0.0013</b>	mg/L	0.0010	0.005	1	04/07/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/07/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/07/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/07/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/07/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
2-Butanone	ND	mg/L	0.0250		1	04/07/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
2-Hexanone	ND	mg/L	0.0100		1	04/07/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/07/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/07/08
Acetone	ND	mg/L	0.0250		1	04/07/08
Benzene	ND	mg/L	0.0010	0.005	1	04/07/08
Bromobenzene	ND	mg/L	0.0020		1	04/07/08
Bromochloromethane	ND	mg/L	0.0010		1	04/07/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/07/08
Bromoform	ND	mg/L	0.0010		1	04/07/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227D01

Date Sampled: 03/31/08 10:18

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-01

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020	1	04/07/08	
Carbon Disulfide	ND	mg/L	0.0010	1	04/07/08	
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/07/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/07/08
Chloroethane	ND	mg/L	0.0020	1	04/07/08	
<b>Chloroform</b>	<b>0.0218</b>	mg/L	0.0010	1	04/07/08	
Chloromethane	ND	mg/L	0.0020	1	04/07/08	
<b>cis-1,2-Dichloroethene</b>	<b>0.0985</b>	mg/L	0.0500	0.07	50	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/07/08	
Dibromochloromethane	ND	mg/L	0.0010	1	04/07/08	
Dibromomethane	ND	mg/L	0.0010	1	04/07/08	
Dichlorodifluoromethane	ND	mg/L	0.0020	1	04/07/08	
Diethyl Ether	ND	mg/L	0.0010	1	04/07/08	
Di-isopropyl ether	ND	mg/L	0.0010	1	04/07/08	
Ethyl tertiary-butyl ether	ND	mg/L	0.0010	1	04/07/08	
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/07/08
Hexachlorobutadiene	ND	mg/L	0.0006	1	04/07/08	
Hexachloroethane	ND	mg/L	0.0010	1	04/07/08	
Isopropylbenzene	ND	mg/L	0.0010	1	04/07/08	
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/07/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/07/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/07/08
n-Butylbenzene	ND	mg/L	0.0010	1	04/07/08	
n-Propylbenzene	ND	mg/L	0.0010	1	04/07/08	
sec-Butylbenzene	ND	mg/L	0.0010	1	04/07/08	
Styrene	ND	mg/L	0.0010	0.1	1	04/07/08
tert-Butylbenzene	ND	mg/L	0.0010	1	04/07/08	
Tertiary-amyl methyl ether	ND	mg/L	0.0010	1	04/07/08	
<b>Tetrachloroethene</b>	<b>0.0047</b>	mg/L	0.0010	0.005	1	04/07/08
Tetrahydrofuran	ND	mg/L	0.0050	1	04/07/08	
Toluene	ND	mg/L	0.0010	1	04/07/08	
<b>trans-1,2-Dichloroethene</b>	<b>0.0114</b>	mg/L	0.0010	0.1	1	04/07/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/07/08	
<b>Trichloroethene</b>	<b>3.94</b>	mg/L	0.0500	0.005	50	04/08/08
<b>Trichlorofluoromethane</b>	<b>0.0013</b>	mg/L	0.0010	1	04/07/08	
Vinyl Acetate	ND	mg/L	0.0050	1	04/07/08	



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227D01

Date Sampled: 03/31/08 10:18

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-01

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/07/08
Xylene O	ND	mg/L	0.0010	10	1	04/07/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/07/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/07/08
Trihalomethanes (Total)	<b>0.0218</b>	mg/L	0.0036	0.1		04/07/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	109 %		70-130
Surrogate: 4-Bromofluorobenzene	97 %		70-130
Surrogate: Dibromofluoromethane	105 %		70-130
Surrogate: Toluene-d8	97 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227S01

Date Sampled: 03/31/08 12:15

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-02

Sample Matrix: Ground Water

Analyst: MD

## 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Limit</u>	<u>RI - GA</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010			1	04/07/08
1,1,1-Trichloroethane	<b>0.432</b>	mg/L	0.0100	0.2		10	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005			1	04/07/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005		1	04/07/08
1,1-Dichloroethane	<b>0.105</b>	mg/L	0.0100			10	04/08/08
1,1-Dichloroethene	<b>0.0128</b>	mg/L	0.0010	0.007		1	04/07/08
1,1-Dichloropropene	ND	mg/L	0.0020			1	04/07/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010			1	04/07/08
1,2,3-Trichloropropane	ND	mg/L	0.0010			1	04/07/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07		1	04/07/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010			1	04/07/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002		1	04/07/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005		1	04/07/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6		1	04/07/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005		1	04/07/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005		1	04/07/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010			1	04/07/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6		1	04/07/08
1,3-Dichloropropane	ND	mg/L	0.0010			1	04/07/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075		1	04/07/08
1,4-Dioxane - Screen	ND	mg/L	0.500			1	04/07/08
1-Chlorohexane	ND	mg/L	0.0010			1	04/07/08
2,2-Dichloropropane	ND	mg/L	0.0010			1	04/07/08
2-Butanone	ND	mg/L	0.0250			1	04/07/08
2-Chlorotoluene	ND	mg/L	0.0010			1	04/07/08
2-Hexanone	ND	mg/L	0.0100			1	04/07/08
4-Chlorotoluene	ND	mg/L	0.0010			1	04/07/08
4-Isopropyltoluene	ND	mg/L	0.0010			1	04/07/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250			1	04/07/08
Acetone	ND	mg/L	0.0250			1	04/07/08
Benzene	ND	mg/L	0.0010	0.005		1	04/07/08
Bromobenzene	ND	mg/L	0.0020			1	04/07/08
Bromochloromethane	ND	mg/L	0.0010			1	04/07/08
Bromodichloromethane	ND	mg/L	0.0006			1	04/07/08
Bromoform	ND	mg/L	0.0010			1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227S01

Date Sampled: 03/31/08 12:15

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-02

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/07/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/07/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/07/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/07/08
<b>Chloroethane</b>	<b>0.0023</b>	mg/L	0.0020		1	04/07/08
<b>Chloroform</b>	<b>0.0078</b>	mg/L	0.0010		1	04/07/08
Chloromethane	ND	mg/L	0.0020		1	04/07/08
<b>cis-1,2-Dichloroethene</b>	<b>0.0389</b>	mg/L	0.0010	0.07	1	04/07/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/07/08
Dibromomethane	ND	mg/L	0.0010		1	04/07/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/07/08
Diethyl Ether	ND	mg/L	0.0010		1	04/07/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/07/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/07/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/07/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/07/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/07/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/07/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/07/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/07/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/07/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/07/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Styrene	ND	mg/L	0.0010	0.1	1	04/07/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/07/08
<b>Tetrachloroethene</b>	<b>0.0221</b>	mg/L	0.0010	0.005	1	04/07/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/07/08
Toluene	ND	mg/L	0.0010	1	1	04/07/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/07/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
<b>Trichloroethene</b>	<b>0.348</b>	mg/L	0.0100	0.005	10	04/08/08
<b>Trichlorofluoromethane</b>	<b>0.0062</b>	mg/L	0.0010		1	04/07/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227S01

Date Sampled: 03/31/08 12:15

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-02

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/07/08
Xylene O	ND	mg/L	0.0010	10	1	04/07/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/07/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/07/08
Trihalomethanes (Total)	<b>0.0078</b>	mg/L	0.0036	0.1		04/07/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	112 %		70-130
Surrogate: 4-Bromofluorobenzene	97 %		70-130
Surrogate: Dibromofluoromethane	105 %		70-130
Surrogate: Toluene-d8	97 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
 Client Project ID: Providence Gorham Site  
 Client Sample ID: MW 227S01 Dup  
 Date Sampled: 03/31/08 12:15  
 Percent Solids: N/A  
 Initial Volume: 10  
 Final Volume: 10  
 Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
 ESS Laboratory Sample ID: 0804037-03  
 Sample Matrix: Ground Water  
 Analyst: MD

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	RI - GA		<u>Analyzed</u>
				<u>Limit</u>	<u>DF</u>	
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/08/08
1,1,1-Trichloroethane	0.400	mg/L	0.0100	0.2	10	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/08/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,1-Dichloroethane	0.101	mg/L	0.0100		10	04/08/08
1,1-Dichloroethene	0.0130	mg/L	0.0010	0.007	1	04/08/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/08/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/08/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/08/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/08/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/08/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/08/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/08/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/08/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/08/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/08/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
2-Butanone	ND	mg/L	0.0250		1	04/08/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
2-Hexanone	ND	mg/L	0.0100		1	04/08/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/08/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/08/08
Acetone	ND	mg/L	0.0250		1	04/08/08
Benzene	ND	mg/L	0.0010	0.005	1	04/08/08
Bromobenzene	ND	mg/L	0.0020		1	04/08/08
Bromochloromethane	ND	mg/L	0.0010		1	04/08/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/08/08
Bromoform	ND	mg/L	0.0010		1	04/08/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 227S01 Dup  
Date Sampled: 03/31/08 12:15  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-03  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/08/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/08/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/08/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/08/08
Chloroethane	0.0023	mg/L	0.0020		1	04/08/08
Chloroform	0.0079	mg/L	0.0010		1	04/08/08
Chloromethane	ND	mg/L	0.0020		1	04/08/08
cis-1,2-Dichloroethene	0.0384	mg/L	0.0010	0.07	1	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/08/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/08/08
Dibromomethane	ND	mg/L	0.0010		1	04/08/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/08/08
Diethyl Ether	ND	mg/L	0.0010		1	04/08/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/08/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/08/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/08/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/08/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/08/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/08/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/08/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/08/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/08/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/08/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
Styrene	ND	mg/L	0.0010	0.1	1	04/08/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/08/08
Tetrachloroethene	0.0213	mg/L	0.0010	0.005	1	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/08/08
Toluene	ND	mg/L	0.0010	1	1	04/08/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/08/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/08/08
Trichloroethene	0.312	mg/L	0.0100	0.005	10	04/08/08
Trichlorofluoromethane	0.0062	mg/L	0.0010		1	04/08/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/08/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 227S01 Dup

Date Sampled: 03/31/08 12:15

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-03

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/08/08
Xylene O	ND	mg/L	0.0010	10	1	04/08/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/08/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/08/08
Trihalomethanes (Total)	<b>0.0079</b>	mg/L	0.0036	0.1		04/08/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	112 %		70-130
Surrogate: 4-Bromofluorobenzene	98 %		70-130
Surrogate: Dibromofluoromethane	106 %		70-130
Surrogate: Toluene-d8	97 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 220S01

Date Sampled: 03/31/08 14:25

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-04

Sample Matrix: Ground Water

Analyst: MD

## 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	RI - GA		<u>Analyzed</u>
				<u>Limit</u>	<u>DF</u>	
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/09/08
1,1,1-Trichloroethane	0.0696	mg/L	0.0010	0.2	1	04/09/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/09/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/09/08
1,1-Dichloroethane	0.131	mg/L	0.100		100	04/07/08
1,1-Dichloroethene	0.0045	mg/L	0.0010	0.007	1	04/09/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/09/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/09/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/09/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/09/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/09/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/09/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/09/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/09/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/09/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/09/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/09/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/09/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/09/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/09/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/09/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/09/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/09/08
2-Butanone	ND	mg/L	0.0250		1	04/09/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/09/08
2-Hexanone	ND	mg/L	0.0100		1	04/09/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/09/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/09/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/09/08
Acetone	ND	mg/L	0.0250		1	04/09/08
Benzene	ND	mg/L	0.0010	0.005	1	04/09/08
Bromobenzene	ND	mg/L	0.0020		1	04/09/08
Bromochloromethane	ND	mg/L	0.0010		1	04/09/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/09/08
Bromoform	ND	mg/L	0.0010		1	04/09/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 220S01

Date Sampled: 03/31/08 14:25

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-04

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/09/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/09/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/09/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/09/08
<b>Chloroethane</b>	<b>0.0133</b>	mg/L	0.0020		1	04/09/08
Chloroform	ND	mg/L	0.0010		1	04/09/08
Chloromethane	ND	mg/L	0.0020		1	04/09/08
<b>cis-1,2-Dichloroethene</b>	<b>0.108</b>	mg/L	0.100	0.07	100	04/07/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/09/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/09/08
Dibromomethane	ND	mg/L	0.0010		1	04/09/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/09/08
Diethyl Ether	ND	mg/L	0.0010		1	04/09/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/09/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/09/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/09/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/09/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/09/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/09/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/09/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/09/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/09/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/09/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/09/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/09/08
Styrene	ND	mg/L	0.0010	0.1	1	04/09/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/09/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/09/08
<b>Tetrachloroethene</b>	<b>0.0011</b>	mg/L	0.0010	0.005	1	04/09/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/09/08
Toluene	ND	mg/L	0.0010	1	1	04/09/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/09/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/09/08
<b>Trichloroethene</b>	<b>0.0232</b>	mg/L	0.0010	0.005	1	04/09/08
<b>Trichlorofluoromethane</b>	<b>0.0016</b>	mg/L	0.0010		1	04/09/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/09/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 220S01

Date Sampled: 03/31/08 14:25

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-04

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/09/08
Xylene O	ND	mg/L	0.0010	10	1	04/09/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/09/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/09/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/09/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	110 %		70-130
Surrogate: 4-Bromofluorobenzene	95 %		70-130
Surrogate: Dibromofluoromethane	103 %		70-130
Surrogate: Toluene-d8	94 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 221S01

Date Sampled: 03/31/08 16:30

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-05

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - GA Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/08/08
1,1,1-Trichloroethane	0.0248	mg/L	0.0010	0.2	1	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/08/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,1-Dichloroethane	0.102	mg/L	0.100		100	04/07/08
1,1-Dichloroethene	0.0010	mg/L	0.0010	0.007	1	04/08/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/08/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/08/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/08/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/08/08
1,2,4-Trimethylbenzene	0.0267	mg/L	0.0010		1	04/08/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/08/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/08/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/08/08
1,3,5-Trimethylbenzene	0.0063	mg/L	0.0010		1	04/08/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/08/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/08/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/08/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
2-Butanone	ND	mg/L	0.0250		1	04/08/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
2-Hexanone	ND	mg/L	0.0100		1	04/08/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
4-Isopropyltoluene	0.0013	mg/L	0.0010		1	04/08/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/08/08
Acetone	ND	mg/L	0.0250		1	04/08/08
Benzene	0.0016	mg/L	0.0010	0.005	1	04/08/08
Bromobenzene	ND	mg/L	0.0020		1	04/08/08
Bromochloromethane	ND	mg/L	0.0010		1	04/08/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/08/08
Bromoform	ND	mg/L	0.0010		1	04/08/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 221S01

Date Sampled: 03/31/08 16:30

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-05

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/08/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/08/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/08/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/08/08
<b>Chloroethane</b>	<b>0.0340</b>	mg/L	0.0020		1	04/08/08
Chloroform	ND	mg/L	0.0010		1	04/08/08
Chloromethane	ND	mg/L	0.0020		1	04/08/08
<b>cis-1,2-Dichloroethene</b>	<b>0.0264</b>	mg/L	0.0010	0.07	1	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/08/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/08/08
Dibromomethane	ND	mg/L	0.0010		1	04/08/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/08/08
Diethyl Ether	ND	mg/L	0.0010		1	04/08/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/08/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/08/08
<b>Ethylbenzene</b>	<b>0.0077</b>	mg/L	0.0010	0.7	1	04/08/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/08/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/08/08
<b>Isopropylbenzene</b>	<b>0.0017</b>	mg/L	0.0010		1	04/08/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/08/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/08/08
<b>Naphthalene</b>	<b>0.0284</b>	mg/L	0.0010	0.02	1	04/08/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
<b>n-Propylbenzene</b>	<b>0.0026</b>	mg/L	0.0010		1	04/08/08
<b>sec-Butylbenzene</b>	<b>0.0011</b>	mg/L	0.0010		1	04/08/08
Styrene	ND	mg/L	0.0010	0.1	1	04/08/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/08/08
<b>Tetrachloroethene</b>	<b>0.0030</b>	mg/L	0.0010	0.005	1	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/08/08
<b>Toluene</b>	<b>0.0014</b>	mg/L	0.0010	1	1	04/08/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/08/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/08/08
<b>Trichloroethene</b>	<b>0.0175</b>	mg/L	0.0010	0.005	1	04/08/08
Trichlorofluoromethane	ND	mg/L	0.0010		1	04/08/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/08/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 221S01

Date Sampled: 03/31/08 16:30

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-05

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	0.0249	mg/L	0.0010	0.002	1	04/08/08
Xylene O	0.0137	mg/L	0.0010	10	1	04/08/08
Xylene P,M	0.0074	mg/L	0.0020	10	1	04/08/08
Xylenes (Total)	0.0211	mg/L	0.0030	10	1	04/08/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/08/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	113 %		70-130
Surrogate: 4-Bromofluorobenzene	97 %		70-130
Surrogate: Dibromofluoromethane	106 %		70-130
Surrogate: Toluene-d8	94 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 228D01  
Date Sampled: 04/01/08 10:15  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-06  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Limit</u>	<u>RI - GA</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010			1	04/09/08
1,1,1-Trichloroethane	0.0035	mg/L	0.0010	0.2		1	04/09/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005			1	04/09/08
1,1,2-Trichloroethane	0.0014	mg/L	0.0010	0.005		1	04/09/08
1,1-Dichloroethane	0.0097	mg/L	0.0010			1	04/09/08
1,1-Dichloroethene	0.0422	mg/L	0.0010	0.007		1	04/09/08
1,1-Dichloropropene	ND	mg/L	0.0020			1	04/09/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010			1	04/09/08
1,2,3-Trichloropropane	ND	mg/L	0.0010			1	04/09/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07		1	04/09/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010			1	04/09/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002		1	04/09/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005		1	04/09/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6		1	04/09/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005		1	04/09/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005		1	04/09/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010			1	04/09/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6		1	04/09/08
1,3-Dichloropropane	ND	mg/L	0.0010			1	04/09/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075		1	04/09/08
1,4-Dioxane - Screen	ND	mg/L	0.500			1	04/09/08
1-Chlorohexane	ND	mg/L	0.0010			1	04/09/08
2,2-Dichloropropane	ND	mg/L	0.0010			1	04/09/08
2-Butanone	ND	mg/L	0.0250			1	04/09/08
2-Chlorotoluene	ND	mg/L	0.0010			1	04/09/08
2-Hexanone	ND	mg/L	0.0100			1	04/09/08
4-Chlorotoluene	ND	mg/L	0.0010			1	04/09/08
4-Isopropyltoluene	ND	mg/L	0.0010			1	04/09/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250			1	04/09/08
Acetone	ND	mg/L	0.0250			1	04/09/08
Benzene	ND	mg/L	0.0010	0.005		1	04/09/08
Bromobenzene	ND	mg/L	0.0020			1	04/09/08
Bromochloromethane	ND	mg/L	0.0010			1	04/09/08
Bromodichloromethane	ND	mg/L	0.0006			1	04/09/08
Bromoform	ND	mg/L	0.0010			1	04/09/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 228D01  
Date Sampled: 04/01/08 10:15  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-06  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020	1	04/09/08	
Carbon Disulfide	ND	mg/L	0.0010	1	04/09/08	
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/09/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/09/08
Chloroethane	ND	mg/L	0.0020	1	04/09/08	
<b>Chloroform</b>	<b>0.0016</b>	mg/L	0.0010	1	04/09/08	
Chloromethane	ND	mg/L	0.0020	1	04/09/08	
<b>cis-1,2-Dichloroethene</b>	<b>0.0764</b>	mg/L	0.0010	0.07	1	04/09/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/09/08	
Dibromochloromethane	ND	mg/L	0.0010	1	04/09/08	
Dibromomethane	ND	mg/L	0.0010	1	04/09/08	
Dichlorodifluoromethane	ND	mg/L	0.0020	1	04/09/08	
Diethyl Ether	ND	mg/L	0.0010	1	04/09/08	
Di-isopropyl ether	ND	mg/L	0.0010	1	04/09/08	
Ethyl tertiary-butyl ether	ND	mg/L	0.0010	1	04/09/08	
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/09/08
Hexachlorobutadiene	ND	mg/L	0.0006	1	04/09/08	
Hexachloroethane	ND	mg/L	0.0010	1	04/09/08	
Isopropylbenzene	ND	mg/L	0.0010	1	04/09/08	
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/09/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/09/08
<b>Naphthalene</b>	<b>0.0023</b>	mg/L	0.0010	0.02	1	04/09/08
n-Butylbenzene	ND	mg/L	0.0010	1	04/09/08	
n-Propylbenzene	ND	mg/L	0.0010	1	04/09/08	
sec-Butylbenzene	ND	mg/L	0.0010	1	04/09/08	
Styrene	ND	mg/L	0.0010	0.1	1	04/09/08
tert-Butylbenzene	ND	mg/L	0.0010	1	04/09/08	
Tertiary-amyl methyl ether	ND	mg/L	0.0010	1	04/09/08	
<b>Tetrachloroethene</b>	<b>0.0054</b>	mg/L	0.0010	0.005	1	04/09/08
Tetrahydrofuran	ND	mg/L	0.0050	1	04/09/08	
Toluene	ND	mg/L	0.0010	1	04/09/08	
<b>trans-1,2-Dichloroethene</b>	<b>0.0084</b>	mg/L	0.0010	0.1	1	04/09/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/09/08	
<b>Trichloroethene</b>	<b>0.912</b>	mg/L	0.0500	0.005	50	04/09/08
Trichlorofluoromethane	ND	mg/L	0.0010	1	04/09/08	
Vinyl Acetate	ND	mg/L	0.0050	1	04/09/08	



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 228D01

Date Sampled: 04/01/08 10:15

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-06

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	0.0019	mg/L	0.0010	0.002	1	04/09/08
Xylene O	ND	mg/L	0.0010	10	1	04/09/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/09/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/09/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/09/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	112 %		70-130
Surrogate: 4-Bromofluorobenzene	96 %		70-130
Surrogate: Dibromofluoromethane	105 %		70-130
Surrogate: Toluene-d8	97 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 228S01  
Date Sampled: 04/01/08 14:42  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-07  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - GA Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/08/08
1,1,1-Trichloroethane	0.114	mg/L	0.0500	0.2	50	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/08/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,1-Dichloroethane	0.0443	mg/L	0.0010		1	04/08/08
1,1-Dichloroethene	0.0103	mg/L	0.0010	0.007	1	04/08/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/08/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/08/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/08/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/08/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/08/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/08/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/08/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/08/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/08/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/08/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
2-Butanone	ND	mg/L	0.0250		1	04/08/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
2-Hexanone	ND	mg/L	0.0100		1	04/08/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/08/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/08/08
Acetone	ND	mg/L	0.0250		1	04/08/08
Benzene	ND	mg/L	0.0010	0.005	1	04/08/08
Bromobenzene	ND	mg/L	0.0020		1	04/08/08
Bromochloromethane	ND	mg/L	0.0010		1	04/08/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/08/08
Bromoform	ND	mg/L	0.0010		1	04/08/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 228S01

Date Sampled: 04/01/08 14:42

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-07

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/08/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/08/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/08/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/08/08
Chloroethane	ND	mg/L	0.0020		1	04/08/08
Chloroform	ND	mg/L	0.0010		1	04/08/08
Chloromethane	ND	mg/L	0.0020		1	04/08/08
cis-1,2-Dichloroethene	<b>0.0165</b>	mg/L	0.0010	0.07	1	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/08/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/08/08
Dibromomethane	ND	mg/L	0.0010		1	04/08/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/08/08
Diethyl Ether	ND	mg/L	0.0010		1	04/08/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/08/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/08/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/08/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/08/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/08/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/08/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/08/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/08/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/08/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/08/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
Styrene	ND	mg/L	0.0010	0.1	1	04/08/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/08/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/08/08
Tetrachloroethene	<b>3.61</b>	mg/L	0.0500	0.005	50	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/08/08
Toluene	ND	mg/L	0.0010	1	1	04/08/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/08/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/08/08
Trichloroethene	<b>0.578</b>	mg/L	0.0500	0.005	50	04/08/08
Trichlorofluoromethane	<b>0.0040</b>	mg/L	0.0010		1	04/08/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/08/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 228S01

Date Sampled: 04/01/08 14:42

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-07

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/08/08
Xylene O	ND	mg/L	0.0010	10	1	04/08/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/08/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/08/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/08/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	108 %		70-130
Surrogate: 4-Bromofluorobenzene	97 %		70-130
Surrogate: Dibromofluoromethane	103 %		70-130
Surrogate: Toluene-d8	95 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 228S01 Dup

Date Sampled: 04/01/08 12:20

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-08

Sample Matrix: Ground Water

Analyst: MD

## 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	RI - GA		<u>Analyzed</u>
				<u>Limit</u>	<u>DF</u>	
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/09/08
1,1,1-Trichloroethane	<b>0.106</b>	mg/L	0.0500	0.2	50	04/09/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/09/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/09/08
1,1-Dichloroethane	<b>0.0432</b>	mg/L	0.0010		1	04/09/08
1,1-Dichloroethene	<b>0.0096</b>	mg/L	0.0010	0.007	1	04/09/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/09/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/09/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/09/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/09/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/09/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/09/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/09/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/09/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/09/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/09/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/09/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/09/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/09/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/09/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/09/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/09/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/09/08
2-Butanone	ND	mg/L	0.0250		1	04/09/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/09/08
2-Hexanone	ND	mg/L	0.0100		1	04/09/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/09/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/09/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/09/08
Acetone	ND	mg/L	0.0250		1	04/09/08
Benzene	ND	mg/L	0.0010	0.005	1	04/09/08
Bromobenzene	ND	mg/L	0.0020		1	04/09/08
Bromochloromethane	ND	mg/L	0.0010		1	04/09/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/09/08
Bromoform	ND	mg/L	0.0010		1	04/09/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 228S01 Dup

Date Sampled: 04/01/08 12:20

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-08

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/09/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/09/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/09/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/09/08
Chloroethane	ND	mg/L	0.0020		1	04/09/08
Chloroform	ND	mg/L	0.0010		1	04/09/08
Chloromethane	ND	mg/L	0.0020		1	04/09/08
cis-1,2-Dichloroethene	0.0162	mg/L	0.0010	0.07	1	04/09/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/09/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/09/08
Dibromomethane	ND	mg/L	0.0010		1	04/09/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/09/08
Diethyl Ether	ND	mg/L	0.0010		1	04/09/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/09/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/09/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/09/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/09/08
Hexachloroethane	ND	mg/L	0.0010		1	04/09/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/09/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/09/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/09/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/09/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/09/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/09/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/09/08
Styrene	ND	mg/L	0.0010	0.1	1	04/09/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/09/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/09/08
Tetrachloroethene	3.52	mg/L	0.0500	0.005	50	04/09/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/09/08
Toluene	ND	mg/L	0.0010		1	04/09/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/09/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/09/08
Trichloroethene	0.542	mg/L	0.0500	0.005	50	04/09/08
Trichlorofluoromethane	0.0037	mg/L	0.0010		1	04/09/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/09/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 228S01 Dup

Date Sampled: 04/01/08 12:20

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-08

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/09/08
Xylene O	ND	mg/L	0.0010	10	1	04/09/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/09/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/09/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/09/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	112 %		70-130
Surrogate: 4-Bromofluorobenzene	96 %		70-130
Surrogate: Dibromofluoromethane	103 %		70-130
Surrogate: Toluene-d8	98 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
 Client Project ID: Providence Gorham Site  
 Client Sample ID: MW 230D01  
 Date Sampled: 04/01/08 14:42  
 Percent Solids: N/A  
 Initial Volume: 10  
 Final Volume: 10  
 Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
 ESS Laboratory Sample ID: 0804037-09  
 Sample Matrix: Ground Water  
 Analyst: MD

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>RI - GA Limit</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/08/08
1,1,1-Trichloroethane	0.0682	mg/L	0.0010	0.2	1	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/08/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,1-Dichloroethane	0.0106	mg/L	0.0010		1	04/08/08
1,1-Dichloroethene	0.0124	mg/L	0.0010	0.007	1	04/08/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/08/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/08/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/08/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/08/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/08/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/08/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/08/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/08/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/08/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/08/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
2-Butanone	ND	mg/L	0.0250		1	04/08/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
2-Hexanone	ND	mg/L	0.0100		1	04/08/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/08/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/08/08
Acetone	ND	mg/L	0.0250		1	04/08/08
Benzene	ND	mg/L	0.0010	0.005	1	04/08/08
Bromobenzene	ND	mg/L	0.0020		1	04/08/08
Bromochloromethane	ND	mg/L	0.0010		1	04/08/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/08/08
Bromoform	ND	mg/L	0.0010		1	04/08/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 230D01  
Date Sampled: 04/01/08 14:42  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-09  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020	1	04/08/08	
Carbon Disulfide	ND	mg/L	0.0010	1	04/08/08	
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/08/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/08/08
Chloroethane	ND	mg/L	0.0020	1	04/08/08	
<b>Chloroform</b>	<b>0.0019</b>	mg/L	0.0010	1	04/08/08	
Chloromethane	ND	mg/L	0.0020	1	04/08/08	
<b>cis-1,2-Dichloroethene</b>	<b>0.0122</b>	mg/L	0.0010	0.07	1	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/08/08	
Dibromochloromethane	ND	mg/L	0.0010	1	04/08/08	
Dibromomethane	ND	mg/L	0.0010	1	04/08/08	
Dichlorodifluoromethane	ND	mg/L	0.0020	1	04/08/08	
Diethyl Ether	ND	mg/L	0.0010	1	04/08/08	
Di-isopropyl ether	ND	mg/L	0.0010	1	04/08/08	
Ethyl tertiary-butyl ether	ND	mg/L	0.0010	1	04/08/08	
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/08/08
Hexachlorobutadiene	ND	mg/L	0.0006	1	04/08/08	
Hexachloroethane	ND	mg/L	0.0010	1	04/08/08	
Isopropylbenzene	ND	mg/L	0.0010	1	04/08/08	
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/08/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/08/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/08/08
n-Butylbenzene	ND	mg/L	0.0010	1	04/08/08	
n-Propylbenzene	ND	mg/L	0.0010	1	04/08/08	
sec-Butylbenzene	ND	mg/L	0.0010	1	04/08/08	
Styrene	ND	mg/L	0.0010	0.1	1	04/08/08
tert-Butylbenzene	ND	mg/L	0.0010	1	04/08/08	
Tertiary-amyl methyl ether	ND	mg/L	0.0010	1	04/08/08	
<b>Tetrachloroethene</b>	<b>0.0026</b>	mg/L	0.0010	0.005	1	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050	1	04/08/08	
Toluene	ND	mg/L	0.0010	1	04/08/08	
<b>trans-1,2-Dichloroethene</b>	<b>0.0015</b>	mg/L	0.0010	0.1	1	04/08/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/08/08	
Trichloroethene	<b>0.521</b>	mg/L	0.0200	0.005	20	04/08/08
Trichlorofluoromethane	<b>0.0097</b>	mg/L	0.0010	1	04/08/08	
Vinyl Acetate	ND	mg/L	0.0050	1	04/08/08	



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 230D01

Date Sampled: 04/01/08 14:42

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-09

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/08/08
Xylene O	ND	mg/L	0.0010	10	1	04/08/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/08/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/08/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/08/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	107 %		70-130
Surrogate: 4-Bromofluorobenzene	100 %		70-130
Surrogate: Dibromofluoromethane	103 %		70-130
Surrogate: Toluene-d8	96 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

Client Sample ID: MW 230S01

ESS Laboratory Sample ID: 0804037-10

Date Sampled: 04/01/08 16:05

Sample Matrix: Ground Water

Percent Solids: N/A

Analyst: MD

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>RI - GA Limit</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/07/08
1,1,1-Trichloroethane	0.536	mg/L	0.0100	0.2	10	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/07/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,1-Dichloroethane	0.0400	mg/L	0.0010		1	04/07/08
1,1-Dichloroethene	0.0086	mg/L	0.0010	0.007	1	04/07/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/07/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/07/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/07/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/07/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/07/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/07/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/07/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/07/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/07/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/07/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
2-Butanone	ND	mg/L	0.0250		1	04/07/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
2-Hexanone	ND	mg/L	0.0100		1	04/07/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/07/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/07/08
Acetone	ND	mg/L	0.0250		1	04/07/08
Benzene	ND	mg/L	0.0010	0.005	1	04/07/08
Bromobenzene	ND	mg/L	0.0020		1	04/07/08
Bromochloromethane	ND	mg/L	0.0010		1	04/07/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/07/08
Bromoform	ND	mg/L	0.0010		1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 230S01  
Date Sampled: 04/01/08 16:05  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-10  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/07/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/07/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/07/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/07/08
Chloroethane	ND	mg/L	0.0020		1	04/07/08
Chloroform	ND	mg/L	0.0010		1	04/07/08
Chloromethane	ND	mg/L	0.0020		1	04/07/08
cis-1,2-Dichloroethene	<b>0.0141</b>	mg/L	0.0010	0.07	1	04/07/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/07/08
Dibromomethane	ND	mg/L	0.0010		1	04/07/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/07/08
Diethyl Ether	ND	mg/L	0.0010		1	04/07/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/07/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/07/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/07/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/07/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/07/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/07/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/07/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/07/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/07/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/07/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Styrene	ND	mg/L	0.0010	0.1	1	04/07/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/07/08
<b>Tetrachloroethene</b>	<b>0.0021</b>	mg/L	0.0010	0.005	1	04/07/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/07/08
Toluene	ND	mg/L	0.0010	1	1	04/07/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/07/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
<b>Trichloroethene</b>	<b>0.182</b>	mg/L	0.0100	0.005	10	04/08/08
<b>Trichlorofluoromethane</b>	<b>0.0042</b>	mg/L	0.0010		1	04/07/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 230S01

Date Sampled: 04/01/08 16:05

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-10

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/07/08
Xylene O	ND	mg/L	0.0010	10	1	04/07/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/07/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/07/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/07/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	113 %		70-130
Surrogate: 4-Bromofluorobenzene	97 %		70-130
Surrogate: Dibromofluoromethane	106 %		70-130
Surrogate: Toluene-d8	96 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 226S01  
Date Sampled: 04/02/08 09:50  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-11  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>Limit</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/07/08
1,1,1-Trichloroethane	0.348	mg/L	0.0100	0.2	10	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/07/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,1-Dichloroethane	0.0632	mg/L	0.0010		1	04/07/08
1,1-Dichloroethene	0.0099	mg/L	0.0010	0.007	1	04/07/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/07/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/07/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/07/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/07/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/07/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/07/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/07/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/07/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/07/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/07/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
2-Butanone	ND	mg/L	0.0250		1	04/07/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
2-Hexanone	ND	mg/L	0.0100		1	04/07/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/07/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/07/08
Acetone	ND	mg/L	0.0250		1	04/07/08
Benzene	ND	mg/L	0.0010	0.005	1	04/07/08
Bromobenzene	ND	mg/L	0.0020		1	04/07/08
Bromochloromethane	ND	mg/L	0.0010		1	04/07/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/07/08
Bromoform	ND	mg/L	0.0010		1	04/07/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: MW 226S01  
Date Sampled: 04/02/08 09:50  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-11  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/07/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/07/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/07/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/07/08
Chloroethane	ND	mg/L	0.0020		1	04/07/08
Chloroform	ND	mg/L	0.0010		1	04/07/08
Chloromethane	ND	mg/L	0.0020		1	04/07/08
<b>cis-1,2-Dichloroethene</b>	<b>0.0140</b>	mg/L	0.0010	0.07	1	04/07/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/07/08
Dibromomethane	ND	mg/L	0.0010		1	04/07/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/07/08
Diethyl Ether	ND	mg/L	0.0010		1	04/07/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/07/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/07/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/07/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/07/08
Hexachloroethane	ND	mg/L	0.0010		1	04/07/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/07/08
<b>Methyl tert-Butyl Ether</b>	<b>0.0012</b>	mg/L	0.0010	0.04	1	04/07/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/07/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/07/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/07/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Styrene	ND	mg/L	0.0010	0.1	1	04/07/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/07/08
<b>Tetrachloroethene</b>	<b>0.418</b>	mg/L	0.0100	0.005	10	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/07/08
Toluene	ND	mg/L	0.0010		1	04/07/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/07/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Trichloroethene	0.324	mg/L	0.0100	0.005	10	04/08/08
Trichlorofluoromethane	0.0047	mg/L	0.0010		1	04/07/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 226S01

Date Sampled: 04/02/08 09:50

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-11

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/07/08
Xylene O	ND	mg/L	0.0010	10	1	04/07/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/07/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/07/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/07/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	111 %		70-130
Surrogate: 4-Bromofluorobenzene	96 %		70-130
Surrogate: Dibromofluoromethane	106 %		70-130
Surrogate: Toluene-d8	96 %		70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
 Client Project ID: Providence Gorham Site  
 Client Sample ID: MW 229S01  
 Date Sampled: 04/02/08 10:50  
 Percent Solids: N/A  
 Initial Volume: 10  
 Final Volume: 10  
 Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
 ESS Laboratory Sample ID: 0804037-12  
 Sample Matrix: Ground Water  
 Analyst: MD

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>RI - GA Limit</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/07/08
1,1,1-Trichloroethane	ND	mg/L	0.0010	0.2	1	04/07/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/07/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,1-Dichloroethane	ND	mg/L	0.0010		1	04/07/08
1,1-Dichloroethene	ND	mg/L	0.0010	0.007	1	04/07/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/07/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/07/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/07/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/07/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/07/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/07/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/07/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/07/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/07/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/07/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
2-Butanone	ND	mg/L	0.0250		1	04/07/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
2-Hexanone	ND	mg/L	0.0100		1	04/07/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/07/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/07/08
Acetone	ND	mg/L	0.0250		1	04/07/08
Benzene	ND	mg/L	0.0010	0.005	1	04/07/08
Bromobenzene	ND	mg/L	0.0020		1	04/07/08
Bromochloromethane	ND	mg/L	0.0010		1	04/07/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/07/08
Bromoform	ND	mg/L	0.0010		1	04/07/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 229S01

Date Sampled: 04/02/08 10:50

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-12

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/07/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/07/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/07/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/07/08
Chloroethane	ND	mg/L	0.0020		1	04/07/08
Chloroform	ND	mg/L	0.0010		1	04/07/08
Chloromethane	ND	mg/L	0.0020		1	04/07/08
cis-1,2-Dichloroethene	ND	mg/L	0.0010	0.07	1	04/07/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/07/08
Dibromomethane	ND	mg/L	0.0010		1	04/07/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/07/08
Diethyl Ether	ND	mg/L	0.0010		1	04/07/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/07/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/07/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/07/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/07/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/07/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/07/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/07/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/07/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/07/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/07/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Styrene	ND	mg/L	0.0010	0.1	1	04/07/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/07/08
Tetrachloroethene	0.0744	mg/L	0.0100	0.005	10	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/07/08
Toluene	ND	mg/L	0.0010	1	1	04/07/08
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/07/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Trichloroethene	ND	mg/L	0.0010	0.005	1	04/07/08
Trichlorofluoromethane	ND	mg/L	0.0010		1	04/07/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

Client Sample ID: MW 229S01

ESS Laboratory Sample ID: 0804037-12

Date Sampled: 04/02/08 10:50

Sample Matrix: Ground Water

Percent Solids: N/A

Analyst: MD

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/07/08
Xylene O	ND	mg/L	0.0010	10	1	04/07/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/07/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/07/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/07/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	112 %		70-130
Surrogate: 4-Bromofluorobenzene	98 %		70-130
Surrogate: Dibromofluoromethane	103 %		70-130
Surrogate: Toluene-d8	97 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 226D01

Date Sampled: 04/02/08 08:50

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-13

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Analyte	Results	Units	MRL	RI - GA Limit	DF	Analyzed
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/07/08
1,1,1-Trichloroethane	0.0045	mg/L	0.0010	0.2	1	04/07/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/07/08
1,1,2-Trichloroethane	0.0022	mg/L	0.0010	0.005	1	04/07/08
1,1-Dichloroethane	0.0069	mg/L	0.0010		1	04/07/08
1,1-Dichloroethene	0.0798	mg/L	0.0010	0.007	1	04/07/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/07/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/07/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/07/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/07/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/07/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/07/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/07/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/07/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/07/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/07/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/07/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/07/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/07/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/07/08
2-Butanone	ND	mg/L	0.0250		1	04/07/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
2-Hexanone	ND	mg/L	0.0100		1	04/07/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/07/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/07/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/07/08
Acetone	ND	mg/L	0.0250		1	04/07/08
Benzene	ND	mg/L	0.0010	0.005	1	04/07/08
Bromobenzene	ND	mg/L	0.0020		1	04/07/08
Bromochloromethane	ND	mg/L	0.0010		1	04/07/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/07/08
Bromoform	ND	mg/L	0.0010		1	04/07/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 226D01

Date Sampled: 04/02/08 08:50

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-13

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020		1	04/07/08
Carbon Disulfide	ND	mg/L	0.0010		1	04/07/08
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/07/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/07/08
Chloroethane	ND	mg/L	0.0020		1	04/07/08
Chloroform	ND	mg/L	0.0010		1	04/07/08
Chloromethane	ND	mg/L	0.0020		1	04/07/08
cis-1,2-Dichloroethene	0.162	mg/L	0.0500	0.07	50	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Dibromochloromethane	ND	mg/L	0.0010		1	04/07/08
Dibromomethane	ND	mg/L	0.0010		1	04/07/08
Dichlorodifluoromethane	ND	mg/L	0.0020		1	04/07/08
Diethyl Ether	ND	mg/L	0.0010		1	04/07/08
Di-isopropyl ether	ND	mg/L	0.0010		1	04/07/08
Ethyl tertiary-butyl ether	ND	mg/L	0.0010		1	04/07/08
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/07/08
Hexachlorobutadiene	ND	mg/L	0.0006		1	04/07/08
Hexachloroethane	ND	mg/L	0.0010	1	1	04/07/08
Isopropylbenzene	ND	mg/L	0.0010		1	04/07/08
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/07/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/07/08
Naphthalene	0.0012	mg/L	0.0010	0.02	1	04/07/08
n-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
n-Propylbenzene	ND	mg/L	0.0010		1	04/07/08
sec-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Styrene	ND	mg/L	0.0010	0.1	1	04/07/08
tert-Butylbenzene	ND	mg/L	0.0010		1	04/07/08
Tertiary-amyl methyl ether	ND	mg/L	0.0010		1	04/07/08
Tetrachloroethene	0.0107	mg/L	0.0010	0.005	1	04/07/08
Tetrahydrofuran	ND	mg/L	0.0050		1	04/07/08
Toluene	ND	mg/L	0.0010	1	1	04/07/08
trans-1,2-Dichloroethene	0.0246	mg/L	0.0010	0.1	1	04/07/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004		1	04/07/08
Trichloroethene	4.87	mg/L	0.0500	0.005	50	04/08/08
Trichlorofluoromethane	ND	mg/L	0.0010		1	04/07/08
Vinyl Acetate	ND	mg/L	0.0050		1	04/07/08



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: MW 226D01

Date Sampled: 04/02/08 08:50

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-13

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	0.0030	mg/L	0.0010	0.002	1	04/07/08
Xylene O	ND	mg/L	0.0010	10	1	04/07/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/07/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/07/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/07/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	109 %		70-130
Surrogate: 4-Bromofluorobenzene	96 %		70-130
Surrogate: Dibromofluoromethane	103 %		70-130
Surrogate: Toluene-d8	95 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: Equipment Blank

Date Sampled: 04/01/08 17:05

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-14

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

<u>Analyte</u>	<u>Results</u>	<u>Units</u>	<u>MRL</u>	<u>RI - GA Limit</u>	<u>DF</u>	<u>Analyzed</u>
1,1,1,2-Tetrachloroethane	ND	mg/L	0.0010		1	04/08/08
1,1,1-Trichloroethane	ND	mg/L	0.0010	0.2	1	04/08/08
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0005		1	04/08/08
1,1,2-Trichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,1-Dichloroethane	ND	mg/L	0.0010		1	04/08/08
1,1-Dichloroethene	ND	mg/L	0.0010	0.007	1	04/08/08
1,1-Dichloropropene	ND	mg/L	0.0020		1	04/08/08
1,2,3-Trichlorobenzene	ND	mg/L	0.0010		1	04/08/08
1,2,3-Trichloropropane	ND	mg/L	0.0010		1	04/08/08
1,2,4-Trichlorobenzene	ND	mg/L	0.0010	0.07	1	04/08/08
1,2,4-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,2-Dibromo-3-Chloropropane	ND	mg/L	0.0050	0.0002	1	04/08/08
1,2-Dibromoethane	ND	mg/L	0.0010	0.00005	1	04/08/08
1,2-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,2-Dichloroethane	ND	mg/L	0.0010	0.005	1	04/08/08
1,2-Dichloropropane	ND	mg/L	0.0010	0.005	1	04/08/08
1,3,5-Trimethylbenzene	ND	mg/L	0.0010		1	04/08/08
1,3-Dichlorobenzene	ND	mg/L	0.0010	0.6	1	04/08/08
1,3-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
1,4-Dichlorobenzene	ND	mg/L	0.0010	0.075	1	04/08/08
1,4-Dioxane - Screen	ND	mg/L	0.500		1	04/08/08
1-Chlorohexane	ND	mg/L	0.0010		1	04/08/08
2,2-Dichloropropane	ND	mg/L	0.0010		1	04/08/08
2-Butanone	ND	mg/L	0.0250		1	04/08/08
2-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
2-Hexanone	ND	mg/L	0.0100		1	04/08/08
4-Chlorotoluene	ND	mg/L	0.0010		1	04/08/08
4-Isopropyltoluene	ND	mg/L	0.0010		1	04/08/08
4-Methyl-2-Pentanone	ND	mg/L	0.0250		1	04/08/08
Acetone	ND	mg/L	0.0250		1	04/08/08
Benzene	ND	mg/L	0.0010	0.005	1	04/08/08
Bromobenzene	ND	mg/L	0.0020		1	04/08/08
Bromochloromethane	ND	mg/L	0.0010		1	04/08/08
Bromodichloromethane	ND	mg/L	0.0006		1	04/08/08
Bromoform	ND	mg/L	0.0010		1	04/08/08



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site  
Client Sample ID: Equipment Blank  
Date Sampled: 04/01/08 17:05  
Percent Solids: N/A  
Initial Volume: 10  
Final Volume: 10  
Extraction Method: 5030B

ESS Laboratory Work Order: 0804037  
ESS Laboratory Sample ID: 0804037-14  
Sample Matrix: Ground Water  
Analyst: MD

### 8260B Volatile Organic Compounds

Bromomethane	ND	mg/L	0.0020	1	04/08/08	
Carbon Disulfide	ND	mg/L	0.0010	1	04/08/08	
Carbon Tetrachloride	ND	mg/L	0.0010	0.005	1	04/08/08
Chlorobenzene	ND	mg/L	0.0010	0.1	1	04/08/08
Chloroethane	ND	mg/L	0.0020	1	04/08/08	
<b>Chloroform</b>	<b>0.0014</b>	mg/L	0.0010	1	04/08/08	
Chloromethane	ND	mg/L	0.0020	1	04/08/08	
cis-1,2-Dichloroethene	ND	mg/L	0.0010	0.07	1	04/08/08
cis-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/08/08	
Dibromochloromethane	ND	mg/L	0.0010	1	04/08/08	
Dibromomethane	ND	mg/L	0.0010	1	04/08/08	
Dichlorodifluoromethane	ND	mg/L	0.0020	1	04/08/08	
Diethyl Ether	ND	mg/L	0.0010	1	04/08/08	
Di-isopropyl ether	ND	mg/L	0.0010	1	04/08/08	
Ethyl tertiary-butyl ether	ND	mg/L	0.0010	1	04/08/08	
Ethylbenzene	ND	mg/L	0.0010	0.7	1	04/08/08
Hexachlorobutadiene	ND	mg/L	0.0006	1	04/08/08	
Hexachloroethane	ND	mg/L	0.0010	1	04/08/08	
Isopropylbenzene	ND	mg/L	0.0010	1	04/08/08	
Methyl tert-Butyl Ether	ND	mg/L	0.0010	0.04	1	04/08/08
Methylene Chloride	ND	mg/L	0.0040	0.005	1	04/08/08
Naphthalene	ND	mg/L	0.0010	0.02	1	04/08/08
n-Butylbenzene	ND	mg/L	0.0010	1	04/08/08	
n-Propylbenzene	ND	mg/L	0.0010	1	04/08/08	
sec-Butylbenzene	ND	mg/L	0.0010	1	04/08/08	
Styrene	ND	mg/L	0.0010	0.1	1	04/08/08
tert-Butylbenzene	ND	mg/L	0.0010	1	04/08/08	
Tertiary-amyl methyl ether	ND	mg/L	0.0010	1	04/08/08	
Tetrachloroethene	ND	mg/L	0.0010	0.005	1	04/08/08
Tetrahydrofuran	ND	mg/L	0.0050	1	04/08/08	
Toluene	ND	mg/L	0.0010	1	04/08/08	
trans-1,2-Dichloroethene	ND	mg/L	0.0010	0.1	1	04/08/08
trans-1,3-Dichloropropene	ND	mg/L	0.0004	1	04/08/08	
Trichloroethene	ND	mg/L	0.0010	0.005	1	04/08/08
Trichlorofluoromethane	ND	mg/L	0.0010	1	04/08/08	
Vinyl Acetate	ND	mg/L	0.0050	1	04/08/08	



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

Client Sample ID: Equipment Blank

Date Sampled: 04/01/08 17:05

Percent Solids: N/A

Initial Volume: 10

Final Volume: 10

Extraction Method: 5030B

ESS Laboratory Work Order: 0804037

ESS Laboratory Sample ID: 0804037-14

Sample Matrix: Ground Water

Analyst: MD

### 8260B Volatile Organic Compounds

Vinyl Chloride	ND	mg/L	0.0010	0.002	1	04/08/08
Xylene O	ND	mg/L	0.0010	10	1	04/08/08
Xylene P,M	ND	mg/L	0.0020	10	1	04/08/08
Xylenes (Total)	ND	mg/L	0.0030	10	1	04/08/08
Trihalomethanes (Total)	ND	mg/L	0.0036	0.1		04/08/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	114 %		70-130
Surrogate: 4-Bromofluorobenzene	97 %		70-130
Surrogate: Dibromofluoromethane	105 %		70-130
Surrogate: Toluene-d8	96 %		70-130



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										

Batch BD80709 - 5030B

### Blank

1,1,1,2-Tetrachloroethane	ND	0.0010	mg/L
1,1,1-Trichloroethane	ND	0.0010	mg/L
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,2-Trichloroethane	ND	0.0010	mg/L
1,1-Dichloroethane	ND	0.0010	mg/L
1,1-Dichloroethene	ND	0.0010	mg/L
1,1-Dichloropropene	ND	0.0020	mg/L
1,2,3-Trichlorobenzene	ND	0.0010	mg/L
1,2,3-Trichloropropane	ND	0.0010	mg/L
1,2,4-Trichlorobenzene	ND	0.0010	mg/L
1,2,4-Trimethylbenzene	ND	0.0010	mg/L
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L
1,2-Dibromoethane	ND	0.0010	mg/L
1,2-Dichlorobenzene	ND	0.0010	mg/L
1,2-Dichloroethane	ND	0.0010	mg/L
1,2-Dichloropropane	ND	0.0010	mg/L
1,3,5-Trimethylbenzene	ND	0.0010	mg/L
1,3-Dichlorobenzene	ND	0.0010	mg/L
1,3-Dichloropropane	ND	0.0010	mg/L
1,4-Dichlorobenzene	ND	0.0010	mg/L
1,4-Dioxane - Screen	ND	0.500	mg/L
1-Chlorohexane	ND	0.0010	mg/L
2,2-Dichloropropane	ND	0.0010	mg/L
2-Butanone	ND	0.0250	mg/L
2-Chlorotoluene	ND	0.0010	mg/L
2-Hexanone	ND	0.0100	mg/L
4-Chlorotoluene	ND	0.0010	mg/L
4-Isopropyltoluene	ND	0.0010	mg/L
4-Methyl-2-Pentanone	ND	0.0250	mg/L
Acetone	ND	0.0250	mg/L
Benzene	ND	0.0010	mg/L
Bromobenzene	ND	0.0020	mg/L
Bromochloromethane	ND	0.0010	mg/L
Bromodichloromethane	ND	0.0006	mg/L
Bromoform	ND	0.0010	mg/L
Bromomethane	ND	0.0020	mg/L
Carbon Disulfide	ND	0.0010	mg/L
Carbon Tetrachloride	ND	0.0010	mg/L
Chlorobenzene	ND	0.0010	mg/L
Chloroethane	ND	0.0020	mg/L
Chloroform	ND	0.0010	mg/L
Chloromethane	ND	0.0020	mg/L
cis-1,2-Dichloroethene	ND	0.0010	mg/L
cis-1,3-Dichloropropene	ND	0.0004	mg/L
Dibromochloromethane	ND	0.0010	mg/L



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80709 - 5030B</b>										
Dibromomethane	ND	0.0010	mg/L							
Dichlorodifluoromethane	ND	0.0020	mg/L							
Diethyl Ether	ND	0.0010	mg/L							
Di-isopropyl ether	ND	0.0010	mg/L							
Ethyl tertiary-butyl ether	ND	0.0010	mg/L							
Ethylbenzene	ND	0.0010	mg/L							
Hexachlorobutadiene	ND	0.0006	mg/L							
Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0040	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	29.2		ug/L	25.00		117	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	23.6		ug/L	25.00		95	70-130			
<i>Surrogate: Dibromofluoromethane</i>	26.5		ug/L	25.00		106	70-130			
<i>Surrogate: Toluene-d8</i>	23.9		ug/L	25.00		96	70-130			

LCS										
1,1,1,2-Tetrachloroethane	9.94		ug/L	10.00		99	70-130			
1,1,1-Trichloroethane	10.2		ug/L	10.00		102	70-130			
1,1,2,2-Tetrachloroethane	9.23		ug/L	10.00		92	70-130			
1,1,2-Trichloroethane	9.59		ug/L	10.00		96	70-130			
1,1-Dichloroethane	9.91		ug/L	10.00		99	70-130			
1,1-Dichloroethene	10.5		ug/L	10.00		105	70-130			
1,1-Dichloropropene	9.55		ug/L	10.00		96	70-130			
1,2,3-Trichlorobenzene	8.57		ug/L	10.00		86	70-130			
1,2,3-Trichloropropane	8.73		ug/L	10.00		87	70-130			
1,2,4-Trichlorobenzene	8.65		ug/L	10.00		86	70-130			
1,2,4-Trimethylbenzene	9.30		ug/L	10.00		93	70-130			
1,2-Dibromo-3-Chloropropane	8.93		ug/L	10.00		89	70-130			



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80709 - 5030B</b>										
1,2-Dibromoethane	9.38		ug/L	10.00	94	70-130				
1,2-Dichlorobenzene	9.66		ug/L	10.00	97	70-130				
1,2-Dichloroethane	10.6		ug/L	10.00	106	70-130				
1,2-Dichloropropane	9.77		ug/L	10.00	98	70-130				
1,3,5-Trimethylbenzene	9.04		ug/L	10.00	90	70-130				
1,3-Dichlorobenzene	9.89		ug/L	10.00	99	70-130				
1,3-Dichloropropane	9.09		ug/L	10.00	91	70-130				
1,4-Dichlorobenzene	9.53		ug/L	10.00	95	70-130				
1,4-Dioxane - Screen	113		ug/L	200.0	57	0-332				
1-Chlorohexane	8.71		ug/L	10.00	87	70-130				
2,2-Dichloropropane	10.6		ug/L	10.00	106	70-130				
2-Butanone	47.2		ug/L	50.00	94	70-130				
2-Chlorotoluene	9.11		ug/L	10.00	91	70-130				
2-Hexanone	43.5		ug/L	50.00	87	70-130				
4-Chlorotoluene	8.75		ug/L	10.00	88	70-130				
4-Isopropyltoluene	9.02		ug/L	10.00	90	70-130				
4-Methyl-2-Pentanone	44.2		ug/L	50.00	88	70-130				
Acetone	62.8		ug/L	50.00	126	70-130				
Benzene	9.12		ug/L	10.00	91	70-130				
Bromobenzene	9.71		ug/L	10.00	97	70-130				
Bromochloromethane	10.0		ug/L	10.00	100	70-130				
Bromodichloromethane	11.3		ug/L	10.00	113	70-130				
Bromoform	9.74		ug/L	10.00	97	70-130				
Bromomethane	8.01		ug/L	10.00	80	70-130				
Carbon Disulfide	10.4		ug/L	10.00	104	70-130				
Carbon Tetrachloride	10.4		ug/L	10.00	104	70-130				
Chlorobenzene	9.65		ug/L	10.00	96	70-130				
Chloroethane	11.1		ug/L	10.00	111	70-130				
Chloroform	9.87		ug/L	10.00	99	70-130				
Chloromethane	8.43		ug/L	10.00	84	70-130				
cis-1,2-Dichloroethene	10.4		ug/L	10.00	104	70-130				
cis-1,3-Dichloropropene	9.88		ug/L	10.00	99	70-130				
Dibromochloromethane	10.4		ug/L	10.00	104	70-130				
Dibromomethane	9.25		ug/L	10.00	92	70-130				
Dichlorodifluoromethane	8.67		ug/L	10.00	87	70-130				
Diethyl Ether	10.4		ug/L	10.00	104	70-130				
Di-Isopropyl ether	9.21		ug/L	10.00	92	70-130				
Ethyl tertiary-butyl ether	9.74		ug/L	10.00	97	70-130				
Ethylbenzene	8.91		ug/L	10.00	89	70-130				
Hexachlorobutadiene	9.28		ug/L	10.00	93	70-130				
Hexachloroethane	10.3		ug/L	10.00	103	70-130				
Isopropylbenzene	8.21		ug/L	10.00	82	70-130				
Methyl tert-Butyl Ether	9.96		ug/L	10.00	100	70-130				
Methylene Chloride	10.5		ug/L	10.00	105	70-130				
Naphthalene	8.81		ug/L	10.00	88	70-130				
n-Butylbenzene	8.98		ug/L	10.00	90	70-130				



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qualifier
<b>8260B Volatile Organic Compounds</b>										
<b>Batch BD80709 - 5030B</b>										
n-Propylbenzene	8.97		ug/L	10.00	90	70-130				
sec-Butylbenzene	8.93		ug/L	10.00	89	70-130				
Styrene	8.97		ug/L	10.00	90	70-130				
tert-Butylbenzene	9.45		ug/L	10.00	94	70-130				
Tertiary-amyl methyl ether	9.71		ug/L	10.00	97	70-130				
Tetrachloroethene	9.12		ug/L	10.00	91	70-130				
Tetrahydrofuran	7.23		ug/L	10.00	72	70-130				
Toluene	9.35		ug/L	10.00	94	70-130				
trans-1,2-Dichloroethene	10.1		ug/L	10.00	101	70-130				
trans-1,3-Dichloropropene	8.60		ug/L	10.00	86	70-130				
Trichloroethene	9.50		ug/L	10.00	95	70-130				
Trichlorofluoromethane	9.78		ug/L	10.00	98	70-130				
Vinyl Acetate	8.58		ug/L	10.00	86	70-130				
Vinyl Chloride	13.2		ug/L	10.00	132	70-130				B+
Xylene O	9.12		ug/L	10.00	91	70-130				
Xylene P,M	18.7		ug/L	20.00	94	70-130				
Surrogate: 1,2-Dichloroethane-d4	28.0		ug/L	25.00	112	70-130				
Surrogate: 4-Bromofluorobenzene	24.7		ug/L	25.00	99	70-130				
Surrogate: Dibromofluoromethane	27.0		ug/L	25.00	108	70-130				
Surrogate: Toluene-d8	24.0		ug/L	25.00	96	70-130				
<b>LCS Dup</b>										
1,1,1,2-Tetrachloroethane	9.11		ug/L	10.00	91	70-130	9	20		
1,1,1-Trichloroethane	9.59		ug/L	10.00	96	70-130	6	20		
1,1,2,2-Tetrachloroethane	8.74		ug/L	10.00	87	70-130	5	20		
1,1,2-Trichloroethane	9.24		ug/L	10.00	92	70-130	4	20		
1,1-Dichloroethane	9.69		ug/L	10.00	97	70-130	2	20		
1,1-Dichloroethene	10.0		ug/L	10.00	100	70-130	4	20		
1,1-Dichloropropene	9.32		ug/L	10.00	93	70-130	2	20		
1,2,3-Trichlorobenzene	9.14		ug/L	10.00	91	70-130	6	20		
1,2,3-Trichloropropane	8.63		ug/L	10.00	86	70-130	1	20		
1,2,4-Trichlorobenzene	9.15		ug/L	10.00	92	70-130	6	20		
1,2,4-Trimethylbenzene	9.11		ug/L	10.00	91	70-130	2	20		
1,2-Dibromo-3-Chloropropane	8.60		ug/L	10.00	86	70-130	4	20		
1,2-Dibromoethane	8.86		ug/L	10.00	89	70-130	6	20		
1,2-Dichlorobenzene	9.53		ug/L	10.00	95	70-130	1	20		
1,2-Dichloroethane	10.5		ug/L	10.00	105	70-130	1	20		
1,2-Dichloropropane	9.43		ug/L	10.00	94	70-130	4	20		
1,3,5-Trimethylbenzene	8.85		ug/L	10.00	88	70-130	2	20		
1,3-Dichlorobenzene	9.43		ug/L	10.00	94	70-130	5	20		
1,3-Dichloropropane	8.81		ug/L	10.00	88	70-130	3	20		
1,4-Dichlorobenzene	9.35		ug/L	10.00	94	70-130	2	20		
1,4-Dioxane - Screen	173		ug/L	200.0	86	0-332	41	200		
1-Chlorohexane	8.42		ug/L	10.00	84	70-130	3	20		
2,2-Dichloropropane	9.97		ug/L	10.00	100	70-130	6	20		
2-Butanone	44.3		ug/L	50.00	89	70-130	6	20		
2-Chlorotoluene	8.93		ug/L	10.00	89	70-130	2	20		



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80709 - 5030B</b>										
2-Hexanone	41.8		ug/L	50.00	84	70-130	4	20		
4-Chlorotoluene	8.67		ug/L	10.00	87	70-130	0.9	20		
4-Isopropyltoluene	8.96		ug/L	10.00	90	70-130	0.7	20		
4-Methyl-2-Pentanone	45.8		ug/L	50.00	92	70-130	4	20		
Acetone	56.2		ug/L	50.00	112	70-130	11	20		
Benzene	8.90		ug/L	10.00	89	70-130	2	20		
Bromobenzene	9.68		ug/L	10.00	97	70-130	0.3	20		
Bromochloromethane	9.91		ug/L	10.00	99	70-130	1	20		
Bromodichloromethane	10.7		ug/L	10.00	107	70-130	6	20		
Bromoform	9.37		ug/L	10.00	94	70-130	4	20		
Bromomethane	7.69		ug/L	10.00	77	70-130	4	20		
Carbon Disulfide	9.94		ug/L	10.00	99	70-130	5	20		
Carbon Tetrachloride	9.73		ug/L	10.00	97	70-130	6	20		
Chlorobenzene	9.03		ug/L	10.00	90	70-130	7	20		
Chloroethane	10.9		ug/L	10.00	109	70-130	1	20		
Chloroform	9.68		ug/L	10.00	97	70-130	2	20		
Chloromethane	8.80		ug/L	10.00	88	70-130	4	20		
cis-1,2-Dichloroethene	9.93		ug/L	10.00	99	70-130	4	20		
cis-1,3-Dichloropropene	9.50		ug/L	10.00	95	70-130	4	20		
Dibromochloromethane	9.57		ug/L	10.00	96	70-130	8	20		
Dibromomethane	9.19		ug/L	10.00	92	70-130	0.7	20		
Dichlorodifluoromethane	9.10		ug/L	10.00	91	70-130	5	20		
Diethyl Ether	10.7		ug/L	10.00	107	70-130	2	20		
Di-isopropyl ether	8.95		ug/L	10.00	90	70-130	3	20		
Ethyl tertiary-butyl ether	9.48		ug/L	10.00	95	70-130	3	20		
Ethylbenzene	8.57		ug/L	10.00	86	70-130	4	20		
Hexachlorobutadiene	9.37		ug/L	10.00	94	70-130	1	20		
Hexachloroethane	10.0		ug/L	10.00	100	70-130	3	20		
Isopropylbenzene	7.81		ug/L	10.00	78	70-130	5	20		
Methyl tert-Butyl Ether	9.82		ug/L	10.00	98	70-130	1	20		
Methylene Chloride	10.0		ug/L	10.00	100	70-130	4	20		
Naphthalene	9.17		ug/L	10.00	92	70-130	4	20		
n-Butylbenzene	8.86		ug/L	10.00	89	70-130	1	20		
n-Propylbenzene	8.63		ug/L	10.00	86	70-130	4	20		
sec-Butylbenzene	8.93		ug/L	10.00	89	70-130	0	20		
Styrene	8.29		ug/L	10.00	83	70-130	8	20		
tert-Butylbenzene	9.25		ug/L	10.00	92	70-130	2	20		
Tertiary-amyl methyl ether	9.37		ug/L	10.00	94	70-130	4	20		
Tetrachloroethene	8.57		ug/L	10.00	86	70-130	6	20		
Tetrahydrofuran	7.23		ug/L	10.00	72	70-130	0	20		
Toluene	9.25		ug/L	10.00	92	70-130	1	20		
trans-1,2-Dichloroethene	9.71		ug/L	10.00	97	70-130	4	20		
trans-1,3-Dichloropropene	8.43		ug/L	10.00	84	70-130	2	20		
Trichloroethene	9.36		ug/L	10.00	94	70-130	1	20		
Trichlorofluoromethane	9.38		ug/L	10.00	94	70-130	4	20		
Vinyl Acetate	8.41		ug/L	10.00	84	70-130	2	20		



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
<b>8260B Volatile Organic Compounds</b>										

### Batch BD80709 - 5030B

Vinyl Chloride	12.7		ug/L	10.00		127	70-130	3	20	
Xylene O	8.68		ug/L	10.00		87	70-130	5	20	
Xylene P,M	17.5		ug/L	20.00		88	70-130	7	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	28.6		ug/L	25.00		114	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	24.4		ug/L	25.00		97	70-130			
<i>Surrogate: Dibromofluoromethane</i>	26.9		ug/L	25.00		108	70-130			
<i>Surrogate: Toluene-d8</i>	23.6		ug/L	25.00		95	70-130			

### Batch BD80807 - 5030B

#### Blank

1,1,2-Tetrachloroethane	ND	0.0010	mg/L
1,1,1-Trichloroethane	ND	0.0010	mg/L
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L
1,1,2-Trichloroethane	ND	0.0010	mg/L
1,1-Dichloroethane	ND	0.0010	mg/L
1,1-Dichloroethene	ND	0.0010	mg/L
1,1-Dichloropropene	ND	0.0020	mg/L
1,2,3-Trichlorobenzene	ND	0.0010	mg/L
1,2,3-Trichloropropane	ND	0.0010	mg/L
1,2,4-Trichlorobenzene	ND	0.0010	mg/L
1,2,4-Trimethylbenzene	ND	0.0010	mg/L
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L
1,2-Dibromoethane	ND	0.0010	mg/L
1,2-Dichlorobenzene	ND	0.0010	mg/L
1,2-Dichloroethane	ND	0.0010	mg/L
1,2-Dichloropropane	ND	0.0010	mg/L
1,3,5-Trimethylbenzene	ND	0.0010	mg/L
1,3-Dichlorobenzene	ND	0.0010	mg/L
1,3-Dichloropropane	ND	0.0010	mg/L
1,4-Dichlorobenzene	ND	0.0010	mg/L
1,4-Dioxane - Screen	ND	0.500	mg/L
1-Chlorohexane	ND	0.0010	mg/L
2,2-Dichloropropane	ND	0.0010	mg/L
2-Butanone	ND	0.0250	mg/L
2-Chlorotoluene	ND	0.0010	mg/L
2-Hexanone	ND	0.0100	mg/L
4-Chlorotoluene	ND	0.0010	mg/L
4-Isopropyltoluene	ND	0.0010	mg/L
4-Methyl-2-Pentanone	ND	0.0250	mg/L
Acetone	ND	0.0250	mg/L
Benzene	ND	0.0010	mg/L
Bromobenzene	ND	0.0020	mg/L
Bromochloromethane	ND	0.0010	mg/L
Bromodichloromethane	ND	0.0006	mg/L
Bromoform	ND	0.0010	mg/L
Bromomethane	ND	0.0020	mg/L



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										

### Batch BD80807 - 5030B

Carbon Disulfide	ND	0.0010	mg/L							
Carbon Tetrachloride	ND	0.0010	mg/L							
Chlorobenzene	ND	0.0010	mg/L							
Chloroethane	ND	0.0020	mg/L							
Chloroform	ND	0.0010	mg/L							
Chloromethane	ND	0.0020	mg/L							
cis-1,2-Dichloroethene	ND	0.0010	mg/L							
cis-1,3-Dichloropropene	ND	0.0004	mg/L							
Dibromochloromethane	ND	0.0010	mg/L							
Dibromomethane	ND	0.0010	mg/L							
Dichlorodifluoromethane	ND	0.0020	mg/L							
Diethyl Ether	ND	0.0010	mg/L							
Di-isopropyl ether	ND	0.0010	mg/L							
Ethyl tertiary-butyl ether	ND	0.0010	mg/L							
Ethylbenzene	ND	0.0010	mg/L							
Hexachlorobutadiene	ND	0.0006	mg/L							
Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0040	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	27.8	ug/L	25.00		111	70-130				
<i>Surrogate: 4-Bromofluorobenzene</i>	23.9	ug/L	25.00		96	70-130				
<i>Surrogate: Dibromofluoromethane</i>	25.7	ug/L	25.00		103	70-130				
<i>Surrogate: Toluene-d8</i>	24.4	ug/L	25.00		97	70-130				

### LCS

1,1,1,2-Tetrachloroethane	9.70	ug/L	10.00	97	70-130
1,1,1-Trichloroethane	9.78	ug/L	10.00	98	70-130
1,1,2,2-Tetrachloroethane	9.12	ug/L	10.00	91	70-130



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-----------

### 8260B Volatile Organic Compounds

#### Batch BD80807 - 5030B

1,1,2-Trichloroethane	9.41		ug/L	10.00	94	70-130				
1,1-Dichloroethane	10.4		ug/L	10.00	104	70-130				
1,1-Dichloroethene	10.7		ug/L	10.00	107	70-130				
1,1-Dichloropropene	9.75		ug/L	10.00	98	70-130				
1,2,3-Trichlorobenzene	8.20		ug/L	10.00	82	70-130				
1,2,3-Trichloropropane	8.55		ug/L	10.00	86	70-130				
1,2,4-Trichlorobenzene	8.67		ug/L	10.00	87	70-130				
1,2,4-Trimethylbenzene	9.51		ug/L	10.00	95	70-130				
1,2-Dibromo-3-Chloropropane	8.52		ug/L	10.00	85	70-130				
1,2-Dibromoethane	9.20		ug/L	10.00	92	70-130				
1,2-Dichlorobenzene	9.65		ug/L	10.00	96	70-130				
1,2-Dichloroethane	10.9		ug/L	10.00	109	70-130				
1,2-Dichloropropane	10.0		ug/L	10.00	100	70-130				
1,3,5-Trimethylbenzene	9.21		ug/L	10.00	92	70-130				
1,3-Dichlorobenzene	9.80		ug/L	10.00	98	70-130				
1,3-Dichloropropane	9.42		ug/L	10.00	94	70-130				
1,4-Dichlorobenzene	9.62		ug/L	10.00	96	70-130				
1,4-Dioxane - Screen	98.3		ug/L	200.0	49	0-332				
1-Chlorohexane	8.98		ug/L	10.00	90	70-130				
2,2-Dichloropropane	9.84		ug/L	10.00	98	70-130				
2-Butanone	43.3		ug/L	50.00	87	70-130				
2-Chlorotoluene	9.21		ug/L	10.00	92	70-130				
2-Hexanone	42.0		ug/L	50.00	84	70-130				
4-Chlorotoluene	9.16		ug/L	10.00	92	70-130				
4-Isopropyltoluene	9.31		ug/L	10.00	93	70-130				
4-Methyl-2-Pentanone	45.8		ug/L	50.00	92	70-130				
Acetone	53.6		ug/L	50.00	107	70-130				
Benzene	9.46		ug/L	10.00	95	70-130				
Bromobenzene	9.59		ug/L	10.00	96	70-130				
Bromochloromethane	9.95		ug/L	10.00	100	70-130				
Bromodichloromethane	11.2		ug/L	10.00	112	70-130				
Bromoform	9.51		ug/L	10.00	95	70-130				
Bromomethane	7.93		ug/L	10.00	79	70-130				
Carbon Disulfide	10.6		ug/L	10.00	106	70-130				
Carbon Tetrachloride	10.1		ug/L	10.00	101	70-130				
Chlorobenzene	9.76		ug/L	10.00	98	70-130				
Chloroethane	11.4		ug/L	10.00	114	70-130				
Chloroform	10.0		ug/L	10.00	100	70-130				
Chloromethane	9.50		ug/L	10.00	95	70-130				
cis-1,2-Dichloroethene	10.4		ug/L	10.00	104	70-130				
cis-1,3-Dichloropropene	9.61		ug/L	10.00	96	70-130				
Dibromochloromethane	10.3		ug/L	10.00	103	70-130				
Dibromomethane	9.75		ug/L	10.00	98	70-130				
Dichlorodifluoromethane	8.89		ug/L	10.00	89	70-130				
Diethyl Ether	11.3		ug/L	10.00	113	70-130				
Di-isopropyl ether	9.54		ug/L	10.00	95	70-130				



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										

### Batch BD80807 - 5030B

Ethyl tertiary-butyl ether	9.80		ug/L	10.00		98	70-130			
Ethylbenzene	9.29		ug/L	10.00		93	70-130			
Hexachlorobutadiene	8.96		ug/L	10.00		90	70-130			
Hexachloroethane	10.0		ug/L	10.00		100	70-130			
Isopropylbenzene	8.36		ug/L	10.00		84	70-130			
Methyl tert-Butyl Ether	9.78		ug/L	10.00		98	70-130			
Methylene Chloride	10.5		ug/L	10.00		105	70-130			
Naphthalene	8.77		ug/L	10.00		88	70-130			
n-Butylbenzene	9.03		ug/L	10.00		90	70-130			
n-Propylbenzene	9.25		ug/L	10.00		92	70-130			
sec-Butylbenzene	9.18		ug/L	10.00		92	70-130			
Styrene	9.09		ug/L	10.00		91	70-130			
tert-Butylbenzene	9.42		ug/L	10.00		94	70-130			
Tertiary-amyl methyl ether	9.65		ug/L	10.00		96	70-130			
Tetrachloroethene	9.10		ug/L	10.00		91	70-130			
Tetrahydrofuran	6.85		ug/L	10.00		68	70-130			B-
Toluene	9.50		ug/L	10.00		95	70-130			
trans-1,2-Dichloroethene	10.3		ug/L	10.00		103	70-130			
trans-1,3-Dichloropropene	8.86		ug/L	10.00		89	70-130			
Trichloroethene	9.90		ug/L	10.00		99	70-130			
Trichlorofluoromethane	9.67		ug/L	10.00		97	70-130			
Vinyl Acetate	8.71		ug/L	10.00		87	70-130			
Vinyl Chloride	13.4		ug/L	10.00		134	70-130			B+
Xylene O	9.52		ug/L	10.00		95	70-130			
Xylene P,M	18.8		ug/L	20.00		94	70-130			
Surrogate: 1,2-Dichloroethane-d4	27.8		ug/L	25.00		111	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		ug/L	25.00		98	70-130			
Surrogate: Dibromofluoromethane	26.8		ug/L	25.00		107	70-130			
Surrogate: Toluene-d8	25.0		ug/L	25.00		100	70-130			

### LCS Dup

1,1,1,2-Tetrachloroethane	9.57		ug/L	10.00		96	70-130	1	20	
1,1,1-Trichloroethane	9.77		ug/L	10.00		98	70-130	0.1	20	
1,1,2,2-Tetrachloroethane	9.16		ug/L	10.00		92	70-130	0.4	20	
1,1,2-Trichloroethane	9.71		ug/L	10.00		97	70-130	3	20	
1,1-Dichloroethane	10.2		ug/L	10.00		102	70-130	3	20	
1,1-Dichloroethene	10.5		ug/L	10.00		105	70-130	2	20	
1,1-Dichloropropene	9.84		ug/L	10.00		98	70-130	0.9	20	
1,2,3-Trichlorobenzene	9.28		ug/L	10.00		93	70-130	12	20	
1,2,3-Trichloropropane	9.01		ug/L	10.00		90	70-130	5	20	
1,2,4-Trichlorobenzene	9.10		ug/L	10.00		91	70-130	5	20	
1,2,4-Trimethylbenzene	9.53		ug/L	10.00		95	70-130	0.2	20	
1,2-Dibromo-3-Chloropropane	9.00		ug/L	10.00		90	70-130	5	20	
1,2-Dibromoethane	9.17		ug/L	10.00		92	70-130	0.3	20	
1,2-Dichlorobenzene	9.72		ug/L	10.00		97	70-130	0.7	20	
1,2-Dichloroethane	10.4		ug/L	10.00		104	70-130	4	20	
1,2-Dichloropropane	10.0		ug/L	10.00		100	70-130	0.4	20	



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-----------

### 8260B Volatile Organic Compounds

#### Batch BD80807 - 5030B

1,3,5-Trimethylbenzene	9.30		ug/L	10.00	93	70-130	1	20		
1,3-Dichlorobenzene	9.89		ug/L	10.00	99	70-130	0.9	20		
1,3-Dichloropropane	9.11		ug/L	10.00	91	70-130	3	20		
1,4-Dichlorobenzene	9.56		ug/L	10.00	96	70-130	0.6	20		
1,4-Dioxane - Screen	134		ug/L	200.0	67	0-332	31	200		
1-Chlorohexane	9.16		ug/L	10.00	92	70-130	2	20		
2,2-Dichloropropane	10.2		ug/L	10.00	102	70-130	3	20		
2-Butanone	42.1		ug/L	50.00	84	70-130	3	20		
2-Chlorotoluene	9.47		ug/L	10.00	95	70-130	3	20		
2-Hexanone	42.4		ug/L	50.00	85	70-130	0.9	20		
4-Chlorotoluene	9.11		ug/L	10.00	91	70-130	0.5	20		
4-Isopropyltoluene	9.48		ug/L	10.00	95	70-130	2	20		
4-Methyl-2-Pentanone	45.8		ug/L	50.00	92	70-130	0.02	20		
Acetone	52.0		ug/L	50.00	104	70-130	3	20		
Benzene	9.36		ug/L	10.00	94	70-130	1	20		
Bromobenzene	9.54		ug/L	10.00	95	70-130	0.5	20		
Bromochloromethane	10.0		ug/L	10.00	100	70-130	0.6	20		
Bromodichloromethane	11.4		ug/L	10.00	114	70-130	2	20		
Bromoform	9.51		ug/L	10.00	95	70-130	0	20		
Bromomethane	7.82		ug/L	10.00	78	70-130	1	20		
Carbon Disulfide	10.6		ug/L	10.00	106	70-130	0.3	20		
Carbon Tetrachloride	10.2		ug/L	10.00	102	70-130	0.5	20		
Chlorobenzene	9.56		ug/L	10.00	96	70-130	2	20		
Chloroethane	11.2		ug/L	10.00	112	70-130	2	20		
Chloroform	9.92		ug/L	10.00	99	70-130	0.8	20		
Chloromethane	9.73		ug/L	10.00	97	70-130	2	20		
cis-1,2-Dichloroethene	10.3		ug/L	10.00	103	70-130	0.6	20		
cis-1,3-Dichloropropene	9.52		ug/L	10.00	95	70-130	0.9	20		
Dibromochloromethane	9.92		ug/L	10.00	99	70-130	3	20		
Dibromomethane	9.60		ug/L	10.00	96	70-130	2	20		
Dichlorodifluoromethane	9.02		ug/L	10.00	90	70-130	1	20		
Diethyl Ether	12.7		ug/L	10.00	127	70-130	12	20		
Di-isopropyl ether	9.26		ug/L	10.00	93	70-130	3	20		
Ethyl tertiary-butyl ether	9.96		ug/L	10.00	100	70-130	2	20		
Ethylbenzene	9.10		ug/L	10.00	91	70-130	2	20		
Hexachlorobutadiene	9.50		ug/L	10.00	95	70-130	6	20		
Hexachloroethane	10.4		ug/L	10.00	104	70-130	3	20		
Isopropylbenzene	8.34		ug/L	10.00	83	70-130	0.2	20		
Methyl tert-Butyl Ether	9.89		ug/L	10.00	99	70-130	1	20		
Methylene Chloride	10.4		ug/L	10.00	104	70-130	1	20		
Naphthalene	9.55		ug/L	10.00	96	70-130	9	20		
n-Butylbenzene	9.38		ug/L	10.00	94	70-130	4	20		
n-Propylbenzene	9.36		ug/L	10.00	94	70-130	1	20		
sec-Butylbenzene	9.35		ug/L	10.00	94	70-130	2	20		
Styrene	8.94		ug/L	10.00	89	70-130	2	20		
tert-Butylbenzene	9.88		ug/L	10.00	99	70-130	5	20		



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Qualifier
8260B Volatile Organic Compounds									

**Batch BD80807 - 5030B**

Tertiary-amyl methyl ether	9.77		ug/L	10.00	98	70-130	1	20	
Tetrachloroethene	9.01		ug/L	10.00	90	70-130	1	20	
Tetrahydrofuran	8.16		ug/L	10.00	82	70-130	17	20	
Toluene	9.47		ug/L	10.00	95	70-130	0.3	20	
trans-1,2-Dichloroethene	10.4		ug/L	10.00	104	70-130	0.5	20	
trans-1,3-Dichloropropene	8.95		ug/L	10.00	90	70-130	1	20	
Trichloroethene	9.69		ug/L	10.00	97	70-130	2	20	
Trichlorofluoromethane	9.82		ug/L	10.00	98	70-130	2	20	
Vinyl Acetate	8.76		ug/L	10.00	88	70-130	0.6	20	
Vinyl Chloride	13.6		ug/L	10.00	136	70-130	2	20	B+
Xylene O	9.35		ug/L	10.00	94	70-130	2	20	
Xylene P,M	18.4		ug/L	20.00	92	70-130	2	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	28.0		ug/L	25.00	112	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	24.0		ug/L	25.00	96	70-130			
<i>Surrogate: Dibromofluoromethane</i>	26.8		ug/L	25.00	107	70-130			
<i>Surrogate: Toluene-d8</i>	24.2		ug/L	25.00	97	70-130			

**Matrix Spike Source: 0804037-07**

1,1,1,2-Tetrachloroethane	0.0099	0.0010	mg/L	0.01000	ND	99	70-130		
1,1,1-Trichloroethane	0.112	0.0010	mg/L	0.01000	0.114	NR	70-130		MT
1,1,2,2-Tetrachloroethane	0.0083	0.0005	mg/L	0.01000	ND	83	70-130		
1,1,2-Trichloroethane	0.0101	0.0010	mg/L	0.01000	0.0003	98	70-130		
1,1-Dichloroethane	0.0474	0.0010	mg/L	0.01000	0.0443	31	70-130		M-
1,1-Dichloroethene	0.0194	0.0010	mg/L	0.01000	0.0103	91	70-130		
1,1-Dichloropropene	0.0105	0.0020	mg/L	0.01000	ND	105	70-130		
1,2,3-Trichlorobenzene	0.0071	0.0010	mg/L	0.01000	ND	71	70-130		
1,2,3-Trichloropropane	0.0081	0.0010	mg/L	0.01000	ND	81	70-130		
1,2,4-Trichlorobenzene	0.0075	0.0010	mg/L	0.01000	ND	75	70-130		
1,2,4-Trimethylbenzene	0.0090	0.0010	mg/L	0.01000	ND	90	70-130		
1,2-Dibromo-3-Chloropropane	0.0080	0.0050	mg/L	0.01000	ND	80	70-130		
1,2-Dibromoethane	0.0092	0.0010	mg/L	0.01000	ND	92	70-130		
1,2-Dichlorobenzene	0.0087	0.0010	mg/L	0.01000	ND	87	70-130		
1,2-Dichloroethane	0.0112	0.0010	mg/L	0.01000	ND	112	70-130		
1,2-Dichloropropane	0.0121	0.0010	mg/L	0.01000	ND	121	70-130		
1,3,5-Trimethylbenzene	0.0087	0.0010	mg/L	0.01000	ND	87	70-130		
1,3-Dichlorobenzene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130		
1,3-Dichloropropane	0.0091	0.0010	mg/L	0.01000	ND	91	70-130		
1,4-Dichlorobenzene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130		
1,4-Dioxane - Screen	0.203	0.500	mg/L	0.2000	0.0577	73	0-332		
1-Chlorohexane	0.0096	0.0010	mg/L	0.01000	ND	96	70-130		
2,2-Dichloropropane	0.0101	0.0010	mg/L	0.01000	ND	101	70-130		
2-Butanone	0.0385	0.0250	mg/L	0.05000	ND	77	70-130		
2-Chlorotoluene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130		
2-Hexanone	0.0419	0.0100	mg/L	0.05000	ND	84	70-130		
4-Chlorotoluene	0.0086	0.0010	mg/L	0.01000	ND	86	70-130		
4-Isopropyltoluene	0.0086	0.0010	mg/L	0.01000	ND	86	70-130		
4-Methyl-2-Pentanone	0.0461	0.0250	mg/L	0.05000	ND	92	70-130		



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										

### Batch BD80807 - 5030B

Acetone	0.0443	0.0250	mg/L	0.05000	ND	89	70-130			
Benzene	0.0099	0.0010	mg/L	0.01000	ND	99	70-130			
Bromobenzene	0.0088	0.0020	mg/L	0.01000	ND	88	70-130			
Bromochloromethane	0.0099	0.0010	mg/L	0.01000	ND	99	70-130			
Bromodichloromethane	0.0120	0.0006	mg/L	0.01000	ND	120	70-130			
Bromoform	0.0093	0.0010	mg/L	0.01000	ND	93	70-130			
Bromomethane	0.0084	0.0020	mg/L	0.01000	ND	84	70-130			
Carbon Disulfide	0.0110	0.0010	mg/L	0.01000	ND	110	70-130			
Carbon Tetrachloride	0.0108	0.0010	mg/L	0.01000	ND	108	70-130			
Chlorobenzene	0.0096	0.0010	mg/L	0.01000	ND	96	70-130			
Chloroethane	0.0129	0.0020	mg/L	0.01000	0.0012	117	70-130			
Chloroform	0.0111	0.0010	mg/L	0.01000	0.0008	103	70-130			
Chloromethane	0.0100	0.0020	mg/L	0.01000	ND	100	70-130			
cis-1,2-Dichloroethene	0.0253	0.0010	mg/L	0.01000	0.0165	88	70-130			
cis-1,3-Dichloropropene	0.0101	0.0004	mg/L	0.01000	ND	101	70-130			
Dibromochloromethane	0.0098	0.0010	mg/L	0.01000	ND	98	70-130			
Dibromomethane	0.0096	0.0010	mg/L	0.01000	ND	96	70-130			
Dichlorodifluoromethane	0.0091	0.0020	mg/L	0.01000	ND	91	70-130			
Diethyl Ether	0.0197	0.0010	mg/L	0.01000	ND	197	70-130			M+
Di-isopropyl ether	0.0097	0.0010	mg/L	0.01000	ND	97	70-130			
Ethyl tertiary-butyl ether	0.0100	0.0010	mg/L	0.01000	ND	100	70-130			
Ethylbenzene	0.0093	0.0010	mg/L	0.01000	ND	93	70-130			
Hexachlorobutadiene	0.0075	0.0006	mg/L	0.01000	ND	75	70-130			
Hexachloroethane	0.0104	0.0010	mg/L	0.01000	ND	104	70-130			
Isopropylbenzene	0.0077	0.0010	mg/L	0.01000	ND	77	70-130			
Methyl tert-Butyl Ether	0.0110	0.0010	mg/L	0.01000	0.0008	101	70-130			
Methylene Chloride	0.0110	0.0040	mg/L	0.01000	0.0007	103	70-130			
Naphthalene	0.0082	0.0010	mg/L	0.01000	ND	82	70-130			
n-Butylbenzene	0.0086	0.0010	mg/L	0.01000	ND	86	70-130			
n-Propylbenzene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130			
sec-Butylbenzene	0.0087	0.0010	mg/L	0.01000	ND	87	70-130			
Styrene	0.0090	0.0010	mg/L	0.01000	ND	90	70-130			
tert-Butylbenzene	0.0089	0.0010	mg/L	0.01000	ND	89	70-130			
Tertiary-amyl methyl ether	0.0100	0.0010	mg/L	0.01000	ND	100	70-130			
Tetrachloroethene	0.360	0.0010	mg/L	0.01000	3.61	NR	70-130			MT
Tetrahydrofuran	0.0096	0.0050	mg/L	0.01000	0.0022	73	70-130			
Toluene	0.0100	0.0010	mg/L	0.01000	ND	100	70-130			
trans-1,2-Dichloroethene	0.0119	0.0010	mg/L	0.01000	0.0008	111	70-130			
trans-1,3-Dichloropropene	0.0089	0.0004	mg/L	0.01000	ND	89	70-130			
Trichloroethene	0.428	0.0010	mg/L	0.01000	0.578	NR	70-130			MT
Trichlorofluoromethane	0.0131	0.0010	mg/L	0.01000	0.0040	92	70-130			
Vinyl Acetate	0.0091	0.0050	mg/L	0.01000	ND	91	70-130			
Vinyl Chloride	0.0150	0.0010	mg/L	0.01000	ND	150	70-130			M+
Xylene O	0.0093	0.0010	mg/L	0.01000	ND	93	70-130			
Xylene P,M	0.0188	0.0020	mg/L	0.02000	ND	94	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.3		ug/L	25.00		105	70-130			

56



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										

### Batch BD80807 - 5030B

Surrogate: 4-Bromofluorobenzene	24.8		ug/L	25.00	99	70-130				
Surrogate: Dibromofluoromethane	25.5		ug/L	25.00	102	70-130				
Surrogate: Toluene-d8	23.8		ug/L	25.00	95	70-130				
<b>Matrix Spike Dup Source: 0804037-07</b>										
1,1,1,2-Tetrachloroethane	0.0106	0.0010	mg/L	0.01000	ND	106	70-130	7	20	
1,1,1-Trichloroethane	0.113	0.0010	mg/L	0.01000	0.114	NR	70-130	NR	20	D+, MT
1,1,2,2-Tetrachloroethane	0.0084	0.0005	mg/L	0.01000	ND	84	70-130	2	20	
1,1,2-Trichloroethane	0.0100	0.0010	mg/L	0.01000	0.0003	97	70-130	0.6	20	
1,1-Dichloroethane	0.0477	0.0010	mg/L	0.01000	0.0443	34	70-130	10	20	M-
1,1-Dichloroethene	0.0196	0.0010	mg/L	0.01000	0.0103	93	70-130	2	20	
1,1-Dichloropropene	0.0104	0.0020	mg/L	0.01000	ND	104	70-130	0.8	20	
1,2,3-Trichlorobenzene	0.0080	0.0010	mg/L	0.01000	ND	80	70-130	12	20	
1,2,3-Trichloropropane	0.0083	0.0010	mg/L	0.01000	ND	83	70-130	2	20	
1,2,4-Trichlorobenzene	0.0084	0.0010	mg/L	0.01000	ND	84	70-130	12	20	
1,2,4-Trimethylbenzene	0.0090	0.0010	mg/L	0.01000	ND	90	70-130	0.2	20	
1,2-Dibromo-3-Chloropropane	0.0094	0.0050	mg/L	0.01000	ND	94	70-130	17	20	
1,2-Dibromoethane	0.0094	0.0010	mg/L	0.01000	ND	94	70-130	2	20	
1,2-Dichlorobenzene	0.0089	0.0010	mg/L	0.01000	ND	89	70-130	3	20	
1,2-Dichloroethane	0.0111	0.0010	mg/L	0.01000	ND	111	70-130	0.4	20	
1,2-Dichloropropane	0.0118	0.0010	mg/L	0.01000	ND	118	70-130	2	20	
1,3,5-Trimethylbenzene	0.0086	0.0010	mg/L	0.01000	ND	86	70-130	1	20	
1,3-Dichlorobenzene	0.0091	0.0010	mg/L	0.01000	ND	91	70-130	3	20	
1,3-Dichloropropane	0.0092	0.0010	mg/L	0.01000	ND	92	70-130	0.9	20	
1,4-Dichlorobenzene	0.0087	0.0010	mg/L	0.01000	ND	87	70-130	0.7	20	
1,4-Dioxane - Screen	0.344	0.500	mg/L	0.2000	0.0577	143	0-332	65	200	
1-Chlorohexane	0.0093	0.0010	mg/L	0.01000	ND	93	70-130	3	20	
2,2-Dichloropropane	0.0100	0.0010	mg/L	0.01000	ND	100	70-130	1	20	
2-Butanone	0.0433	0.0250	mg/L	0.05000	ND	87	70-130	12	20	
2-Chlorotoluene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130	1	20	
2-Hexanone	0.0424	0.0100	mg/L	0.05000	ND	85	70-130	1	20	
4-Chlorotoluene	0.0086	0.0010	mg/L	0.01000	ND	86	70-130	0.3	20	
4-Isopropyltoluene	0.0087	0.0010	mg/L	0.01000	ND	87	70-130	1	20	
4-Methyl-2-Pentanone	0.0484	0.0250	mg/L	0.05000	ND	97	70-130	5	20	
Acetone	0.0473	0.0250	mg/L	0.05000	ND	95	70-130	7	20	
Benzene	0.0100	0.0010	mg/L	0.01000	ND	100	70-130	0.8	20	
Bromobenzene	0.0090	0.0020	mg/L	0.01000	ND	90	70-130	1	20	
Bromochloromethane	0.0101	0.0010	mg/L	0.01000	ND	101	70-130	2	20	
Bromodichloromethane	0.0115	0.0006	mg/L	0.01000	ND	115	70-130	4	20	
Bromoform	0.0093	0.0010	mg/L	0.01000	ND	93	70-130	0	20	
Bromomethane	0.0091	0.0020	mg/L	0.01000	ND	91	70-130	8	20	
Carbon Disulfide	0.0112	0.0010	mg/L	0.01000	ND	112	70-130	2	20	
Carbon Tetrachloride	0.0109	0.0010	mg/L	0.01000	ND	109	70-130	1	20	
Chlorobenzene	0.0095	0.0010	mg/L	0.01000	ND	95	70-130	1	20	
Chloroethane	0.0131	0.0020	mg/L	0.01000	0.0012	119	70-130	2	20	
Chloroform	0.0110	0.0010	mg/L	0.01000	0.0008	102	70-130	0.3	20	



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80807 - 5030B</b>										
Chloromethane	0.0095	0.0020	mg/L	0.01000	ND	95	70-130	5	20	
cis-1,2-Dichloroethene	0.0256	0.0010	mg/L	0.01000	0.0165	90	70-130	3	20	
cis-1,3-Dichloropropene	0.0102	0.0004	mg/L	0.01000	ND	102	70-130	1	20	
Dibromochloromethane	0.0100	0.0010	mg/L	0.01000	ND	100	70-130	2	20	
Dibromomethane	0.0095	0.0010	mg/L	0.01000	ND	95	70-130	0.4	20	
Dichlorodifluoromethane	0.0093	0.0020	mg/L	0.01000	ND	93	70-130	2	20	
Diethyl Ether	0.0201	0.0010	mg/L	0.01000	ND	201	70-130	2	20	M+
Di-isopropyl ether	0.0097	0.0010	mg/L	0.01000	ND	97	70-130	0.5	20	
Ethyl tertiary-butyl ether	0.0103	0.0010	mg/L	0.01000	ND	103	70-130	4	20	
Ethylbenzene	0.0094	0.0010	mg/L	0.01000	ND	94	70-130	0.9	20	
Hexachlorobutadiene	0.0084	0.0006	mg/L	0.01000	ND	84	70-130	11	20	
Hexachloroethane	0.0100	0.0010	mg/L	0.01000	ND	100	70-130	4	20	
Isopropylbenzene	0.0079	0.0010	mg/L	0.01000	ND	79	70-130	2	20	
Methyl tert-Butyl Ether	0.0110	0.0010	mg/L	0.01000	0.0008	102	70-130	0.4	20	
Methylene Chloride	0.0110	0.0040	mg/L	0.01000	0.0007	103	70-130	0.5	20	
Naphthalene	0.0090	0.0010	mg/L	0.01000	ND	90	70-130	9	20	
n-Butylbenzene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130	2	20	
n-Propylbenzene	0.0089	0.0010	mg/L	0.01000	ND	89	70-130	0.7	20	
sec-Butylbenzene	0.0087	0.0010	mg/L	0.01000	ND	87	70-130	0.8	20	
Styrene	0.0088	0.0010	mg/L	0.01000	ND	88	70-130	1	20	
tert-Butylbenzene	0.0092	0.0010	mg/L	0.01000	ND	92	70-130	3	20	
Tertiary-amyl methyl ether	0.0101	0.0010	mg/L	0.01000	ND	101	70-130	2	20	
Tetrachloroethene	0.273	0.0010	mg/L	0.01000	3.61	NR	70-130	NR	20	MT
Tetrahydrofuran	0.0100	0.0050	mg/L	0.01000	0.0022	77	70-130	6	20	
Toluene	0.0098	0.0010	mg/L	0.01000	ND	98	70-130	2	20	
trans-1,2-Dichloroethene	0.0116	0.0010	mg/L	0.01000	0.0008	108	70-130	3	20	
trans-1,3-Dichloropropene	0.0087	0.0004	mg/L	0.01000	ND	87	70-130	2	20	
Trichloroethene	0.423	0.0010	mg/L	0.01000	0.578	NR	70-130	NR	20	MT
Trichlorofluoromethane	0.0133	0.0010	mg/L	0.01000	0.0040	94	70-130	2	20	
Vinyl Acetate	0.0090	0.0050	mg/L	0.01000	ND	90	70-130	0.9	20	
Vinyl Chloride	0.0142	0.0010	mg/L	0.01000	ND	142	70-130	6	20	M+
Xylene O	0.0095	0.0010	mg/L	0.01000	ND	95	70-130	2	20	
Xylene P,M	0.0189	0.0020	mg/L	0.02000	ND	95	70-130	0.6	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	26.0		ug/L	25.00		104	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	24.8		ug/L	25.00		99	70-130			
<i>Surrogate: Dibromofluoromethane</i>	25.6		ug/L	25.00		102	70-130			
<i>Surrogate: Toluene-d8</i>	24.6		ug/L	25.00		98	70-130			
<b>Batch BD80909 - 5030B</b>										
<b>Blank</b>										
1,1,1,2-Tetrachloroethane	ND	0.0010	mg/L							
1,1,1-Trichloroethane	ND	0.0010	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethene	ND	0.0010	mg/L							



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										

### Batch BD80909 - 5030B

1,1-Dichloropropene	ND	0.0020	mg/L
1,2,3-Trichlorobenzene	ND	0.0010	mg/L
1,2,3-Trichloropropane	ND	0.0010	mg/L
1,2,4-Trichlorobenzene	ND	0.0010	mg/L
1,2,4-Trimethylbenzene	ND	0.0010	mg/L
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L
1,2-Dibromoethane	ND	0.0010	mg/L
1,2-Dichlorobenzene	ND	0.0010	mg/L
1,2-Dichloroethane	ND	0.0010	mg/L
1,2-Dichloropropane	ND	0.0010	mg/L
1,3,5-Trimethylbenzene	ND	0.0010	mg/L
1,3-Dichlorobenzene	ND	0.0010	mg/L
1,3-Dichloropropane	ND	0.0010	mg/L
1,4-Dichlorobenzene	ND	0.0010	mg/L
1,4-Dioxane - Screen	ND	0.500	mg/L
1-Chlorohexane	ND	0.0010	mg/L
2,2-Dichloropropane	ND	0.0010	mg/L
2-Butanone	ND	0.0250	mg/L
2-Chlorotoluene	ND	0.0010	mg/L
2-Hexanone	ND	0.0100	mg/L
4-Chlorotoluene	ND	0.0010	mg/L
4-Isopropyltoluene	ND	0.0010	mg/L
4-Methyl-2-Pentanone	ND	0.0250	mg/L
Acetone	ND	0.0250	mg/L
Benzene	ND	0.0010	mg/L
Bromobenzene	ND	0.0020	mg/L
Bromochloromethane	ND	0.0010	mg/L
Bromodichloromethane	ND	0.0006	mg/L
Bromoform	ND	0.0010	mg/L
Bromomethane	ND	0.0020	mg/L
Carbon Disulfide	ND	0.0010	mg/L
Carbon Tetrachloride	ND	0.0010	mg/L
Chlorobenzene	ND	0.0010	mg/L
Chloroethane	ND	0.0020	mg/L
Chloroform	ND	0.0010	mg/L
Chloromethane	ND	0.0020	mg/L
cis-1,2-Dichloroethene	ND	0.0010	mg/L
cis-1,3-Dichloropropene	ND	0.0004	mg/L
Dibromochloromethane	ND	0.0010	mg/L
Dibromomethane	ND	0.0010	mg/L
Dichlorodifluoromethane	ND	0.0020	mg/L
Diethyl Ether	ND	0.0010	mg/L
Di-isopropyl ether	ND	0.0010	mg/L
Ethyl tertiary-butyl ether	ND	0.0010	mg/L
Ethylbenzene	ND	0.0010	mg/L
Hexachlorobutadiene	ND	0.0006	mg/L



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	-----------

### 8260B Volatile Organic Compounds

#### Batch BD80909 - 5030B

Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0040	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	27.6		ug/L	25.00		110	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		ug/L	25.00		99	70-130			
Surrogate: Dibromofluoromethane	25.5		ug/L	25.00		102	70-130			
Surrogate: Toluene-d8	24.1		ug/L	25.00		96	70-130			

#### LCS

1,1,1,2-Tetrachloroethane	9.60		ug/L	10.00		96	70-130			
1,1,1-Trichloroethane	9.63		ug/L	10.00		96	70-130			
1,1,2,2-Tetrachloroethane	9.60		ug/L	10.00		96	70-130			
1,1,2-Trichloroethane	9.59		ug/L	10.00		96	70-130			
1,1-Dichloroethane	9.85		ug/L	10.00		98	70-130			
1,1-Dichloroethene	10.6		ug/L	10.00		106	70-130			
1,1-Dichloropropene	9.88		ug/L	10.00		99	70-130			
1,2,3-Trichlorobenzene	8.61		ug/L	10.00		86	70-130			
1,2,3-Trichloropropane	9.44		ug/L	10.00		94	70-130			
1,2,4-Trichlorobenzene	8.69		ug/L	10.00		87	70-130			
1,2,4-Trimethylbenzene	9.89		ug/L	10.00		99	70-130			
1,2-Dibromo-3-Chloropropane	9.45		ug/L	10.00		94	70-130			
1,2-Dibromoethane	9.32		ug/L	10.00		93	70-130			
1,2-Dichlorobenzene	9.79		ug/L	10.00		98	70-130			
1,2-Dichloroethane	10.3		ug/L	10.00		103	70-130			
1,2-Dichloropropane	10.0		ug/L	10.00		100	70-130			
1,3,5-Trimethylbenzene	9.47		ug/L	10.00		95	70-130			
1,3-Dichlorobenzene	9.79		ug/L	10.00		98	70-130			
1,3-Dichloropropane	9.16		ug/L	10.00		92	70-130			



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80909 - 5030B</b>										
1,4-Dichlorobenzene	9.54		ug/L	10.00		95	70-130			
1,4-Dioxane - Screen	95.0		ug/L	200.0		47	0-332			
1-Chlorohexane	9.56		ug/L	10.00		96	70-130			
2,2-Dichloropropane	9.97		ug/L	10.00		100	70-130			
2-Butanone	44.2		ug/L	50.00		88	70-130			
2-Chlorotoluene	9.80		ug/L	10.00		98	70-130			
2-Hexanone	45.7		ug/L	50.00		91	70-130			
4-Chlorotoluene	9.38		ug/L	10.00		94	70-130			
4-Isopropyltoluene	9.44		ug/L	10.00		94	70-130			
4-Methyl-2-Pentanone	47.3		ug/L	50.00		95	70-130			
Acetone	55.8		ug/L	50.00		112	70-130			
Benzene	9.40		ug/L	10.00		94	70-130			
Bromobenzene	9.85		ug/L	10.00		98	70-130			
Bromochloromethane	9.69		ug/L	10.00		97	70-130			
Bromodichloromethane	10.9		ug/L	10.00		109	70-130			
Bromoform	9.80		ug/L	10.00		98	70-130			
Bromomethane	9.17		ug/L	10.00		92	70-130			
Carbon Disulfide	10.6		ug/L	10.00		106	70-130			
Carbon Tetrachloride	9.71		ug/L	10.00		97	70-130			
Chlorobenzene	9.54		ug/L	10.00		95	70-130			
Chloroethane	10.9		ug/L	10.00		109	70-130			
Chloroform	9.70		ug/L	10.00		97	70-130			
Chloromethane	9.71		ug/L	10.00		97	70-130			
cis-1,2-Dichloroethene	10.1		ug/L	10.00		101	70-130			
cis-1,3-Dichloropropene	9.89		ug/L	10.00		99	70-130			
Dibromochloromethane	9.82		ug/L	10.00		98	70-130			
Dibromomethane	9.18		ug/L	10.00		92	70-130			
Dichlorodifluoromethane	8.25		ug/L	10.00		82	70-130			
Diethyl Ether	10.7		ug/L	10.00		107	70-130			
Di-isopropyl ether	9.48		ug/L	10.00		95	70-130			
Ethyl tertiary-butyl ether	9.88		ug/L	10.00		99	70-130			
Ethylbenzene	9.34		ug/L	10.00		93	70-130			
Hexachlorobutadiene	9.60		ug/L	10.00		96	70-130			
Hexachloroethane	11.0		ug/L	10.00		110	70-130			
Isopropylbenzene	8.61		ug/L	10.00		86	70-130			
Methyl tert-Butyl Ether	9.78		ug/L	10.00		98	70-130			
Methylene Chloride	10.3		ug/L	10.00		103	70-130			
Naphthalene	9.11		ug/L	10.00		91	70-130			
n-Butylbenzene	9.34		ug/L	10.00		93	70-130			
n-Propylbenzene	9.66		ug/L	10.00		97	70-130			
sec-Butylbenzene	9.47		ug/L	10.00		95	70-130			
Styrene	9.13		ug/L	10.00		91	70-130			
tert-Butylbenzene	9.93		ug/L	10.00		99	70-130			
Tertiary-amyl methyl ether	9.71		ug/L	10.00		97	70-130			
Tetrachloroethene	9.04		ug/L	10.00		90	70-130			
Tetrahydrofuran	8.64		ug/L	10.00		86	70-130			



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80909 - 5030B</b>										
Toluene	9.42		ug/L	10.00	94	70-130				
trans-1,2-Dichloroethene	10.2		ug/L	10.00	102	70-130				
trans-1,3-Dichloropropene	8.80		ug/L	10.00	88	70-130				
Trichloroethene	9.71		ug/L	10.00	97	70-130				
Trichlorofluoromethane	9.34		ug/L	10.00	93	70-130				
Vinyl Acetate	8.90		ug/L	10.00	89	70-130				
Vinyl Chloride	12.9		ug/L	10.00	129	70-130				
Xylene O	9.22		ug/L	10.00	92	70-130				
Xylene P,M	18.9		ug/L	20.00	94	70-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	27.7		ug/L	25.00	111	70-130				
<i>Surrogate: 4-Bromofluorobenzene</i>	24.5		ug/L	25.00	98	70-130				
<i>Surrogate: Dibromofluoromethane</i>	26.2		ug/L	25.00	105	70-130				
<i>Surrogate: Toluene-d8</i>	24.6		ug/L	25.00	98	70-130				
<b>LCS Dup</b>										
1,1,1,2-Tetrachloroethane	10.4		ug/L	10.00	104	70-130	8	20		
1,1,1-Trichloroethane	10.4		ug/L	10.00	104	70-130	8	20		
1,1,2,2-Tetrachloroethane	10.4		ug/L	10.00	104	70-130	8	20		
1,1,2-Trichloroethane	10.4		ug/L	10.00	104	70-130	8	20		
1,1-Dichloroethane	10.8		ug/L	10.00	108	70-130	9	20		
1,1-Dichloroethene	11.6		ug/L	10.00	116	70-130	9	20		
1,1-Dichloropropene	10.5		ug/L	10.00	105	70-130	6	20		
1,2,3-Trichlorobenzene	9.81		ug/L	10.00	98	70-130	13	20		
1,2,3-Trichloropropane	10.0		ug/L	10.00	100	70-130	6	20		
1,2,4-Trichlorobenzene	9.99		ug/L	10.00	100	70-130	14	20		
1,2,4-Trimethylbenzene	10.6		ug/L	10.00	106	70-130	6	20		
1,2-Dibromo-3-Chloropropane	11.1		ug/L	10.00	111	70-130	16	20		
1,2-Dibromoethane	10.2		ug/L	10.00	102	70-130	9	20		
1,2-Dichlorobenzene	10.4		ug/L	10.00	104	70-130	7	20		
1,2-Dichloroethane	11.0		ug/L	10.00	110	70-130	7	20		
1,2-Dichloropropane	10.8		ug/L	10.00	108	70-130	7	20		
1,3,5-Trimethylbenzene	10.2		ug/L	10.00	102	70-130	8	20		
1,3-Dichlorobenzene	10.5		ug/L	10.00	105	70-130	7	20		
1,3-Dichloropropane	9.80		ug/L	10.00	98	70-130	7	20		
1,4-Dichlorobenzene	10.3		ug/L	10.00	103	70-130	7	20		
1,4-Dioxane - Screen	161		ug/L	200.0	81	0-332	52	200		
1-Chlorohexane	10.2		ug/L	10.00	102	70-130	7	20		
2,2-Dichloropropane	10.6		ug/L	10.00	106	70-130	6	20		
2-Butanone	47.2		ug/L	50.00	94	70-130	7	20		
2-Chlorotoluene	10.2		ug/L	10.00	102	70-130	4	20		
2-Hexanone	50.2		ug/L	50.00	100	70-130	9	20		
4-Chlorotoluene	10.2		ug/L	10.00	102	70-130	9	20		
4-Isopropyltoluene	10.2		ug/L	10.00	102	70-130	8	20		
4-Methyl-2-Pentanone	51.2		ug/L	50.00	102	70-130	8	20		
Acetone	56.7		ug/L	50.00	113	70-130	2	20		
Benzene	10.1		ug/L	10.00	101	70-130	8	20		
Bromobenzene	10.5		ug/L	10.00	105	70-130	7	20		



# ESS Laboratory

Division of Thielsch Engineering, Inc.

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
<b>Batch BD80909 - 5030B</b>										
Bromochloromethane	10.4		ug/L	10.00	104	70-130	7	20		
Bromodichloromethane	11.9		ug/L	10.00	119	70-130	8	20		
Bromoform	10.4		ug/L	10.00	104	70-130	6	20		
Bromomethane	10.2		ug/L	10.00	102	70-130	10	20		
Carbon Disulfide	11.2		ug/L	10.00	112	70-130	5	20		
Carbon Tetrachloride	10.7		ug/L	10.00	107	70-130	9	20		
Chlorobenzene	10.3		ug/L	10.00	103	70-130	8	20		
Chloroethane	11.7		ug/L	10.00	117	70-130	7	20		
Chloroform	10.4		ug/L	10.00	104	70-130	6	20		
Chloromethane	10.0		ug/L	10.00	100	70-130	3	20		
cis-1,2-Dichloroethene	11.3		ug/L	10.00	113	70-130	11	20		
cis-1,3-Dichloropropene	10.7		ug/L	10.00	107	70-130	8	20		
Dibromochloromethane	10.8		ug/L	10.00	108	70-130	9	20		
Dibromomethane	10.2		ug/L	10.00	102	70-130	11	20		
Dichlorodifluoromethane	8.77		ug/L	10.00	88	70-130	6	20		
Diethyl Ether	11.3		ug/L	10.00	113	70-130	6	20		
Di-isopropyl ether	10.1		ug/L	10.00	101	70-130	7	20		
Ethyl tertiary-butyl ether	10.6		ug/L	10.00	106	70-130	7	20		
Ethylbenzene	10.1		ug/L	10.00	101	70-130	8	20		
Hexachlorobutadiene	10.5		ug/L	10.00	105	70-130	9	20		
Hexachloroethane	11.3		ug/L	10.00	113	70-130	3	20		
Isopropylbenzene	9.17		ug/L	10.00	92	70-130	6	20		
Methyl tert-Butyl Ether	10.4		ug/L	10.00	104	70-130	6	20		
Methylene Chloride	10.7		ug/L	10.00	107	70-130	4	20		
Naphthalene	10.4		ug/L	10.00	104	70-130	14	20		
n-Butylbenzene	10.4		ug/L	10.00	104	70-130	11	20		
n-Propylbenzene	10.4		ug/L	10.00	104	70-130	7	20		
sec-Butylbenzene	10.3		ug/L	10.00	103	70-130	8	20		
Styrene	9.86		ug/L	10.00	99	70-130	8	20		
tert-Butylbenzene	10.5		ug/L	10.00	105	70-130	6	20		
Tertiary-amyl methyl ether	10.7		ug/L	10.00	107	70-130	10	20		
Tetrachloroethene	9.83		ug/L	10.00	98	70-130	8	20		
Tetrahydrofuran	9.76		ug/L	10.00	98	70-130	12	20		
Toluene	10.2		ug/L	10.00	102	70-130	8	20		
trans-1,2-Dichloroethene	11.2		ug/L	10.00	112	70-130	9	20		
trans-1,3-Dichloropropene	9.36		ug/L	10.00	94	70-130	6	20		
Trichloroethene	10.4		ug/L	10.00	104	70-130	6	20		
Trichlorofluoromethane	9.86		ug/L	10.00	99	70-130	5	20		
Vinyl Acetate	9.65		ug/L	10.00	96	70-130	8	20		
Vinyl Chloride	14.0		ug/L	10.00	140	70-130	8	20		
Xylene O	10.3		ug/L	10.00	103	70-130	11	20		
Xylene P,M	20.3		ug/L	20.00	102	70-130	8	20		
Surrogate: 1,2-Dichloroethane-d4	26.9		ug/L	25.00	107	70-130				
Surrogate: 4-Bromofluorobenzene	24.2		ug/L	25.00	97	70-130				
Surrogate: Dibromofluoromethane	26.4		ug/L	25.00	105	70-130				
Surrogate: Toluene-d8	24.7		ug/L	25.00	99	70-130				



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

### Notes and Definitions

U	Analyte included in the analysis, but not detected
MT	Due to high target values, matrix spike is masked.
M+	Matrix Spike recovery is above upper control limit.
M-	Matrix Spike recovery is below lower control limit.
D+	Relative percent difference for duplicate is outside of criteria.
D	Diluted.
C-	Continuing Calibration recovery is below lower control limit.
B+	Blank Spike recovery is above upper control limit.
B-	Blank Spike recovery is below lower control limit.
ND	Analyte NOT DETECTED above the detection limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.

Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers  
Soil and Water

Navy Installation Restoration QA Program  
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP accredited): 242405  
Potable Water  
Non Potable Water

New York (NELAP accredited): 11313  
Potable Water  
Non Potable Water  
Solid and Hazardous Waste

United States Department of Agriculture  
Soil Permit: S-54210

New Jersey (NELAP accredited): RI002  
Potable Water  
Non Potable Water  
Soil and Hazardous Waste

Maryland: 301  
Potable Water

# ESS Laboratory

Division of Thielisch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211

Tel. (401) 461-7181 Fax (401) 461-4486

[www.esslaboratory.com](http://www.esslaboratory.com)

# CHAIN OF CUSTODY

Turn Time	Standard	Other				
If faster than 5 days, prior approval by laboratory is required #						
State where samples were collected from:						
MA (RI)	CT	NH	NJ	NY	ME	Other
Is this project for any of the following: MA-MCP						
USACE Other Navy						

Project #	Project Name (20 Char. or less)	
36500500-11-8	Tektronix Inc	
Address	107 Acacia Rd	
Zip	PO#	
Telephone #	Fax #	
781-215-6606		
Email Address		
dheissen@tek.com		

Co. Name <i>Maete C</i>	Project # <i>36500500-11-8</i>	Address <i>107 Acacia Rd</i>	Zip <i>PO#</i>	Telephone # <i>781-215-6606</i>	Fax #	Email Address <i>dheissen@tek.com</i>	Pres Code <i>Code</i>	Number of Containers <i>Type of Container</i>	Circle and/or Write Required Analysis						
									MATRIX	GRAB	COMP	GRAB	COMP	GRAB	COMP
1	3-31-07	10:18	6W	MW	227D01		2	3	V	X	04	P.I.	Receiving	No older	
2	3-31-07	12:15	6W	MW	227S01		2	3	V	X	04	P.I.	Receiving	No older	
3	3-31-08	12:15	6W	MW	227S01DUP		2	3	V	X	04	P.I.	Receiving	No older	
6	3-31-08	14:25	6W	MW	220S01		2	3	V	X	38	P.D.	Receiving	(Product in H2O)	
5	3-31-08	16:30	6W	MW	221S01		2	3	V	X	15	P.I.	Receiving	(0.1 Sheen in H2O)	
4	4-01-07	10:15	6W	MW	228D01		2	3	V	X	10	P.I.	Receiving	Ken	
7	4-01-08	14:42	6W	MW	228S01		2	3	V	X	10	P.I.	Receiving	Jaken	
8	4-01-07	12:20	6W	MW	228S01DUP		2	3	V	X	10	P.I.	Receiving	Jaken	
9	4-01-08	14:42	6W	MW	230D01		2	3	/	X	10	P.I.	Receiving	Jaken	
Container Type: P-Poly		G-Glass	S-Sterile	V-VOA	Matrix: S-Soil	D-Solid	D-Sludge	WW-Waste Water	GW-Ground Water	SW-Surface Water	DW-Drinking Water	O-Oil	W-Wipes	F-Filters	
Cooler Present		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Internal Use Only		Preservation Code: 1- NP, 2- HCl, 3- H <sub>2</sub> SO <sub>4</sub> , 4- HNO <sub>3</sub> , 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9-									
Seals Intact		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	NA:	<input type="checkbox"/> Pickup	Sampled by:		Received by:		Date/Time		Received by:		Date/Time	
Cooler Temp:		<i>44</i>		<input type="checkbox"/> Technicians		<i>Mark Massie</i>		<i>David</i>		<i>4/20/08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time	
<i>Mark</i>		<i>4-20-08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time	
<i>Mark</i>		<i>4/20/08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>		<i>David</i>		<i>4/20/08 16:10</i>	

Please fax all changes to Chain of Custody in writing.  
\* By circling MA-MCP client acknowledges samples were collected in accordance with MADDEP CAM VII A

Preservation Code: 1- NP, 2- HCl, 3- H<sub>2</sub>SO<sub>4</sub>, 4- HNO<sub>3</sub>, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9-

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>Mark</i>	<i>4-20-08 16:10</i>	<i>David</i>	<i>4/20/08 16:10</i>	<i>David</i>	<i>4/20/08 16:10</i>	<i>David</i>	<i>4/20/08 16:10</i>

1 (White) Lab Copy 2 (Yellow) Client Receipt  
Please fax all changes to Chain of Custody in writing.

# ESS Laboratory

Division of Thielich Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211

Tel. (401) 461-7181 Fax (401) 461-4486

[www.esslaboratory.com](http://www.esslaboratory.com)

# CHAIN OF CUSTODY

Page 2 of 2

Turn Time If faster than 5 days, prior approval by laboratory is required #	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Other _____						
State where samples were collected from:	MA	RI	CT	NH	NJ	NY	ME	Other _____
Is this project for any of the following: MA-MCP	USACE	Navy						

Co. Name	Project #	Project Name (20 Char. or less)							
Madec	3660 Social	Textron/Barham							
Contact Person	Address	167 Audubon Rd.							
City	Wellesfield	MA							
Telephone #	Fax #	Email Address							
181-245-6666	01880	elcheise.m@madeccy.com							
ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers

Co. Name	Project #	Project Name (20 Char. or less)	Write Required Analysis										
Madec	3660 Social	Textron/Barham											
Contact Person	Address	167 Audubon Rd.											
City	Wellesfield	MA											
Telephone #	Fax #	Email Address											
181-245-6666	01880	elcheise.m@madeccy.com											
ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers				
10	4-01-08	16:05	X	X	MW 2305C 1		2 3	V X	No R/D Readings	No order			
11	4-02-08	09:50	X	X	MW 226S01		2 3	V X	No P/D Readings	No order			
12	4-02-08	10:50	X	X	MW 229SC 1		2 3	V X	No P/D Readings	No order			
67	4-02-08	08:50	X	X	MW 226DC1		2 3	V Y	No P/D Readings	No order			
14	4-01-08	17:05	X	X	Equipment Blank		2 3	V Y	No P/D Readings	No order			
15	4-01-08	11:12	Y	X	MW 228SMSM5D		2 3	V X	No P/D Readings	No order			
01													
4-08													
Cooler Present	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Internal Use Only										
Seals Intact	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	NA: <u>—</u>	<input type="checkbox"/> Pickup	Preservation Code: 1-NP, 2-HCl, 3-H <sub>2</sub> SO <sub>4</sub> , 4-HNO <sub>3</sub> , 5-NaOH, 6-MeOH, 7-Acetic Acid, 8-ZnAc, 9-								
Cooler Temp:	<u>44</u>		<input type="checkbox"/> Technicians	Sampled by: <u>Newark Madec</u>									
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time		
<u>John</u>	4-20-08 16:10	<u>J. Bent</u>	4-20-08 16:10										
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time		

ESS LAB PROJECT ID  
**0804037**

Reporting Limits  
**GA**

Electronic Deliverable  
 Yes  No

Format: Excel  Access  PDF  Other  Fax

ESS LAB PROJECT ID  
**0804037**

Reporting Limits  
**GA**

Electronic Deliverable  
 Yes  No

Format: Excel  Access  PDF  Other  Fax

\*By circling MA-MCP client acknowledges samples were collected  
in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt  
10/26/04 A



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

## PROJECT NARRATIVE

David Heislein  
MACTEC Engineering & Consulting, Inc.  
107 Audubon Road  
Wakefield, MA 01880

**RE: Providence Gorham Site**  
**ESS Laboratory Work Order Number: 0804037**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this Project Narrative, the entire report has been paginated. The ESS Laboratory Certifications sheet is the final report page. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard  
Laboratory Director

Date: April 09, 2008

### Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration may be used instead of automated integration because it produces more accurate results. All ICP Metals were analyzed using the established linear dynamic range to determine acceptable analytical results.

ESS Laboratory certifies that the test results meet the requirements of NELAC, except where noted within this project narrative.

### Sample Receipt

The following sample(s) were received on April 02, 2008 for the analyses specified on the enclosed Chain of Custody Record.

Laboratory ID	Matrix	Client SampleID
0804037-01	Ground Water	MW 227D01
0804037-02	Ground Water	MW 227S01
0804037-03	Ground Water	MW 227S01 Dup
0804037-04	Ground Water	MW 220S01
0804037-05	Ground Water	MW 221S01
0804037-06	Ground Water	MW 228D01
0804037-07	Ground Water	MW 228S01
0804037-08	Ground Water	MW 228S01 Dup
0804037-09	Ground Water	MW 230D01
0804037-10	Ground Water	MW 230S01

0804037-11	Ground Water	MW 226S01
0804037-12	Ground Water	MW 229S01
0804037-13	Ground Water	MW 226D01
0804037-14	Ground Water	Equipment Blank



# ESS Laboratory

*Division of Thielsch Engineering, Inc.*

## CERTIFICATE OF ANALYSIS

Client Name: MACTEC Engineering & Consulting, Inc.  
Client Project ID: Providence Gorham Site

ESS Laboratory Work Order: 0804037

## PROJECT NARRATIVE

### 8260B Volatile Organic Compounds

BD80709-BS1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BD80807-BS1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BD80807-BS1	<b>Blank Spike recovery is below lower control limit.</b> Tetrahydrofuran
BD80807-BSD1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BD80807-MS1	<b>Due to high target values, matrix spike is masked.</b> 1,1,1-Trichloroethane, Tetrachloroethene, Trichloroethene
BD80807-MS1	<b>Matrix Spike recovery is above upper control limit.</b> Diethyl Ether, Vinyl Chloride
BD80807-MS1	<b>Matrix Spike recovery is below lower control limit.</b> 1,1-Dichloroethane
BD80807-MSD1	<b>Due to high target values, matrix spike is masked.</b> 1,1,1-Trichloroethane, Tetrachloroethene, Trichloroethene
BD80807-MSD1	<b>Matrix Spike recovery is above upper control limit.</b> Diethyl Ether, Vinyl Chloride
BD80807-MSD1	<b>Matrix Spike recovery is below lower control limit.</b> 1,1-Dichloroethane
BD80807-MSD1	<b>Relative percent difference for duplicate is outside of criteria.</b> 1,1,1-Trichloroethane
BD80909-BSD1	<b>Blank Spike recovery is above upper control limit.</b> Vinyl Chloride
BRD0073-CCV1	<b>Continuing Calibration recovery is below lower control limit.</b> 1,4-Dioxane - Screen, Bromomethane
BRD0085-CCV1	<b>Continuing Calibration recovery is below lower control limit.</b> 1,4-Dioxane - Screen

No other observations noted.

End of Project Narrative.

# VOA Data Package

# VOA Sample Data

ESS Laboratory

SDG: 0804037

CLASS: MSVOA

METHOD: 8260B

# ANALYSES DATA PACKAGE COVER PAGE

8260B

Laboratory: ESS Laboratory

SDG: 0804037

Client: MACTEC Engineering & Consulting, Inc.

Project: Providence Gorham Site

---

Client Sample Id:	Lab Sample Id:
<u>MW 227D01</u>	<u>0804037-01</u>
<u>MW 227D01</u>	<u>0804037-01RE1</u>
<u>MW 227S01</u>	<u>0804037-02</u>
<u>MW 227S01</u>	<u>0804037-02RE1</u>
<u>MW 227S01 Dup</u>	<u>0804037-03</u>
<u>MW 227S01 Dup</u>	<u>0804037-03RE1</u>
<u>MW 220S01</u>	<u>0804037-04</u>
<u>MW 220S01</u>	<u>0804037-04RE1</u>
<u>MW 221S01</u>	<u>0804037-05</u>
<u>MW 221S01</u>	<u>0804037-05RE1</u>
<u>MW 228D01</u>	<u>0804037-06</u>
<u>MW 228D01</u>	<u>0804037-06RE1</u>
<u>MW 228S01</u>	<u>0804037-07</u>
<u>MW 228S01</u>	<u>0804037-07RE1</u>
<u>MW 228S01 Dup</u>	<u>0804037-08</u>
<u>MW 228S01 Dup</u>	<u>0804037-08RE1</u>
<u>MW 230D01</u>	<u>0804037-09</u>
<u>MW 230D01</u>	<u>0804037-09RE1</u>
<u>MW 230S01</u>	<u>0804037-10</u>
<u>MW 230S01</u>	<u>0804037-10RE1</u>
<u>MW 226S01</u>	<u>0804037-11</u>
<u>MW 226S01</u>	<u>0804037-11RE1</u>
<u>MW 229S01</u>	<u>0804037-12</u>
<u>MW 229S01</u>	<u>0804037-12RE1</u>
<u>MW 226D01</u>	<u>0804037-13</u>
<u>MW 226D01</u>	<u>0804037-13RE1</u>
<u>Equipment Blank</u>	<u>0804037-14</u>

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

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

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

**METHOD DETECTION AND REPORTING LIMITS****8260B****Laboratory:** ESS Laboratory**SDG:** 0804037**Client:** MACTEC Engineering & Consulting, Inc.**Project:** Providence Gorham Site**Matrix:** Aqueous**Instrument:** VMS1

Analyte	MDL	MRL	Units
1,1,1,2-Tetrachloroethane	0.0002	0.0010	mg/L
1,1,1-Trichloroethane	0.0002	0.0010	mg/L
1,1,2,2-Tetrachloroethane	0.0001	0.0005	mg/L
1,1,2-Trichloroethane	0.0002	0.0010	mg/L
1,1-Dichloroethane	0.0002	0.0010	mg/L
1,1-Dichloroethene	0.0003	0.0010	mg/L
1,1-Dichloropropene	0.0002	0.0020	mg/L
1,2,3-Trichlorobenzene	0.0002	0.0010	mg/L
1,2,3-Trichloropropane	0.0003	0.0010	mg/L
1,2,4-Trichlorobenzene	0.0002	0.0010	mg/L
1,2,4-Trimethylbenzene	0.0002	0.0010	mg/L
1,2-Dibromo-3-Chloropropane	0.0013	0.0050	mg/L
1,2-Dibromoethane	0.0002	0.0010	mg/L
1,2-Dichlorobenzene	0.0002	0.0010	mg/L
1,2-Dichloroethane	0.0002	0.0010	mg/L
1,2-Dichloropropane	0.0002	0.0010	mg/L
1,3,5-Trimethylbenzene	0.0001	0.0010	mg/L
1,3-Dichlorobenzene	0.0002	0.0010	mg/L
1,3-Dichloropropane	0.0001	0.0010	mg/L
1,4-Dichlorobenzene	0.0001	0.0010	mg/L
1,4-Dioxane - Screen	0.0500	0.500	mg/L
1-Chlorohexane	0.0003	0.0010	mg/L
2,2-Dichloropropane	0.0003	0.0010	mg/L
2-Butanone	0.0050	0.0250	mg/L
2-Chlorotoluene	0.0001	0.0010	mg/L
2-Hexanone	0.0015	0.0100	mg/L
4-Chlorotoluene	0.0002	0.0010	mg/L
4-Isopropyltoluene	0.0002	0.0010	mg/L
4-Methyl-2-Pentanone	0.0020	0.0250	mg/L
Acetone	0.0050	0.0250	mg/L
Benzene	0.0001	0.0010	mg/L
Bromobenzene	0.0002	0.0020	mg/L
Bromochloromethane	0.0002	0.0010	mg/L
Bromodichloromethane	0.0002	0.0006	mg/L
Bromoform	0.0002	0.0010	mg/L
Bromomethane	0.0003	0.0020	mg/L
Carbon Disulfide	0.0002	0.0010	mg/L

**METHOD DETECTION AND REPORTING LIMITS****8260B****Laboratory:** ESS Laboratory**SDG:** 0804037**Client:** MACTEC Engineering & Consulting, Inc.**Project:** Providence Gorham Site**Matrix:** Aqueous**Instrument:** VMS1

Analyte	MDL	MRL	Units
Carbon Tetrachloride	0.0002	0.0010	mg/L
Chlorobenzene	0.0001	0.0010	mg/L
Chloroethane	0.0003	0.0020	mg/L
Chloroform	0.0002	0.0010	mg/L
Chloromethane	0.0002	0.0020	mg/L
cis-1,2-Dichloroethene	0.0002	0.0010	mg/L
cis-1,3-Dichloropropene	0.0001	0.0004	mg/L
Dibromochloromethane	0.0002	0.0010	mg/L
Dibromomethane	0.0002	0.0010	mg/L
Dichlorodifluoromethane	0.0003	0.0020	mg/L
Diethyl Ether	0.0003	0.0010	mg/L
Di-isopropyl ether	0.0002	0.0010	mg/L
Ethyl tertiary-butyl ether	0.0002	0.0010	mg/L
Ethylbenzene	0.0002	0.0010	mg/L
Hexachlorobutadiene	0.0002	0.0006	mg/L
Hexachloroethane	0.0002	0.0010	mg/L
Isopropylbenzene	0.0001	0.0010	mg/L
Methyl tert-Butyl Ether	0.0003	0.0010	mg/L
Methylene Chloride	0.0005	0.0040	mg/L
Naphthalene	0.0003	0.0010	mg/L
n-Butylbenzene	0.0002	0.0010	mg/L
n-Propylbenzene	0.0002	0.0010	mg/L
sec-Butylbenzene	0.0001	0.0010	mg/L
Styrene	0.0001	0.0010	mg/L
tert-Butylbenzene	0.0001	0.0010	mg/L
Tertiary-amyl methyl ether	0.0002	0.0010	mg/L
Tetrachloroethene	0.0002	0.0010	mg/L
Tetrahydrofuran	0.0015	0.0050	mg/L
Toluene	0.0001	0.0010	mg/L
trans-1,2-Dichloroethene	0.0003	0.0010	mg/L
trans-1,3-Dichloropropene	0.0001	0.0004	mg/L
Trichloroethene	0.0002	0.0010	mg/L
Trichlorofluoromethane	0.0003	0.0010	mg/L
Vinyl Acetate	0.0004	0.0050	mg/L
Vinyl Chloride	0.0001	0.0010	mg/L
Xylene O	0.0002	0.0010	mg/L
Xylene P,M	0.0003	0.0020	mg/L

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 227D01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-01 File ID: M1048279.D  
 Sampled: 03/31/08 10:18 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 19:31  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	50	0.224	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0033	
75-34-3	1,1-Dichloroethane	1	0.0143	
75-35-4	1,1-Dichloroethene	50	0.158	D
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0013	
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 227D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-01</u>
Sampled:	<u>03/31/08 10:18</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
			Instrument: <u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0218	
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	50	0.0985	D
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0047	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0114	
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	50	3.94	D
75-69-4	Trichlorofluoromethane	1	0.0013	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.3	109	70 - 130	
4-Bromofluorobenzene	25.00	24.1	97	70 - 130	
Dibromofluoromethane	25.00	26.3	105	70 - 130	
Toluene-d8	25.00	24.2	97	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 227D01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-01 File ID: M1048279.D  
Sampled: 03/31/08 10:18 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 19:31  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3097349	10.21	3449327	10.21	
Chlorobenzene-d5	2329472	14.39	2561062	14.39	
1,4-Dichlorobenzene-D4	1062024	17.07	1163116	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

MW 227D01

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-01RE1</u>
Sampled:	<u>03/31/08 10:18</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	50	0.0500	DU
71-55-6	1,1,1-Trichloroethane	50	0.224	D
79-34-5	1,1,2,2-Tetrachloroethane	50	0.0250	DU
79-00-5	1,1,2-Trichloroethane	50	0.0500	DU
75-34-3	1,1-Dichloroethane	50	0.0500	DU
75-35-4	1,1-Dichloroethene	50	0.158	D
563-58-6	1,1-Dichloropropene	50	0.100	DU
87-61-6	1,2,3-Trichlorobenzene	50	0.0500	DU
96-18-4	1,2,3-Trichloropropane	50	0.0500	DU
120-82-1	1,2,4-Trichlorobenzene	50	0.0500	DU
95-63-6	1,2,4-Trimethylbenzene	50	0.0500	DU
96-12-8	1,2-Dibromo-3-Chloropropane	50	0.250	DU
106-93-4	1,2-Dibromoethane	50	0.0500	DU
95-50-1	1,2-Dichlorobenzene	50	0.0500	DU
107-06-2	1,2-Dichloroethane	50	0.0500	DU
78-87-5	1,2-Dichloropropane	50	0.0500	DU
108-67-8	1,3,5-Trimethylbenzene	50	0.0500	DU
541-73-1	1,3-Dichlorobenzene	50	0.0500	DU
142-28-9	1,3-Dichloropropane	50	0.0500	DU
106-46-7	1,4-Dichlorobenzene	50	0.0500	DU
123-91-1	1,4-Dioxane - Screen	50	25.0	DU
544-10-5	1-Chlorohexane	50	0.0500	DU
594-20-7	2,2-Dichloropropane	50	0.0500	DU
78-93-3	2-Butanone	50	1.25	DU
95-49-8	2-Chlorotoluene	50	0.0500	DU
591-78-6	2-Hexanone	50	0.500	DU
106-43-4	4-Chlorotoluene	50	0.0500	DU
99-87-6	4-Isopropyltoluene	50	0.0500	DU
108-10-1	4-Methyl-2-Pentanone	50	1.25	DU
67-64-1	Acetone	50	1.25	DU
71-43-2	Benzene	50	0.0500	DU
108-86-1	Bromobenzene	50	0.100	DU
74-97-5	Bromochloromethane	50	0.0500	DU
75-27-4	Bromodichloromethane	50	0.0300	DU
75-25-2	Bromoform	50	0.0500	DU
74-83-9	Bromomethane	50	0.100	DU
75-15-0	Carbon Disulfide	50	0.0500	DU
56-23-5	Carbon Tetrachloride	50	0.0500	DU
108-90-7	Chlorobenzene	50	0.0500	DU
75-00-3	Chloroethane	50	0.100	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 227D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-01RE1</u>
Sampled:	<u>03/31/08 10:18</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	50	0.0500	DU
74-87-3	Chloromethane	50	0.100	DU
156-59-2	cis-1,2-Dichloroethene	50	0.0985	D
10061-01-5	cis-1,3-Dichloropropene	50	0.0200	DU
124-48-1	Dibromochloromethane	50	0.0500	DU
74-95-3	Dibromomethane	50	0.0500	DU
75-71-8	Dichlorodifluoromethane	50	0.100	DU
60-29-7	Diethyl Ether	50	0.0500	DU
108-20-3	Di-isopropyl ether	50	0.0500	DU
637-92-3	Ethyl tertiary-butyl ether	50	0.0500	DU
100-41-4	Ethylbenzene	50	0.0500	DU
87-68-3	Hexachlorobutadiene	50	0.0300	DU
67-72-1	Hexachloroethane	50	0.0500	DU
98-82-8	Isopropylbenzene	50	0.0500	DU
1634-04-4	Methyl tert-Butyl Ether	50	0.0500	DU
75-09-2	Methylene Chloride	50	0.200	DU
91-20-3	Naphthalene	50	0.0500	DU
104-51-8	n-Butylbenzene	50	0.0500	DU
103-65-1	n-Propylbenzene	50	0.0500	DU
135-98-8	sec-Butylbenzene	50	0.0500	DU
100-42-5	Styrene	50	0.0500	DU
98-06-6	tert-Butylbenzene	50	0.0500	DU
994-05-8	Tertiary-amyl methyl ether	50	0.0500	DU
127-18-4	Tetrachloroethene	50	0.0500	DU
109-99-9	Tetrahydrofuran	50	0.250	DU
108-88-3	Toluene	50	0.0500	DU
156-60-5	trans-1,2-Dichloroethene	50	0.0500	DU
10061-02-6	trans-1,3-Dichloropropene	50	0.0200	DU
79-01-6	Trichloroethene	50	3.94	D
75-69-4	Trichlorofluoromethane	50	0.0500	DU
108-05-4	Vinyl Acetate	50	0.250	DU
75-01-4	Vinyl Chloride	50	0.0500	DU
95-47-6	Xylene O	50	0.0500	DU
1330-20-7	Xylene P,M	50	0.100	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.4	114	70 - 130	
4-Bromofluorobenzene	25.00	23.6	94	70 - 130	
Dibromofluoromethane	25.00	26.2	105	70 - 130	
Toluene-d8	25.00	24.0	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET****8260B**

MW 227D01

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-01RE1 File ID: M1048302.D  
Sampled: 03/31/08 10:18 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 16:29  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2846210	10.21	3292493	10.21	
Chlorobenzene-d5	2096603	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	956004	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

MW 227S01

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-02</u>
Sampled:	<u>03/31/08 12:15</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	10	0.432	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	10	0.105	D
75-35-4	1,1-Dichloroethene	1	0.0128	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0023	

# ORGANIC ANALYSIS DATA SHEET

**8260B**

MW 227S01

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-02</u>
Sampled:	<u>03/31/08 12:15</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
			Instrument: <u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0078	
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0389	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0221	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	10	0.348	D
75-69-4	Trichlorofluoromethane	1	0.0062	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.0	112	70 - 130	
4-Bromofluorobenzene	25.00	24.1	97	70 - 130	
Dibromofluoromethane	25.00	26.2	105	70 - 130	
Toluene-d8	25.00	24.2	97	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 227S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-02 File ID: M1048280.D  
Sampled: 03/31/08 12:15 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 19:59  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3216284	10.21	3449327	10.21	
Chlorobenzene-d5	2382828	14.39	2561062	14.39	
1,4-Dichlorobenzene-D4	1082537	17.06	1163116	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

MW 227S01

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-02RE1</u>
Sampled:	<u>03/31/08 12:15</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
			Instrument: <u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	0.0100	DU
71-55-6	1,1,1-Trichloroethane	10	0.432	D
79-34-5	1,1,2,2-Tetrachloroethane	10	0.0050	DU
79-00-5	1,1,2-Trichloroethane	10	0.0100	DU
75-34-3	1,1-Dichloroethane	10	0.105	D
75-35-4	1,1-Dichloroethene	10	0.0130	D
563-58-6	1,1-Dichloropropene	10	0.0200	DU
87-61-6	1,2,3-Trichlorobenzene	10	0.0100	DU
96-18-4	1,2,3-Trichloropropane	10	0.0100	DU
120-82-1	1,2,4-Trichlorobenzene	10	0.0100	DU
95-63-6	1,2,4-Trimethylbenzene	10	0.0100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	10	0.0500	DU
106-93-4	1,2-Dibromoethane	10	0.0100	DU
95-50-1	1,2-Dichlorobenzene	10	0.0100	DU
107-06-2	1,2-Dichloroethane	10	0.0100	DU
78-87-5	1,2-Dichloropropane	10	0.0100	DU
108-67-8	1,3,5-Trimethylbenzene	10	0.0100	DU
541-73-1	1,3-Dichlorobenzene	10	0.0100	DU
142-28-9	1,3-Dichloropropane	10	0.0100	DU
106-46-7	1,4-Dichlorobenzene	10	0.0100	DU
123-91-1	1,4-Dioxane - Screen	10	5.00	DU
544-10-5	1-Chlorohexane	10	0.0100	DU
594-20-7	2,2-Dichloropropane	10	0.0100	DU
78-93-3	2-Butanone	10	0.250	DU
95-49-8	2-Chlorotoluene	10	0.0100	DU
591-78-6	2-Hexanone	10	0.100	DU
106-43-4	4-Chlorotoluene	10	0.0100	DU
99-87-6	4-Isopropyltoluene	10	0.0100	DU
108-10-1	4-Methyl-2-Pentanone	10	0.250	DU
67-64-1	Acetone	10	0.250	DU
71-43-2	Benzene	10	0.0100	DU
108-86-1	Bromobenzene	10	0.0200	DU
74-97-5	Bromochloromethane	10	0.0100	DU
75-27-4	Bromodichloromethane	10	0.0060	DU
75-25-2	Bromoform	10	0.0100	DU
74-83-9	Bromomethane	10	0.0200	DU
75-15-0	Carbon Disulfide	10	0.0100	DU
56-23-5	Carbon Tetrachloride	10	0.0100	DU
108-90-7	Chlorobenzene	10	0.0100	DU
75-00-3	Chloroethane	10	0.0200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

MW 227S01

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-02RE1</u>
Sampled:	<u>03/31/08 12:15</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	10	0.0100	DU
74-87-3	Chloromethane	10	0.0200	DU
156-59-2	cis-1,2-Dichloroethene	10	0.0397	D
10061-01-5	cis-1,3-Dichloropropene	10	0.0040	DU
124-48-1	Dibromochloromethane	10	0.0100	DU
74-95-3	Dibromomethane	10	0.0100	DU
75-71-8	Dichlorodifluoromethane	10	0.0200	DU
60-29-7	Diethyl Ether	10	0.0100	DU
108-20-3	Di-isopropyl ether	10	0.0100	DU
637-92-3	Ethyl tertiary-butyl ether	10	0.0100	DU
100-41-4	Ethylbenzene	10	0.0100	DU
87-68-3	Hexachlorobutadiene	10	0.0060	DU
67-72-1	Hexachloroethane	10	0.0100	DU
98-82-8	Isopropylbenzene	10	0.0100	DU
1634-04-4	Methyl tert-Butyl Ether	10	0.0100	DU
75-09-2	Methylene Chloride	10	0.0400	DU
91-20-3	Naphthalene	10	0.0100	DU
104-51-8	n-Butylbenzene	10	0.0100	DU
103-65-1	n-Propylbenzene	10	0.0100	DU
135-98-8	sec-Butylbenzene	10	0.0100	DU
100-42-5	Styrene	10	0.0100	DU
98-06-6	tert-Butylbenzene	10	0.0100	DU
994-05-8	Tertiary-amyl methyl ether	10	0.0100	DU
127-18-4	Tetrachloroethene	10	0.0230	D
109-99-9	Tetrahydrofuran	10	0.0500	DU
108-88-3	Toluene	10	0.0100	DU
156-60-5	trans-1,2-Dichloroethene	10	0.0100	DU
10061-02-6	trans-1,3-Dichloropropene	10	0.0040	DU
79-01-6	Trichloroethene	10	0.348	D
75-69-4	Trichlorofluoromethane	10	0.0100	DU
108-05-4	Vinyl Acetate	10	0.0500	DU
75-01-4	Vinyl Chloride	10	0.0100	DU
95-47-6	Xylene O	10	0.0100	DU
1330-20-7	Xylene P,M	10	0.0200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.1	112	70 - 130	
4-Bromofluorobenzene	25.00	24.3	97	70 - 130	
Dibromofluoromethane	25.00	25.6	102	70 - 130	
Toluene-d8	25.00	24.2	97	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 227S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-02RE1 File ID: M1048295.D  
Sampled: 03/31/08 12:15 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 13:06  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3156459	10.21	3292493	10.21	
Chlorobenzene-d5	2335323	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	1049941	17.07	1058187	17.06	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 227S01 Dup

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-03 File ID: M1048306.D  
 Sampled: 03/31/08 12:15 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 13:35  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	10	0.400	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	10	0.101	D
75-35-4	1,1-Dichloroethene	1	0.0130	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0023	

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 227S01 Dup**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-03</u>
Sampled:	<u>03/31/08 12:15</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0079	
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0384	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0213	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	10	0.312	D
75-69-4	Trichlorofluoromethane	1	0.0062	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.1	112	70 - 130	
4-Bromofluorobenzene	25.00	24.6	98	70 - 130	
Dibromofluoromethane	25.00	26.5	106	70 - 130	
Toluene-d8	25.00	24.3	97	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 227S01 Dup**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-03 File ID: M1048306.D  
Sampled: 03/31/08 12:15 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 13:35  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml

Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2903074	10.22	3292493	10.21	
Chlorobenzene-d5	2136745	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	1012607	17.07	1058187	17.06	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 227S01 Dup

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-03RE1 File ID: M1048296.D  
 Sampled: 03/31/08 12:15 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 13:35  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	0.0100	DU
71-55-6	1,1,1-Trichloroethane	10	0.400	D
79-34-5	1,1,2,2-Tetrachloroethane	10	0.0050	DU
79-00-5	1,1,2-Trichloroethane	10	0.0100	DU
75-34-3	1,1-Dichloroethane	10	0.101	D
75-35-4	1,1-Dichloroethene	10	0.0122	D
563-58-6	1,1-Dichloropropene	10	0.0200	DU
87-61-6	1,2,3-Trichlorobenzene	10	0.0100	DU
96-18-4	1,2,3-Trichloropropane	10	0.0100	DU
120-82-1	1,2,4-Trichlorobenzene	10	0.0100	DU
95-63-6	1,2,4-Trimethylbenzene	10	0.0100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	10	0.0500	DU
106-93-4	1,2-Dibromoethane	10	0.0100	DU
95-50-1	1,2-Dichlorobenzene	10	0.0100	DU
107-06-2	1,2-Dichloroethane	10	0.0100	DU
78-87-5	1,2-Dichloropropane	10	0.0100	DU
108-67-8	1,3,5-Trimethylbenzene	10	0.0100	DU
541-73-1	1,3-Dichlorobenzene	10	0.0100	DU
142-28-9	1,3-Dichloropropane	10	0.0100	DU
106-46-7	1,4-Dichlorobenzene	10	0.0100	DU
123-91-1	1,4-Dioxane - Screen	10	5.00	DU
544-10-5	1-Chlorohexane	10	0.0100	DU
594-20-7	2,2-Dichloropropane	10	0.0100	DU
78-93-3	2-Butanone	10	0.250	DU
95-49-8	2-Chlorotoluene	10	0.0100	DU
591-78-6	2-Hexanone	10	0.100	DU
106-43-4	4-Chlorotoluene	10	0.0100	DU
99-87-6	4-Isopropyltoluene	10	0.0100	DU
108-10-1	4-Methyl-2-Pentanone	10	0.250	DU
67-64-1	Acetone	10	0.250	DU
71-43-2	Benzene	10	0.0100	DU
108-86-1	Bromobenzene	10	0.0200	DU
74-97-5	Bromochloromethane	10	0.0100	DU
75-27-4	Bromodichloromethane	10	0.0060	DU
75-25-2	Bromoform	10	0.0100	DU
74-83-9	Bromomethane	10	0.0200	DU
75-15-0	Carbon Disulfide	10	0.0100	DU
56-23-5	Carbon Tetrachloride	10	0.0100	DU
108-90-7	Chlorobenzene	10	0.0100	DU
75-00-3	Chloroethane	10	0.0200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 227S01 Dup**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-03RE1</u>
Sampled:	<u>03/31/08 12:15</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	10	0.0100	DU
74-87-3	Chloromethane	10	0.0200	DU
156-59-2	cis-1,2-Dichloroethene	10	0.0376	D
10061-01-5	cis-1,3-Dichloropropene	10	0.0040	DU
124-48-1	Dibromochloromethane	10	0.0100	DU
74-95-3	Dibromomethane	10	0.0100	DU
75-71-8	Dichlorodifluoromethane	10	0.0200	DU
60-29-7	Diethyl Ether	10	0.0100	DU
108-20-3	Di-isopropyl ether	10	0.0100	DU
637-92-3	Ethyl tertiary-butyl ether	10	0.0100	DU
100-41-4	Ethylbenzene	10	0.0100	DU
87-68-3	Hexachlorobutadiene	10	0.0060	DU
67-72-1	Hexachloroethane	10	0.0100	DU
98-82-8	Isopropylbenzene	10	0.0100	DU
1634-04-4	Methyl tert-Butyl Ether	10	0.0100	DU
75-09-2	Methylene Chloride	10	0.0400	DU
91-20-3	Naphthalene	10	0.0100	DU
104-51-8	n-Butylbenzene	10	0.0100	DU
103-65-1	n-Propylbenzene	10	0.0100	DU
135-98-8	sec-Butylbenzene	10	0.0100	DU
100-42-5	Styrene	10	0.0100	DU
98-06-6	tert-Butylbenzene	10	0.0100	DU
994-05-8	Tertiary-amyl methyl ether	10	0.0100	DU
127-18-4	Tetrachloroethene	10	0.0204	D
109-99-9	Tetrahydrofuran	10	0.0500	DU
108-88-3	Toluene	10	0.0100	DU
156-60-5	trans-1,2-Dichloroethene	10	0.0100	DU
10061-02-6	trans-1,3-Dichloropropene	10	0.0040	DU
79-01-6	Trichloroethene	10	0.312	D
75-69-4	Trichlorofluoromethane	10	0.0100	DU
108-05-4	Vinyl Acetate	10	0.0500	DU
75-01-4	Vinyl Chloride	10	0.0100	DU
95-47-6	Xylene O	10	0.0100	DU
1330-20-7	Xylene P,M	10	0.0200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.4	113	70 - 130	
4-Bromofluorobenzene	25.00	24.2	97	70 - 130	
Dibromofluoromethane	25.00	26.3	105	70 - 130	
Toluene-d8	25.00	23.9	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 227S01 Dup**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-03RE1 File ID: M1048296.D  
Sampled: 03/31/08 12:15 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 13:35  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml

Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2888023	10.21	3292493	10.21	
Chlorobenzene-d5	2149492	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	977165	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 220S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-04</u>
Sampled:	<u>03/31/08 14:25</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0696	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	100	0.131	D
75-35-4	1,1-Dichloroethene	1	0.0045	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0133	

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 220S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-04</u>
Sampled:	<u>03/31/08 14:25</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	100	0.108	D
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0011	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	1	0.0232	
75-69-4	Trichlorofluoromethane	1	0.0016	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.4	110	70 - 130	
4-Bromofluorobenzene	25.00	23.7	95	70 - 130	
Dibromofluoromethane	25.00	25.9	103	70 - 130	
Toluene-d8	25.00	23.5	94	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 220S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-04 File ID: M1048322.D  
Sampled: 03/31/08 14:25 Prepared: 04/09/08 07:00 Analyzed: 04/07/08 16:18  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3152477	10.22	3429944	10.22	
Chlorobenzene-d5	2331058	14.4	2419813	14.39	
1,4-Dichlorobenzene-D4	1040323	17.07	1056695	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 220S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-04RE1</u>
Sampled:	<u>03/31/08 14:25</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	100	0.100	DU
71-55-6	1,1,1-Trichloroethane	100	0.100	DU
79-34-5	1,1,2,2-Tetrachloroethane	100	0.0500	DU
79-00-5	1,1,2-Trichloroethane	100	0.100	DU
75-34-3	1,1-Dichloroethane	100	0.131	D
75-35-4	1,1-Dichloroethene	100	0.100	DU
563-58-6	1,1-Dichloropropene	100	0.200	DU
87-61-6	1,2,3-Trichlorobenzene	100	0.100	DU
96-18-4	1,2,3-Trichloropropane	100	0.100	DU
120-82-1	1,2,4-Trichlorobenzene	100	0.100	DU
95-63-6	1,2,4-Trimethylbenzene	100	0.100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	100	0.500	DU
106-93-4	1,2-Dibromoethane	100	0.100	DU
95-50-1	1,2-Dichlorobenzene	100	0.100	DU
107-06-2	1,2-Dichloroethane	100	0.100	DU
78-87-5	1,2-Dichloropropane	100	0.100	DU
108-67-8	1,3,5-Trimethylbenzene	100	0.100	DU
541-73-1	1,3-Dichlorobenzene	100	0.100	DU
142-28-9	1,3-Dichloropropane	100	0.100	DU
106-46-7	1,4-Dichlorobenzene	100	0.100	DU
123-91-1	1,4-Dioxane - Screen	100	50.0	DU
544-10-5	1-Chlorohexane	100	0.100	DU
594-20-7	2,2-Dichloropropane	100	0.100	DU
78-93-3	2-Butanone	100	2.50	DU
95-49-8	2-Chlorotoluene	100	0.100	DU
591-78-6	2-Hexanone	100	1.00	DU
106-43-4	4-Chlorotoluene	100	0.100	DU
99-87-6	4-Isopropyltoluene	100	0.100	DU
108-10-1	4-Methyl-2-Pentanone	100	2.50	DU
67-64-1	Acetone	100	2.50	DU
71-43-2	Benzene	100	0.100	DU
108-86-1	Bromobenzene	100	0.200	DU
74-97-5	Bromochloromethane	100	0.100	DU
75-27-4	Bromodichloromethane	100	0.0600	DU
75-25-2	Bromoform	100	0.100	DU
74-83-9	Bromomethane	100	0.200	DU
75-15-0	Carbon Disulfide	100	0.100	DU
56-23-5	Carbon Tetrachloride	100	0.100	DU
108-90-7	Chlorobenzene	100	0.100	DU
75-00-3	Chloroethane	100	0.200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 220S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-04RE1</u>
Sampled:	<u>03/31/08 14:25</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	100	0.100	DU
74-87-3	Chloromethane	100	0.200	DU
156-59-2	cis-1,2-Dichloroethene	100	0.108	D
10061-01-5	cis-1,3-Dichloropropene	100	0.0400	DU
124-48-1	Dibromochloromethane	100	0.100	DU
74-95-3	Dibromomethane	100	0.100	DU
75-71-8	Dichlorodifluoromethane	100	0.200	DU
60-29-7	Diethyl Ether	100	0.100	DU
108-20-3	Di-isopropyl ether	100	0.100	DU
637-92-3	Ethyl tertiary-butyl ether	100	0.100	DU
100-41-4	Ethylbenzene	100	0.100	DU
87-68-3	Hexachlorobutadiene	100	0.0600	DU
67-72-1	Hexachloroethane	100	0.100	DU
98-82-8	Isopropylbenzene	100	0.100	DU
1634-04-4	Methyl tert-Butyl Ether	100	0.100	DU
75-09-2	Methylene Chloride	100	0.400	DU
91-20-3	Naphthalene	100	0.100	DU
104-51-8	n-Butylbenzene	100	0.100	DU
103-65-1	n-Propylbenzene	100	0.100	DU
135-98-8	sec-Butylbenzene	100	0.100	DU
100-42-5	Styrene	100	0.100	DU
98-06-6	tert-Butylbenzene	100	0.100	DU
994-05-8	Tertiary-amyl methyl ether	100	0.100	DU
127-18-4	Tetrachloroethene	100	0.100	DU
109-99-9	Tetrahydrofuran	100	0.500	DU
108-88-3	Toluene	100	0.100	DU
156-60-5	trans-1,2-Dichloroethene	100	0.100	DU
10061-02-6	trans-1,3-Dichloropropene	100	0.0400	DU
79-01-6	Trichloroethene	100	0.100	DU
75-69-4	Trichlorofluoromethane	100	0.100	DU
108-05-4	Vinyl Acetate	100	0.500	DU
75-01-4	Vinyl Chloride	100	0.100	DU
95-47-6	Xylene O	100	0.100	DU
1330-20-7	Xylene P,M	100	0.200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.6	111	70 - 130	
4-Bromofluorobenzene	25.00	24.7	99	70 - 130	
Dibromofluoromethane	25.00	26.4	106	70 - 130	
Toluene-d8	25.00	24.1	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 220S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-04RE1 File ID: M1048272.D  
Sampled: 03/31/08 14:25 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 16:18  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3413100	10.21	3449327	10.21	
Chlorobenzene-d5	2615456	14.39	2561062	14.39	
1,4-Dichlorobenzene-D4	1227371	17.07	1163116	17.07	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 221S01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-05 File ID: M1048305.D  
 Sampled: 03/31/08 16:30 Prepared: 04/08/08 07:00 Analyzed: 04/07/08 16:47  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0248	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	100	0.102	D
75-35-4	1,1-Dichloroethene	1	0.0010	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0267	
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0063	
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0013	
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0016	
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0340	

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 221S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-05</u>
Sampled:	<u>03/31/08 16:30</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0264	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0077	
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0017	
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0284	
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0026	
135-98-8	sec-Butylbenzene	1	0.0011	
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0030	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0014	
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	1	0.0175	
75-69-4	Trichlorofluoromethane	1	0.0010	U
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0249	
95-47-6	Xylene O	1	0.0137	
1330-20-7	Xylene P,M	1	0.0074	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.3	113	70 - 130	
4-Bromofluorobenzene	25.00	24.2	97	70 - 130	
Dibromofluoromethane	25.00	26.4	106	70 - 130	
Toluene-d8	25.00	23.4	94	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 221S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-05 File ID: M1048305.D  
Sampled: 03/31/08 16:30 Prepared: 04/08/08 07:00 Analyzed: 04/07/08 16:47  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2768005	10.21	3292493	10.21	
Chlorobenzene-d5	2069035	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	996513	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 221S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-05RE1</u>
Sampled:	<u>03/31/08 16:30</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	100	0.100	DU
71-55-6	1,1,1-Trichloroethane	100	0.100	DU
79-34-5	1,1,2,2-Tetrachloroethane	100	0.0500	DU
79-00-5	1,1,2-Trichloroethane	100	0.100	DU
75-34-3	1,1-Dichloroethane	100	0.102	D
75-35-4	1,1-Dichloroethene	100	0.100	DU
563-58-6	1,1-Dichloropropene	100	0.200	DU
87-61-6	1,2,3-Trichlorobenzene	100	0.100	DU
96-18-4	1,2,3-Trichloropropane	100	0.100	DU
120-82-1	1,2,4-Trichlorobenzene	100	0.100	DU
95-63-6	1,2,4-Trimethylbenzene	100	0.100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	100	0.500	DU
106-93-4	1,2-Dibromoethane	100	0.100	DU
95-50-1	1,2-Dichlorobenzene	100	0.100	DU
107-06-2	1,2-Dichloroethane	100	0.100	DU
78-87-5	1,2-Dichloropropane	100	0.100	DU
108-67-8	1,3,5-Trimethylbenzene	100	0.100	DU
541-73-1	1,3-Dichlorobenzene	100	0.100	DU
142-28-9	1,3-Dichloropropane	100	0.100	DU
106-46-7	1,4-Dichlorobenzene	100	0.100	DU
123-91-1	1,4-Dioxane - Screen	100	50.0	DU
544-10-5	1-Chlorohexane	100	0.100	DU
594-20-7	2,2-Dichloropropane	100	0.100	DU
78-93-3	2-Butanone	100	2.50	DU
95-49-8	2-Chlorotoluene	100	0.100	DU
591-78-6	2-Hexanone	100	1.00	DU
106-43-4	4-Chlorotoluene	100	0.100	DU
99-87-6	4-Isopropyltoluene	100	0.100	DU
108-10-1	4-Methyl-2-Pentanone	100	2.50	DU
67-64-1	Acetone	100	2.50	DU
71-43-2	Benzene	100	0.100	DU
108-86-1	Bromobenzene	100	0.200	DU
74-97-5	Bromochloromethane	100	0.100	DU
75-27-4	Bromodichloromethane	100	0.0600	DU
75-25-2	Bromoform	100	0.100	DU
74-83-9	Bromomethane	100	0.200	DU
75-15-0	Carbon Disulfide	100	0.100	DU
56-23-5	Carbon Tetrachloride	100	0.100	DU
108-90-7	Chlorobenzene	100	0.100	DU
75-00-3	Chloroethane	100	0.200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 221S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-05RE1</u>
Sampled:	<u>03/31/08 16:30</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	100	0.100	DU
74-87-3	Chloromethane	100	0.200	DU
156-59-2	cis-1,2-Dichloroethene	100	0.100	DU
10061-01-5	cis-1,3-Dichloropropene	100	0.0400	DU
124-48-1	Dibromochloromethane	100	0.100	DU
74-95-3	Dibromomethane	100	0.100	DU
75-71-8	Dichlorodifluoromethane	100	0.200	DU
60-29-7	Diethyl Ether	100	0.100	DU
108-20-3	Di-isopropyl ether	100	0.100	DU
637-92-3	Ethyl tertiary-butyl ether	100	0.100	DU
100-41-4	Ethylbenzene	100	0.100	DU
87-68-3	Hexachlorobutadiene	100	0.0600	DU
67-72-1	Hexachloroethane	100	0.100	DU
98-82-8	Isopropylbenzene	100	0.100	DU
1634-04-4	Methyl tert-Butyl Ether	100	0.100	DU
75-09-2	Methylene Chloride	100	0.400	DU
91-20-3	Naphthalene	100	0.100	DU
104-51-8	n-Butylbenzene	100	0.100	DU
103-65-1	n-Propylbenzene	100	0.100	DU
135-98-8	sec-Butylbenzene	100	0.100	DU
100-42-5	Styrene	100	0.100	DU
98-06-6	tert-Butylbenzene	100	0.100	DU
994-05-8	Tertiary-amyl methyl ether	100	0.100	DU
127-18-4	Tetrachloroethene	100	0.100	DU
109-99-9	Tetrahydrofuran	100	0.500	DU
108-88-3	Toluene	100	0.100	DU
156-60-5	trans-1,2-Dichloroethene	100	0.100	DU
10061-02-6	trans-1,3-Dichloropropene	100	0.0400	DU
79-01-6	Trichloroethene	100	0.100	DU
75-69-4	Trichlorofluoromethane	100	0.100	DU
108-05-4	Vinyl Acetate	100	0.500	DU
75-01-4	Vinyl Chloride	100	0.100	DU
95-47-6	Xylene O	100	0.100	DU
1330-20-7	Xylene P,M	100	0.200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.7	111	70 - 130	
4-Bromofluorobenzene	25.00	24.7	99	70 - 130	
Dibromofluoromethane	25.00	25.8	103	70 - 130	
Toluene-d8	25.00	24.5	98	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 221S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-05RE1 File ID: M1048273.D  
Sampled: 03/31/08 16:30 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 16:47  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3214094	10.21	3449327	10.21	
Chlorobenzene-d5	2474136	14.39	2561062	14.39	
1,4-Dichlorobenzene-D4	1147151	17.07	1163116	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-06</u>
Sampled:	<u>04/01/08 10:15</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0035	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0014	
75-34-3	1,1-Dichloroethane	1	0.0097	
75-35-4	1,1-Dichloroethene	1	0.0422	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-06</u>
Sampled:	<u>04/01/08 10:15</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0016	
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0764	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0023	
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0054	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0084	
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	50	0.912	D
75-69-4	Trichlorofluoromethane	1	0.0010	U
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0019	
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.1	112	70 - 130	
4-Bromofluorobenzene	25.00	23.9	96	70 - 130	
Dibromofluoromethane	25.00	26.1	105	70 - 130	
Toluene-d8	25.00	24.2	97	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 228D01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-06 File ID: M1048323.D  
Sampled: 04/01/08 10:15 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:08  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3031784	10.22	3429944	10.22	
Chlorobenzene-d5	2259342	14.4	2419813	14.39	
1,4-Dichlorobenzene-D4	1034705	17.08	1056695	17.07	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 228D01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-06RE1 File ID: M1048320.D  
 Sampled: 04/01/08 10:15 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:08  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	50	0.0500	DU
71-55-6	1,1,1-Trichloroethane	50	0.0500	DU
79-34-5	1,1,2,2-Tetrachloroethane	50	0.0250	DU
79-00-5	1,1,2-Trichloroethane	50	0.0500	DU
75-34-3	1,1-Dichloroethane	50	0.0500	DU
75-35-4	1,1-Dichloroethene	50	0.0500	DU
563-58-6	1,1-Dichloropropene	50	0.100	DU
87-61-6	1,2,3-Trichlorobenzene	50	0.0500	DU
96-18-4	1,2,3-Trichloropropane	50	0.0500	DU
120-82-1	1,2,4-Trichlorobenzene	50	0.0500	DU
95-63-6	1,2,4-Trimethylbenzene	50	0.0500	DU
96-12-8	1,2-Dibromo-3-Chloropropane	50	0.250	DU
106-93-4	1,2-Dibromoethane	50	0.0500	DU
95-50-1	1,2-Dichlorobenzene	50	0.0500	DU
107-06-2	1,2-Dichloroethane	50	0.0500	DU
78-87-5	1,2-Dichloropropane	50	0.0500	DU
108-67-8	1,3,5-Trimethylbenzene	50	0.0500	DU
541-73-1	1,3-Dichlorobenzene	50	0.0500	DU
142-28-9	1,3-Dichloropropane	50	0.0500	DU
106-46-7	1,4-Dichlorobenzene	50	0.0500	DU
123-91-1	1,4-Dioxane - Screen	50	25.0	DU
544-10-5	1-Chlorohexane	50	0.0500	DU
594-20-7	2,2-Dichloropropane	50	0.0500	DU
78-93-3	2-Butanone	50	1.25	DU
95-49-8	2-Chlorotoluene	50	0.0500	DU
591-78-6	2-Hexanone	50	0.500	DU
106-43-4	4-Chlorotoluene	50	0.0500	DU
99-87-6	4-Isopropyltoluene	50	0.0500	DU
108-10-1	4-Methyl-2-Pentanone	50	1.25	DU
67-64-1	Acetone	50	1.25	DU
71-43-2	Benzene	50	0.0500	DU
108-86-1	Bromobenzene	50	0.100	DU
74-97-5	Bromochloromethane	50	0.0500	DU
75-27-4	Bromodichloromethane	50	0.0300	DU
75-25-2	Bromoform	50	0.0500	DU
74-83-9	Bromomethane	50	0.100	DU
75-15-0	Carbon Disulfide	50	0.0500	DU
56-23-5	Carbon Tetrachloride	50	0.0500	DU
108-90-7	Chlorobenzene	50	0.0500	DU
75-00-3	Chloroethane	50	0.100	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-06RE1</u>
Sampled:	<u>04/01/08 10:15</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	50	0.0500	DU
74-87-3	Chloromethane	50	0.100	DU
156-59-2	cis-1,2-Dichloroethene	50	0.0725	D
10061-01-5	cis-1,3-Dichloropropene	50	0.0200	DU
124-48-1	Dibromochloromethane	50	0.0500	DU
74-95-3	Dibromomethane	50	0.0500	DU
75-71-8	Dichlorodifluoromethane	50	0.100	DU
60-29-7	Diethyl Ether	50	0.0500	DU
108-20-3	Di-isopropyl ether	50	0.0500	DU
637-92-3	Ethyl tertiary-butyl ether	50	0.0500	DU
100-41-4	Ethylbenzene	50	0.0500	DU
87-68-3	Hexachlorobutadiene	50	0.0300	DU
67-72-1	Hexachloroethane	50	0.0500	DU
98-82-8	Isopropylbenzene	50	0.0500	DU
1634-04-4	Methyl tert-Butyl Ether	50	0.0500	DU
75-09-2	Methylene Chloride	50	0.200	DU
91-20-3	Naphthalene	50	0.0500	DU
104-51-8	n-Butylbenzene	50	0.0500	DU
103-65-1	n-Propylbenzene	50	0.0500	DU
135-98-8	sec-Butylbenzene	50	0.0500	DU
100-42-5	Styrene	50	0.0500	DU
98-06-6	tert-Butylbenzene	50	0.0500	DU
994-05-8	Tertiary-amyl methyl ether	50	0.0500	DU
127-18-4	Tetrachloroethene	50	0.0500	DU
109-99-9	Tetrahydrofuran	50	0.250	DU
108-88-3	Toluene	50	0.0500	DU
156-60-5	trans-1,2-Dichloroethene	50	0.0500	DU
10061-02-6	trans-1,3-Dichloropropene	50	0.0200	DU
79-01-6	Trichloroethene	50	0.912	D
75-69-4	Trichlorofluoromethane	50	0.0500	DU
108-05-4	Vinyl Acetate	50	0.250	DU
75-01-4	Vinyl Chloride	50	0.0500	DU
95-47-6	Xylene O	50	0.0500	DU
1330-20-7	Xylene P,M	50	0.100	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.3	109	70 - 130	
4-Bromofluorobenzene	25.00	24.6	98	70 - 130	
Dibromofluoromethane	25.00	25.5	102	70 - 130	
Toluene-d8	25.00	24.6	98	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 228D01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-06RE1 File ID: M1048320.D  
Sampled: 04/01/08 10:15 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:08  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3242636	10.22	3429944	10.22	
Chlorobenzene-d5	2334801	14.4	2419813	14.39	
1,4-Dichlorobenzene-D4	1082053	17.07	1056695	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-07</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	50	0.114	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0443	
75-35-4	1,1-Dichloroethene	1	0.0103	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-07</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0165	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	50	3.61	D
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	50	0.578	D
75-69-4	Trichlorofluoromethane	1	0.0040	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.0	108	70 - 130	
4-Bromofluorobenzene	25.00	24.1	97	70 - 130	
Dibromofluoromethane	25.00	25.8	103	70 - 130	
Toluene-d8	25.00	23.8	95	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 228S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-07 File ID: M1048308.D  
Sampled: 04/01/08 14:42 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 17:27  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2906630	10.21	3292493	10.21	
Chlorobenzene-d5	2149164	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	986280	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-07RE1</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	50	0.0500	DU
71-55-6	1,1,1-Trichloroethane	50	0.114	D
79-34-5	1,1,2,2-Tetrachloroethane	50	0.0250	DU
79-00-5	1,1,2-Trichloroethane	50	0.0500	DU
75-34-3	1,1-Dichloroethane	50	0.0500	DU
75-35-4	1,1-Dichloroethene	50	0.0500	DU
563-58-6	1,1-Dichloropropene	50	0.100	DU
87-61-6	1,2,3-Trichlorobenzene	50	0.0500	DU
96-18-4	1,2,3-Trichloropropane	50	0.0500	DU
120-82-1	1,2,4-Trichlorobenzene	50	0.0500	DU
95-63-6	1,2,4-Trimethylbenzene	50	0.0500	DU
96-12-8	1,2-Dibromo-3-Chloropropane	50	0.250	DU
106-93-4	1,2-Dibromoethane	50	0.0500	DU
95-50-1	1,2-Dichlorobenzene	50	0.0500	DU
107-06-2	1,2-Dichloroethane	50	0.0500	DU
78-87-5	1,2-Dichloropropane	50	0.0500	DU
108-67-8	1,3,5-Trimethylbenzene	50	0.0500	DU
541-73-1	1,3-Dichlorobenzene	50	0.0500	DU
142-28-9	1,3-Dichloropropane	50	0.0500	DU
106-46-7	1,4-Dichlorobenzene	50	0.0500	DU
123-91-1	1,4-Dioxane - Screen	50	25.0	DU
544-10-5	1-Chlorohexane	50	0.0500	DU
594-20-7	2,2-Dichloropropane	50	0.0500	DU
78-93-3	2-Butanone	50	1.25	DU
95-49-8	2-Chlorotoluene	50	0.0500	DU
591-78-6	2-Hexanone	50	0.500	DU
106-43-4	4-Chlorotoluene	50	0.0500	DU
99-87-6	4-Isopropyltoluene	50	0.0500	DU
108-10-1	4-Methyl-2-Pentanone	50	1.25	DU
67-64-1	Acetone	50	1.25	DU
71-43-2	Benzene	50	0.0500	DU
108-86-1	Bromobenzene	50	0.100	DU
74-97-5	Bromochloromethane	50	0.0500	DU
75-27-4	Bromodichloromethane	50	0.0300	DU
75-25-2	Bromoform	50	0.0500	DU
74-83-9	Bromomethane	50	0.100	DU
75-15-0	Carbon Disulfide	50	0.0500	DU
56-23-5	Carbon Tetrachloride	50	0.0500	DU
108-90-7	Chlorobenzene	50	0.0500	DU
75-00-3	Chloroethane	50	0.100	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-07RE1</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	50	0.0500	DU
74-87-3	Chloromethane	50	0.100	DU
156-59-2	cis-1,2-Dichloroethene	50	0.0500	DU
10061-01-5	cis-1,3-Dichloropropene	50	0.0200	DU
124-48-1	Dibromochloromethane	50	0.0500	DU
74-95-3	Dibromomethane	50	0.0500	DU
75-71-8	Dichlorodifluoromethane	50	0.100	DU
60-29-7	Diethyl Ether	50	0.0500	DU
108-20-3	Di-isopropyl ether	50	0.0500	DU
637-92-3	Ethyl tertiary-butyl ether	50	0.0500	DU
100-41-4	Ethylbenzene	50	0.0500	DU
87-68-3	Hexachlorobutadiene	50	0.0300	DU
67-72-1	Hexachloroethane	50	0.0500	DU
98-82-8	Isopropylbenzene	50	0.0500	DU
1634-04-4	Methyl tert-Butyl Ether	50	0.0500	DU
75-09-2	Methylene Chloride	50	0.200	DU
91-20-3	Naphthalene	50	0.0500	DU
104-51-8	n-Butylbenzene	50	0.0500	DU
103-65-1	n-Propylbenzene	50	0.0500	DU
135-98-8	sec-Butylbenzene	50	0.0500	DU
100-42-5	Styrene	50	0.0500	DU
98-06-6	tert-Butylbenzene	50	0.0500	DU
994-05-8	Tertiary-amyl methyl ether	50	0.0500	DU
127-18-4	Tetrachloroethene	50	3.61	D
109-99-9	Tetrahydrofuran	50	0.250	DU
108-88-3	Toluene	50	0.0500	DU
156-60-5	trans-1,2-Dichloroethene	50	0.0500	DU
10061-02-6	trans-1,3-Dichloropropene	50	0.0200	DU
79-01-6	Trichloroethene	50	0.578	D
75-69-4	Trichlorofluoromethane	50	0.0500	DU
108-05-4	Vinyl Acetate	50	0.250	DU
75-01-4	Vinyl Chloride	50	0.0500	DU
95-47-6	Xylene O	50	0.0500	DU
1330-20-7	Xylene P,M	50	0.100	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.4	114	70 - 130	
4-Bromofluorobenzene	25.00	23.1	92	70 - 130	
Dibromofluoromethane	25.00	26.5	106	70 - 130	
Toluene-d8	25.00	23.5	94	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 228S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-07RE1 File ID: M1048304.D  
Sampled: 04/01/08 14:42 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 17:27  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2840065	10.22	3292493	10.21	
Chlorobenzene-d5	2156418	14.4	2376613	14.39	
1,4-Dichlorobenzene-D4	958933	17.07	1058187	17.06	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

MW 228S01 Dup

8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-08 File ID: M1048324.D  
 Sampled: 04/01/08 12:20 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:37  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	50	0.106	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0432	
75-35-4	1,1-Dichloroethene	1	0.0096	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228S01 Dup**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-08</u>
Sampled:	<u>04/01/08 12:20</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0162	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	50	3.52	D
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	50	0.542	D
75-69-4	Trichlorofluoromethane	1	0.0037	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.1	112	70 - 130	
4-Bromofluorobenzene	25.00	24.1	96	70 - 130	
Dibromofluoromethane	25.00	25.8	103	70 - 130	
Toluene-d8	25.00	24.4	98	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 228S01 Dup**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-08 File ID: M1048324.D  
Sampled: 04/01/08 12:20 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:37  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3183186	10.22	3429944	10.22	
Chlorobenzene-d5	2304911	14.39	2419813	14.39	
1,4-Dichlorobenzene-D4	1082064	17.07	1056695	17.07	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 228S01 Dup

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-08RE1 File ID: M1048321.D  
 Sampled: 04/01/08 12:20 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:37  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	50	0.0500	DU
71-55-6	1,1,1-Trichloroethane	50	0.106	D
79-34-5	1,1,2,2-Tetrachloroethane	50	0.0250	DU
79-00-5	1,1,2-Trichloroethane	50	0.0500	DU
75-34-3	1,1-Dichloroethane	50	0.0500	DU
75-35-4	1,1-Dichloroethene	50	0.0500	DU
563-58-6	1,1-Dichloropropene	50	0.100	DU
87-61-6	1,2,3-Trichlorobenzene	50	0.0500	DU
96-18-4	1,2,3-Trichloropropane	50	0.0500	DU
120-82-1	1,2,4-Trichlorobenzene	50	0.0500	DU
95-63-6	1,2,4-Trimethylbenzene	50	0.0500	DU
96-12-8	1,2-Dibromo-3-Chloropropane	50	0.250	DU
106-93-4	1,2-Dibromoethane	50	0.0500	DU
95-50-1	1,2-Dichlorobenzene	50	0.0500	DU
107-06-2	1,2-Dichloroethane	50	0.0500	DU
78-87-5	1,2-Dichloropropane	50	0.0500	DU
108-67-8	1,3,5-Trimethylbenzene	50	0.0500	DU
541-73-1	1,3-Dichlorobenzene	50	0.0500	DU
142-28-9	1,3-Dichloropropane	50	0.0500	DU
106-46-7	1,4-Dichlorobenzene	50	0.0500	DU
123-91-1	1,4-Dioxane - Screen	50	25.0	DU
544-10-5	1-Chlorohexane	50	0.0500	DU
594-20-7	2,2-Dichloropropane	50	0.0500	DU
78-93-3	2-Butanone	50	1.25	DU
95-49-8	2-Chlorotoluene	50	0.0500	DU
591-78-6	2-Hexanone	50	0.500	DU
106-43-4	4-Chlorotoluene	50	0.0500	DU
99-87-6	4-Isopropyltoluene	50	0.0500	DU
108-10-1	4-Methyl-2-Pentanone	50	1.25	DU
67-64-1	Acetone	50	1.25	DU
71-43-2	Benzene	50	0.0500	DU
108-86-1	Bromobenzene	50	0.100	DU
74-97-5	Bromochloromethane	50	0.0500	DU
75-27-4	Bromodichloromethane	50	0.0300	DU
75-25-2	Bromoform	50	0.0500	DU
74-83-9	Bromomethane	50	0.100	DU
75-15-0	Carbon Disulfide	50	0.0500	DU
56-23-5	Carbon Tetrachloride	50	0.0500	DU
108-90-7	Chlorobenzene	50	0.0500	DU
75-00-3	Chloroethane	50	0.100	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 228S01 Dup**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-08RE1</u>
Sampled:	<u>04/01/08 12:20</u>	Prepared:	<u>04/09/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	50	0.0500	DU
74-87-3	Chloromethane	50	0.100	DU
156-59-2	cis-1,2-Dichloroethene	50	0.0500	DU
10061-01-5	cis-1,3-Dichloropropene	50	0.0200	DU
124-48-1	Dibromochloromethane	50	0.0500	DU
74-95-3	Dibromomethane	50	0.0500	DU
75-71-8	Dichlorodifluoromethane	50	0.100	DU
60-29-7	Diethyl Ether	50	0.0500	DU
108-20-3	Di-isopropyl ether	50	0.0500	DU
637-92-3	Ethyl tertiary-butyl ether	50	0.0500	DU
100-41-4	Ethylbenzene	50	0.0500	DU
87-68-3	Hexachlorobutadiene	50	0.0300	DU
67-72-1	Hexachloroethane	50	0.0500	DU
98-82-8	Isopropylbenzene	50	0.0500	DU
1634-04-4	Methyl tert-Butyl Ether	50	0.0500	DU
75-09-2	Methylene Chloride	50	0.200	DU
91-20-3	Naphthalene	50	0.0500	DU
104-51-8	n-Butylbenzene	50	0.0500	DU
103-65-1	n-Propylbenzene	50	0.0500	DU
135-98-8	sec-Butylbenzene	50	0.0500	DU
100-42-5	Styrene	50	0.0500	DU
98-06-6	tert-Butylbenzene	50	0.0500	DU
994-05-8	Tertiary-amyl methyl ether	50	0.0500	DU
127-18-4	Tetrachloroethene	50	3.52	D
109-99-9	Tetrahydrofuran	50	0.250	DU
108-88-3	Toluene	50	0.0500	DU
156-60-5	trans-1,2-Dichloroethene	50	0.0500	DU
10061-02-6	trans-1,3-Dichloropropene	50	0.0200	DU
79-01-6	Trichloroethene	50	0.542	D
75-69-4	Trichlorofluoromethane	50	0.0500	DU
108-05-4	Vinyl Acetate	50	0.250	DU
75-01-4	Vinyl Chloride	50	0.0500	DU
95-47-6	Xylene O	50	0.0500	DU
1330-20-7	Xylene P,M	50	0.100	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.2	109	70 - 130	
4-Bromofluorobenzene	25.00	24.3	97	70 - 130	
Dibromofluoromethane	25.00	25.2	101	70 - 130	
Toluene-d8	25.00	23.8	95	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 228S01 Dup**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-08RE1 File ID: M1048321.D  
Sampled: 04/01/08 12:20 Prepared: 04/09/08 07:00 Analyzed: 04/09/08 12:37  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80909 Sequence: BRD0085 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3232495	10.22	3429944	10.22	
Chlorobenzene-d5	2365689	14.4	2419813	14.39	
1,4-Dichlorobenzene-D4	1076149	17.08	1056695	17.07	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 230D01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-09 File ID: M1048307.D  
 Sampled: 04/01/08 14:42 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 15:59  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0682	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0106	
75-35-4	1,1-Dichloroethene	1	0.0124	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 230D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-09</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0019	
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0122	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0026	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0015	
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	20	0.521	D
75-69-4	Trichlorofluoromethane	1	0.0097	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	26.7	107	70 - 130	
4-Bromofluorobenzene	25.00	24.9	100	70 - 130	
Dibromofluoromethane	25.00	25.7	103	70 - 130	
Toluene-d8	25.00	24.1	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 230D01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-09 File ID: M1048307.D  
Sampled: 04/01/08 14:42 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 15:59  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3086659	10.22	3292493	10.21	
Chlorobenzene-d5	2233734	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	1019755	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 230D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-09RE1</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	20	0.0200	DU
71-55-6	1,1,1-Trichloroethane	20	0.0618	D
79-34-5	1,1,2,2-Tetrachloroethane	20	0.0100	DU
79-00-5	1,1,2-Trichloroethane	20	0.0200	DU
75-34-3	1,1-Dichloroethane	20	0.0200	DU
75-35-4	1,1-Dichloroethene	20	0.0200	DU
563-58-6	1,1-Dichloropropene	20	0.0400	DU
87-61-6	1,2,3-Trichlorobenzene	20	0.0200	DU
96-18-4	1,2,3-Trichloropropane	20	0.0200	DU
120-82-1	1,2,4-Trichlorobenzene	20	0.0200	DU
95-63-6	1,2,4-Trimethylbenzene	20	0.0200	DU
96-12-8	1,2-Dibromo-3-Chloropropane	20	0.100	DU
106-93-4	1,2-Dibromoethane	20	0.0200	DU
95-50-1	1,2-Dichlorobenzene	20	0.0200	DU
107-06-2	1,2-Dichloroethane	20	0.0200	DU
78-87-5	1,2-Dichloropropane	20	0.0200	DU
108-67-8	1,3,5-Trimethylbenzene	20	0.0200	DU
541-73-1	1,3-Dichlorobenzene	20	0.0200	DU
142-28-9	1,3-Dichloropropane	20	0.0200	DU
106-46-7	1,4-Dichlorobenzene	20	0.0200	DU
123-91-1	1,4-Dioxane - Screen	20	10.0	DU
544-10-5	1-Chlorohexane	20	0.0200	DU
594-20-7	2,2-Dichloropropane	20	0.0200	DU
78-93-3	2-Butanone	20	0.500	DU
95-49-8	2-Chlorotoluene	20	0.0200	DU
591-78-6	2-Hexanone	20	0.200	DU
106-43-4	4-Chlorotoluene	20	0.0200	DU
99-87-6	4-Isopropyltoluene	20	0.0200	DU
108-10-1	4-Methyl-2-Pentanone	20	0.500	DU
67-64-1	Acetone	20	0.500	DU
71-43-2	Benzene	20	0.0200	DU
108-86-1	Bromobenzene	20	0.0400	DU
74-97-5	Bromochloromethane	20	0.0200	DU
75-27-4	Bromodichloromethane	20	0.0120	DU
75-25-2	Bromoform	20	0.0200	DU
74-83-9	Bromomethane	20	0.0400	DU
75-15-0	Carbon Disulfide	20	0.0200	DU
56-23-5	Carbon Tetrachloride	20	0.0200	DU
108-90-7	Chlorobenzene	20	0.0200	DU
75-00-3	Chloroethane	20	0.0400	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 230D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-09RE1</u>
Sampled:	<u>04/01/08 14:42</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	20	0.0200	DU
74-87-3	Chloromethane	20	0.0400	DU
156-59-2	cis-1,2-Dichloroethene	20	0.0200	DU
10061-01-5	cis-1,3-Dichloropropene	20	0.0080	DU
124-48-1	Dibromochloromethane	20	0.0200	DU
74-95-3	Dibromomethane	20	0.0200	DU
75-71-8	Dichlorodifluoromethane	20	0.0400	DU
60-29-7	Diethyl Ether	20	0.0200	DU
108-20-3	Di-isopropyl ether	20	0.0200	DU
637-92-3	Ethyl tertiary-butyl ether	20	0.0200	DU
100-41-4	Ethylbenzene	20	0.0200	DU
87-68-3	Hexachlorobutadiene	20	0.0120	DU
67-72-1	Hexachloroethane	20	0.0200	DU
98-82-8	Isopropylbenzene	20	0.0200	DU
1634-04-4	Methyl tert-Butyl Ether	20	0.0200	DU
75-09-2	Methylene Chloride	20	0.0800	DU
91-20-3	Naphthalene	20	0.0200	DU
104-51-8	n-Butylbenzene	20	0.0200	DU
103-65-1	n-Propylbenzene	20	0.0200	DU
135-98-8	sec-Butylbenzene	20	0.0200	DU
100-42-5	Styrene	20	0.0200	DU
98-06-6	tert-Butylbenzene	20	0.0200	DU
994-05-8	Tertiary-amyl methyl ether	20	0.0200	DU
127-18-4	Tetrachloroethene	20	0.0200	DU
109-99-9	Tetrahydrofuran	20	0.100	DU
108-88-3	Toluene	20	0.0200	DU
156-60-5	trans-1,2-Dichloroethene	20	0.0200	DU
10061-02-6	trans-1,3-Dichloropropene	20	0.0080	DU
79-01-6	Trichloroethene	20	0.521	D
75-69-4	Trichlorofluoromethane	20	0.0200	DU
108-05-4	Vinyl Acetate	20	0.100	DU
75-01-4	Vinyl Chloride	20	0.0200	DU
95-47-6	Xylene O	20	0.0200	DU
1330-20-7	Xylene P,M	20	0.0400	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.8	111	70 - 130	
4-Bromofluorobenzene	25.00	23.7	95	70 - 130	
Dibromofluoromethane	25.00	26.4	106	70 - 130	
Toluene-d8	25.00	23.9	95	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 230D01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-09RE1 File ID: M1048301.D  
Sampled: 04/01/08 14:42 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 15:59  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2877893	10.21	3292493	10.21	
Chlorobenzene-d5	2109391	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	945203	17.07	1058187	17.06	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 230S01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-10 File ID: M1048274.D  
 Sampled: 04/01/08 16:05 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 17:14  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	10	0.536	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0400	
75-35-4	1,1-Dichloroethene	1	0.0086	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 230S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-10</u>
Sampled:	<u>04/01/08 16:05</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0141	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0021	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	10	0.182	D
75-69-4	Trichlorofluoromethane	1	0.0042	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.2	113	70 - 130	
4-Bromofluorobenzene	25.00	24.2	97	70 - 130	
Dibromofluoromethane	25.00	26.4	106	70 - 130	
Toluene-d8	25.00	24.0	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 230S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-10 File ID: M1048274.D  
Sampled: 04/01/08 16:05 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 17:14  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3273232	10.21	3449327	10.21	
Chlorobenzene-d5	2568016	14.39	2561062	14.39	
1,4-Dichlorobenzene-D4	1165081	17.06	1163116	17.07	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 230S01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-10RE1 File ID: M1048297.D  
 Sampled: 04/01/08 16:05 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 14:04  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	0.0100	DU
71-55-6	1,1,1-Trichloroethane	10	0.536	D
79-34-5	1,1,2,2-Tetrachloroethane	10	0.0050	DU
79-00-5	1,1,2-Trichloroethane	10	0.0100	DU
75-34-3	1,1-Dichloroethane	10	0.0438	D
75-35-4	1,1-Dichloroethene	10	0.0100	DU
563-58-6	1,1-Dichloropropene	10	0.0200	DU
87-61-6	1,2,3-Trichlorobenzene	10	0.0100	DU
96-18-4	1,2,3-Trichloropropane	10	0.0100	DU
120-82-1	1,2,4-Trichlorobenzene	10	0.0100	DU
95-63-6	1,2,4-Trimethylbenzene	10	0.0100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	10	0.0500	DU
106-93-4	1,2-Dibromoethane	10	0.0100	DU
95-50-1	1,2-Dichlorobenzene	10	0.0100	DU
107-06-2	1,2-Dichloroethane	10	0.0100	DU
78-87-5	1,2-Dichloropropane	10	0.0100	DU
108-67-8	1,3,5-Trimethylbenzene	10	0.0100	DU
541-73-1	1,3-Dichlorobenzene	10	0.0100	DU
142-28-9	1,3-Dichloropropane	10	0.0100	DU
106-46-7	1,4-Dichlorobenzene	10	0.0100	DU
123-91-1	1,4-Dioxane - Screen	10	5.00	DU
544-10-5	1-Chlorohexane	10	0.0100	DU
594-20-7	2,2-Dichloropropane	10	0.0100	DU
78-93-3	2-Butanone	10	0.250	DU
95-49-8	2-Chlorotoluene	10	0.0100	DU
591-78-6	2-Hexanone	10	0.100	DU
106-43-4	4-Chlorotoluene	10	0.0100	DU
99-87-6	4-Isopropyltoluene	10	0.0100	DU
108-10-1	4-Methyl-2-Pentanone	10	0.250	DU
67-64-1	Acetone	10	0.250	DU
71-43-2	Benzene	10	0.0100	DU
108-86-1	Bromobenzene	10	0.0200	DU
74-97-5	Bromochloromethane	10	0.0100	DU
75-27-4	Bromodichloromethane	10	0.0060	DU
75-25-2	Bromoform	10	0.0100	DU
74-83-9	Bromomethane	10	0.0200	DU
75-15-0	Carbon Disulfide	10	0.0100	DU
56-23-5	Carbon Tetrachloride	10	0.0100	DU
108-90-7	Chlorobenzene	10	0.0100	DU
75-00-3	Chloroethane	10	0.0200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 230S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-10RE1</u>
Sampled:	<u>04/01/08 16:05</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	10	0.0100	DU
74-87-3	Chloromethane	10	0.0200	DU
156-59-2	cis-1,2-Dichloroethene	10	0.0154	D
10061-01-5	cis-1,3-Dichloropropene	10	0.0040	DU
124-48-1	Dibromochloromethane	10	0.0100	DU
74-95-3	Dibromomethane	10	0.0100	DU
75-71-8	Dichlorodifluoromethane	10	0.0200	DU
60-29-7	Diethyl Ether	10	0.0100	DU
108-20-3	Di-isopropyl ether	10	0.0100	DU
637-92-3	Ethyl tertiary-butyl ether	10	0.0100	DU
100-41-4	Ethylbenzene	10	0.0100	DU
87-68-3	Hexachlorobutadiene	10	0.0060	DU
67-72-1	Hexachloroethane	10	0.0100	DU
98-82-8	Isopropylbenzene	10	0.0100	DU
1634-04-4	Methyl tert-Butyl Ether	10	0.0100	DU
75-09-2	Methylene Chloride	10	0.0400	DU
91-20-3	Naphthalene	10	0.0100	DU
104-51-8	n-Butylbenzene	10	0.0100	DU
103-65-1	n-Propylbenzene	10	0.0100	DU
135-98-8	sec-Butylbenzene	10	0.0100	DU
100-42-5	Styrene	10	0.0100	DU
98-06-6	tert-Butylbenzene	10	0.0100	DU
994-05-8	Tertiary-amyl methyl ether	10	0.0100	DU
127-18-4	Tetrachloroethene	10	0.0100	DU
109-99-9	Tetrahydrofuran	10	0.0500	DU
108-88-3	Toluene	10	0.0100	DU
156-60-5	trans-1,2-Dichloroethene	10	0.0100	DU
10061-02-6	trans-1,3-Dichloropropene	10	0.0040	DU
79-01-6	Trichloroethene	10	0.182	D
75-69-4	Trichlorofluoromethane	10	0.0100	DU
108-05-4	Vinyl Acetate	10	0.0500	DU
75-01-4	Vinyl Chloride	10	0.0100	DU
95-47-6	Xylene O	10	0.0100	DU
1330-20-7	Xylene P,M	10	0.0200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.5	114	70 - 130	
4-Bromofluorobenzene	25.00	23.8	95	70 - 130	
Dibromofluoromethane	25.00	26.8	107	70 - 130	
Toluene-d8	25.00	23.9	95	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 230S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-10RE1 File ID: M1048297.D  
Sampled: 04/01/08 16:05 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 14:04  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2940993	10.22	3292493	10.21	
Chlorobenzene-d5	2215335	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	993014	17.07	1058187	17.06	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 226S01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-11 File ID: M1048275.D  
 Sampled: 04/02/08 09:50 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 17:42  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	10	0.348	D
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0632	
75-35-4	1,1-Dichloroethene	1	0.0099	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 226S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-11</u>
Sampled:	<u>04/02/08 09:50</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0140	
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0012	
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	10	0.418	D
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	10	0.324	D
75-69-4	Trichlorofluoromethane	1	0.0047	
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.8	111	70 - 130	
4-Bromofluorobenzene	25.00	24.0	96	70 - 130	
Dibromofluoromethane	25.00	26.5	106	70 - 130	
Toluene-d8	25.00	23.9	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 226S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-11 File ID: M1048275.D  
Sampled: 04/02/08 09:50 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 17:42  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3435292	10.21	3449327	10.21	
Chlorobenzene-d5	2646498	14.38	2561062	14.39	
1,4-Dichlorobenzene-D4	1213731	17.07	1163116	17.07	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 226S01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-11RE1 File ID: M1048298.D  
 Sampled: 04/02/08 09:50 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 14:34  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	0.0100	DU
71-55-6	1,1,1-Trichloroethane	10	0.348	D
79-34-5	1,1,2,2-Tetrachloroethane	10	0.0050	DU
79-00-5	1,1,2-Trichloroethane	10	0.0100	DU
75-34-3	1,1-Dichloroethane	10	0.0656	D
75-35-4	1,1-Dichloroethene	10	0.0100	DU
563-58-6	1,1-Dichloropropene	10	0.0200	DU
87-61-6	1,2,3-Trichlorobenzene	10	0.0100	DU
96-18-4	1,2,3-Trichloropropane	10	0.0100	DU
120-82-1	1,2,4-Trichlorobenzene	10	0.0100	DU
95-63-6	1,2,4-Trimethylbenzene	10	0.0100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	10	0.0500	DU
106-93-4	1,2-Dibromoethane	10	0.0100	DU
95-50-1	1,2-Dichlorobenzene	10	0.0100	DU
107-06-2	1,2-Dichloroethane	10	0.0100	DU
78-87-5	1,2-Dichloropropane	10	0.0100	DU
108-67-8	1,3,5-Trimethylbenzene	10	0.0100	DU
541-73-1	1,3-Dichlorobenzene	10	0.0100	DU
142-28-9	1,3-Dichloropropane	10	0.0100	DU
106-46-7	1,4-Dichlorobenzene	10	0.0100	DU
123-91-1	1,4-Dioxane - Screen	10	5.00	DU
544-10-5	1-Chlorohexane	10	0.0100	DU
594-20-7	2,2-Dichloropropane	10	0.0100	DU
78-93-3	2-Butanone	10	0.250	DU
95-49-8	2-Chlorotoluene	10	0.0100	DU
591-78-6	2-Hexanone	10	0.100	DU
106-43-4	4-Chlorotoluene	10	0.0100	DU
99-87-6	4-Isopropyltoluene	10	0.0100	DU
108-10-1	4-Methyl-2-Pentanone	10	0.250	DU
67-64-1	Acetone	10	0.250	DU
71-43-2	Benzene	10	0.0100	DU
108-86-1	Bromobenzene	10	0.0200	DU
74-97-5	Bromochloromethane	10	0.0100	DU
75-27-4	Bromodichloromethane	10	0.0060	DU
75-25-2	Bromoform	10	0.0100	DU
74-83-9	Bromomethane	10	0.0200	DU
75-15-0	Carbon Disulfide	10	0.0100	DU
56-23-5	Carbon Tetrachloride	10	0.0100	DU
108-90-7	Chlorobenzene	10	0.0100	DU
75-00-3	Chloroethane	10	0.0200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 226S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-11RE1</u>
Sampled:	<u>04/02/08 09:50</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	10	0.0100	DU
74-87-3	Chloromethane	10	0.0200	DU
156-59-2	cis-1,2-Dichloroethene	10	0.0130	D
10061-01-5	cis-1,3-Dichloropropene	10	0.0040	DU
124-48-1	Dibromochloromethane	10	0.0100	DU
74-95-3	Dibromomethane	10	0.0100	DU
75-71-8	Dichlorodifluoromethane	10	0.0200	DU
60-29-7	Diethyl Ether	10	0.0100	DU
108-20-3	Di-isopropyl ether	10	0.0100	DU
637-92-3	Ethyl tertiary-butyl ether	10	0.0100	DU
100-41-4	Ethylbenzene	10	0.0100	DU
87-68-3	Hexachlorobutadiene	10	0.0060	DU
67-72-1	Hexachloroethane	10	0.0100	DU
98-82-8	Isopropylbenzene	10	0.0100	DU
1634-04-4	Methyl tert-Butyl Ether	10	0.0100	DU
75-09-2	Methylene Chloride	10	0.0400	DU
91-20-3	Naphthalene	10	0.0100	DU
104-51-8	n-Butylbenzene	10	0.0100	DU
103-65-1	n-Propylbenzene	10	0.0100	DU
135-98-8	sec-Butylbenzene	10	0.0100	DU
100-42-5	Styrene	10	0.0100	DU
98-06-6	tert-Butylbenzene	10	0.0100	DU
994-05-8	Tertiary-amyl methyl ether	10	0.0100	DU
127-18-4	Tetrachloroethene	10	0.418	D
109-99-9	Tetrahydrofuran	10	0.0500	DU
108-88-3	Toluene	10	0.0100	DU
156-60-5	trans-1,2-Dichloroethene	10	0.0100	DU
10061-02-6	trans-1,3-Dichloropropene	10	0.0040	DU
79-01-6	Trichloroethene	10	0.324	D
75-69-4	Trichlorofluoromethane	10	0.0100	DU
108-05-4	Vinyl Acetate	10	0.0500	DU
75-01-4	Vinyl Chloride	10	0.0100	DU
95-47-6	Xylene O	10	0.0100	DU
1330-20-7	Xylene P,M	10	0.0200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.2	109	70 - 130	
4-Bromofluorobenzene	25.00	23.3	93	70 - 130	
Dibromofluoromethane	25.00	26.1	104	70 - 130	
Toluene-d8	25.00	24.0	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 226S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-11RE1 File ID: M1048298.D  
Sampled: 04/02/08 09:50 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 14:34  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2857814	10.22	3292493	10.21	
Chlorobenzene-d5	2154705	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	954716	17.07	1058187	17.06	

\* Values outside of QC limits

## ORGANIC ANALYSIS DATA SHEET

8260B

MW 229S01

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Ground Water Laboratory ID: 0804037-12 File ID: M1048276.D  
 Sampled: 04/02/08 10:50 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 18:09  
 Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0010	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0010	U
75-35-4	1,1-Dichloroethene	1	0.0010	U
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

MW 229S01

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-12</u>
Sampled:	<u>04/02/08 10:50</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0010	U
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	10	0.0744	D
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	1	0.0010	U
75-69-4	Trichlorofluoromethane	1	0.0010	U
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.0	112	70 - 130	
4-Bromofluorobenzene	25.00	24.5	98	70 - 130	
Dibromofluoromethane	25.00	25.8	103	70 - 130	
Toluene-d8	25.00	24.2	97	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 229S01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-12 File ID: M1048276.D  
Sampled: 04/02/08 10:50 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 18:09  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml

Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3285252	10.21	3449327	10.21	
Chlorobenzene-d5	2494707	14.38	2561062	14.39	
1,4-Dichlorobenzene-D4	1161640	17.06	1163116	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 229S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-12RE1</u>
Sampled:	<u>04/02/08 10:50</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	0.0100	DU
71-55-6	1,1,1-Trichloroethane	10	0.0100	DU
79-34-5	1,1,2,2-Tetrachloroethane	10	0.0050	DU
79-00-5	1,1,2-Trichloroethane	10	0.0100	DU
75-34-3	1,1-Dichloroethane	10	0.0100	DU
75-35-4	1,1-Dichloroethene	10	0.0100	DU
563-58-6	1,1-Dichloropropene	10	0.0200	DU
87-61-6	1,2,3-Trichlorobenzene	10	0.0100	DU
96-18-4	1,2,3-Trichloropropane	10	0.0100	DU
120-82-1	1,2,4-Trichlorobenzene	10	0.0100	DU
95-63-6	1,2,4-Trimethylbenzene	10	0.0100	DU
96-12-8	1,2-Dibromo-3-Chloropropane	10	0.0500	DU
106-93-4	1,2-Dibromoethane	10	0.0100	DU
95-50-1	1,2-Dichlorobenzene	10	0.0100	DU
107-06-2	1,2-Dichloroethane	10	0.0100	DU
78-87-5	1,2-Dichloropropane	10	0.0100	DU
108-67-8	1,3,5-Trimethylbenzene	10	0.0100	DU
541-73-1	1,3-Dichlorobenzene	10	0.0100	DU
142-28-9	1,3-Dichloropropane	10	0.0100	DU
106-46-7	1,4-Dichlorobenzene	10	0.0100	DU
123-91-1	1,4-Dioxane - Screen	10	5.00	DU
544-10-5	1-Chlorohexane	10	0.0100	DU
594-20-7	2,2-Dichloropropane	10	0.0100	DU
78-93-3	2-Butanone	10	0.250	DU
95-49-8	2-Chlorotoluene	10	0.0100	DU
591-78-6	2-Hexanone	10	0.100	DU
106-43-4	4-Chlorotoluene	10	0.0100	DU
99-87-6	4-Isopropyltoluene	10	0.0100	DU
108-10-1	4-Methyl-2-Pentanone	10	0.250	DU
67-64-1	Acetone	10	0.250	DU
71-43-2	Benzene	10	0.0100	DU
108-86-1	Bromobenzene	10	0.0200	DU
74-97-5	Bromochloromethane	10	0.0100	DU
75-27-4	Bromodichloromethane	10	0.0060	DU
75-25-2	Bromoform	10	0.0100	DU
74-83-9	Bromomethane	10	0.0200	DU
75-15-0	Carbon Disulfide	10	0.0100	DU
56-23-5	Carbon Tetrachloride	10	0.0100	DU
108-90-7	Chlorobenzene	10	0.0100	DU
75-00-3	Chloroethane	10	0.0200	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 229S01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-12RE1</u>
Sampled:	<u>04/02/08 10:50</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	10	0.0100	DU
74-87-3	Chloromethane	10	0.0200	DU
156-59-2	cis-1,2-Dichloroethene	10	0.0100	DU
10061-01-5	cis-1,3-Dichloropropene	10	0.0040	DU
124-48-1	Dibromochloromethane	10	0.0100	DU
74-95-3	Dibromomethane	10	0.0100	DU
75-71-8	Dichlorodifluoromethane	10	0.0200	DU
60-29-7	Diethyl Ether	10	0.0100	DU
108-20-3	Di-isopropyl ether	10	0.0100	DU
637-92-3	Ethyl tertiary-butyl ether	10	0.0100	DU
100-41-4	Ethylbenzene	10	0.0100	DU
87-68-3	Hexachlorobutadiene	10	0.0060	DU
67-72-1	Hexachloroethane	10	0.0100	DU
98-82-8	Isopropylbenzene	10	0.0100	DU
1634-04-4	Methyl tert-Butyl Ether	10	0.0100	DU
75-09-2	Methylene Chloride	10	0.0400	DU
91-20-3	Naphthalene	10	0.0100	DU
104-51-8	n-Butylbenzene	10	0.0100	DU
103-65-1	n-Propylbenzene	10	0.0100	DU
135-98-8	sec-Butylbenzene	10	0.0100	DU
100-42-5	Styrene	10	0.0100	DU
98-06-6	tert-Butylbenzene	10	0.0100	DU
994-05-8	Tertiary-amyl methyl ether	10	0.0100	DU
127-18-4	Tetrachloroethene	10	0.0744	D
109-99-9	Tetrahydrofuran	10	0.0500	DU
108-88-3	Toluene	10	0.0100	DU
156-60-5	trans-1,2-Dichloroethene	10	0.0100	DU
10061-02-6	trans-1,3-Dichloropropene	10	0.0040	DU
79-01-6	Trichloroethene	10	0.0100	DU
75-69-4	Trichlorofluoromethane	10	0.0100	DU
108-05-4	Vinyl Acetate	10	0.0500	DU
75-01-4	Vinyl Chloride	10	0.0100	DU
95-47-6	Xylene O	10	0.0100	DU
1330-20-7	Xylene P,M	10	0.0200	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.1	112	70 - 130	
4-Bromofluorobenzene	25.00	23.3	93	70 - 130	
Dibromofluoromethane	25.00	26.1	104	70 - 130	
Toluene-d8	25.00	23.8	95	70 - 130	

**ORGANIC ANALYSIS DATA SHEET****8260B**

MW 229S01

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-12RE1 File ID: M1048299.D  
Sampled: 04/02/08 10:50 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 15:03  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3007251	10.22	3292493	10.21	
Chlorobenzene-d5	2222758	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	1010201	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 226D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-13</u>
Sampled:	<u>04/02/08 08:50</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0045	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0022	
75-34-3	1,1-Dichloroethane	1	0.0069	
75-35-4	1,1-Dichloroethene	1	0.0798	
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 226D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-13</u>
Sampled:	<u>04/02/08 08:50</u>	Prepared:	<u>04/07/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80709</u>	Sequence:	<u>BRD0064</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0010	U
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	50	0.162	D
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0012	
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0107	
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0246	
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	50	4.87	D
75-69-4	Trichlorofluoromethane	1	0.0010	U
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0030	
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.3	109	70 - 130	
4-Bromofluorobenzene	25.00	24.0	96	70 - 130	
Dibromofluoromethane	25.00	25.8	103	70 - 130	
Toluene-d8	25.00	23.7	95	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**MW 226D01**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-13 File ID: M1048277.D  
Sampled: 04/02/08 08:50 Prepared: 04/07/08 07:00 Analyzed: 04/07/08 18:37  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80709 Sequence: BRD0064 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3382560	10.21	3449327	10.21	
Chlorobenzene-d5	2571602	14.38	2561062	14.39	
1,4-Dichlorobenzene-D4	1155234	17.06	1163116	17.07	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 226D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-13RE1</u>
Sampled:	<u>04/02/08 08:50</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	50	0.0500	DU
71-55-6	1,1,1-Trichloroethane	50	0.0500	DU
79-34-5	1,1,2,2-Tetrachloroethane	50	0.0250	DU
79-00-5	1,1,2-Trichloroethane	50	0.0500	DU
75-34-3	1,1-Dichloroethane	50	0.0500	DU
75-35-4	1,1-Dichloroethene	50	0.0660	D
563-58-6	1,1-Dichloropropene	50	0.100	DU
87-61-6	1,2,3-Trichlorobenzene	50	0.0500	DU
96-18-4	1,2,3-Trichloropropane	50	0.0500	DU
120-82-1	1,2,4-Trichlorobenzene	50	0.0500	DU
95-63-6	1,2,4-Trimethylbenzene	50	0.0500	DU
96-12-8	1,2-Dibromo-3-Chloropropane	50	0.250	DU
106-93-4	1,2-Dibromoethane	50	0.0500	DU
95-50-1	1,2-Dichlorobenzene	50	0.0500	DU
107-06-2	1,2-Dichloroethane	50	0.0500	DU
78-87-5	1,2-Dichloropropane	50	0.0500	DU
108-67-8	1,3,5-Trimethylbenzene	50	0.0500	DU
541-73-1	1,3-Dichlorobenzene	50	0.0500	DU
142-28-9	1,3-Dichloropropane	50	0.0500	DU
106-46-7	1,4-Dichlorobenzene	50	0.0500	DU
123-91-1	1,4-Dioxane - Screen	50	25.0	DU
544-10-5	1-Chlorohexane	50	0.0500	DU
594-20-7	2,2-Dichloropropane	50	0.0500	DU
78-93-3	2-Butanone	50	1.25	DU
95-49-8	2-Chlorotoluene	50	0.0500	DU
591-78-6	2-Hexanone	50	0.500	DU
106-43-4	4-Chlorotoluene	50	0.0500	DU
99-87-6	4-Isopropyltoluene	50	0.0500	DU
108-10-1	4-Methyl-2-Pentanone	50	1.25	DU
67-64-1	Acetone	50	1.25	DU
71-43-2	Benzene	50	0.0500	DU
108-86-1	Bromobenzene	50	0.100	DU
74-97-5	Bromochloromethane	50	0.0500	DU
75-27-4	Bromodichloromethane	50	0.0300	DU
75-25-2	Bromoform	50	0.0500	DU
74-83-9	Bromomethane	50	0.100	DU
75-15-0	Carbon Disulfide	50	0.0500	DU
56-23-5	Carbon Tetrachloride	50	0.0500	DU
108-90-7	Chlorobenzene	50	0.0500	DU
75-00-3	Chloroethane	50	0.100	DU

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**MW 226D01**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-13RE1</u>
Sampled:	<u>04/02/08 08:50</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	50	0.0500	DU
74-87-3	Chloromethane	50	0.100	DU
156-59-2	cis-1,2-Dichloroethene	50	0.162	D
10061-01-5	cis-1,3-Dichloropropene	50	0.0200	DU
124-48-1	Dibromochloromethane	50	0.0500	DU
74-95-3	Dibromomethane	50	0.0500	DU
75-71-8	Dichlorodifluoromethane	50	0.100	DU
60-29-7	Diethyl Ether	50	0.0500	DU
108-20-3	Di-isopropyl ether	50	0.0500	DU
637-92-3	Ethyl tertiary-butyl ether	50	0.0500	DU
100-41-4	Ethylbenzene	50	0.0500	DU
87-68-3	Hexachlorobutadiene	50	0.0300	DU
67-72-1	Hexachloroethane	50	0.0500	DU
98-82-8	Isopropylbenzene	50	0.0500	DU
1634-04-4	Methyl tert-Butyl Ether	50	0.0500	DU
75-09-2	Methylene Chloride	50	0.200	DU
91-20-3	Naphthalene	50	0.0500	DU
104-51-8	n-Butylbenzene	50	0.0500	DU
103-65-1	n-Propylbenzene	50	0.0500	DU
135-98-8	sec-Butylbenzene	50	0.0500	DU
100-42-5	Styrene	50	0.0500	DU
98-06-6	tert-Butylbenzene	50	0.0500	DU
994-05-8	Tertiary-amyl methyl ether	50	0.0500	DU
127-18-4	Tetrachloroethene	50	0.0500	DU
109-99-9	Tetrahydrofuran	50	0.250	DU
108-88-3	Toluene	50	0.0500	DU
156-60-5	trans-1,2-Dichloroethene	50	0.0500	DU
10061-02-6	trans-1,3-Dichloropropene	50	0.0200	DU
79-01-6	Trichloroethene	50	4.87	D
75-69-4	Trichlorofluoromethane	50	0.0500	DU
108-05-4	Vinyl Acetate	50	0.250	DU
75-01-4	Vinyl Chloride	50	0.0500	DU
95-47-6	Xylene O	50	0.0500	DU
1330-20-7	Xylene P,M	50	0.100	DU

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.2	113	70 - 130	
4-Bromofluorobenzene	25.00	23.9	96	70 - 130	
Dibromofluoromethane	25.00	25.6	102	70 - 130	
Toluene-d8	25.00	24.0	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET****8260B**

MW 226D01

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-13RE1 File ID: M1048303.D  
Sampled: 04/02/08 08:50 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 16:58  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2869503	10.22	3292493	10.21	
Chlorobenzene-d5	2100432	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	952831	17.07	1058187	17.06	

\* Values outside of QC limits

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**Equipment Blank**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-14</u>
Sampled:	<u>04/01/08 17:05</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0010	U
71-55-6	1,1,1-Trichloroethane	1	0.0010	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0005	U
79-00-5	1,1,2-Trichloroethane	1	0.0010	U
75-34-3	1,1-Dichloroethane	1	0.0010	U
75-35-4	1,1-Dichloroethene	1	0.0010	U
563-58-6	1,1-Dichloropropene	1	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0010	U
96-18-4	1,2,3-Trichloropropane	1	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0010	U
95-50-1	1,2-Dichlorobenzene	1	0.0010	U
107-06-2	1,2-Dichloroethane	1	0.0010	U
78-87-5	1,2-Dichloropropane	1	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0010	U
541-73-1	1,3-Dichlorobenzene	1	0.0010	U
142-28-9	1,3-Dichloropropane	1	0.0010	U
106-46-7	1,4-Dichlorobenzene	1	0.0010	U
123-91-1	1,4-Dioxane - Screen	1	0.500	U
544-10-5	1-Chlorohexane	1	0.0010	U
594-20-7	2,2-Dichloropropane	1	0.0010	U
78-93-3	2-Butanone	1	0.0250	U
95-49-8	2-Chlorotoluene	1	0.0010	U
591-78-6	2-Hexanone	1	0.0100	U
106-43-4	4-Chlorotoluene	1	0.0010	U
99-87-6	4-Isopropyltoluene	1	0.0010	U
108-10-1	4-Methyl-2-Pentanone	1	0.0250	U
67-64-1	Acetone	1	0.0250	U
71-43-2	Benzene	1	0.0010	U
108-86-1	Bromobenzene	1	0.0020	U
74-97-5	Bromochloromethane	1	0.0010	U
75-27-4	Bromodichloromethane	1	0.0006	U
75-25-2	Bromoform	1	0.0010	U
74-83-9	Bromomethane	1	0.0020	U
75-15-0	Carbon Disulfide	1	0.0010	U
56-23-5	Carbon Tetrachloride	1	0.0010	U
108-90-7	Chlorobenzene	1	0.0010	U
75-00-3	Chloroethane	1	0.0020	U

# ORGANIC ANALYSIS DATA SHEET

**8260B**

**Equipment Blank**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Ground Water</u>	Laboratory ID:	<u>0804037-14</u>
Sampled:	<u>04/01/08 17:05</u>	Prepared:	<u>04/08/08 07:00</u>
Solids:		Preparation:	<u>5030B</u>
Batch:	<u>BD80807</u>	Sequence:	<u>BRD0073</u>
		Calibration:	<u>0804001</u>
		Instrument:	<u>VMS1</u>

CAS NO.	COMPOUND	DILUTION	CONC. (mg/L)	Q
67-66-3	Chloroform	1	0.0014	
74-87-3	Chloromethane	1	0.0020	U
156-59-2	cis-1,2-Dichloroethene	1	0.0010	U
10061-01-5	cis-1,3-Dichloropropene	1	0.0004	U
124-48-1	Dibromochloromethane	1	0.0010	U
74-95-3	Dibromomethane	1	0.0010	U
75-71-8	Dichlorodifluoromethane	1	0.0020	U
60-29-7	Diethyl Ether	1	0.0010	U
108-20-3	Di-isopropyl ether	1	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	1	0.0010	U
100-41-4	Ethylbenzene	1	0.0010	U
87-68-3	Hexachlorobutadiene	1	0.0006	U
67-72-1	Hexachloroethane	1	0.0010	U
98-82-8	Isopropylbenzene	1	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	1	0.0010	U
75-09-2	Methylene Chloride	1	0.0040	U
91-20-3	Naphthalene	1	0.0010	U
104-51-8	n-Butylbenzene	1	0.0010	U
103-65-1	n-Propylbenzene	1	0.0010	U
135-98-8	sec-Butylbenzene	1	0.0010	U
100-42-5	Styrene	1	0.0010	U
98-06-6	tert-Butylbenzene	1	0.0010	U
994-05-8	Tertiary-amyl methyl ether	1	0.0010	U
127-18-4	Tetrachloroethene	1	0.0010	U
109-99-9	Tetrahydrofuran	1	0.0050	U
108-88-3	Toluene	1	0.0010	U
156-60-5	trans-1,2-Dichloroethene	1	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	1	0.0004	U
79-01-6	Trichloroethene	1	0.0010	U
75-69-4	Trichlorofluoromethane	1	0.0010	U
108-05-4	Vinyl Acetate	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0010	U
95-47-6	Xylene O	1	0.0010	U
1330-20-7	Xylene P,M	1	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	28.5	114	70 - 130	
4-Bromofluorobenzene	25.00	24.4	97	70 - 130	
Dibromofluoromethane	25.00	26.2	105	70 - 130	
Toluene-d8	25.00	24.1	96	70 - 130	

**ORGANIC ANALYSIS DATA SHEET**  
**8260B**

**Equipment Blank**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Ground Water Laboratory ID: 0804037-14 File ID: M1048300.D  
Sampled: 04/01/08 17:05 Prepared: 04/08/08 07:00 Analyzed: 04/08/08 15:30  
Solids: Preparation: 5030B Initial/Final: 10 ml / 10 ml  
Batch: BD80807 Sequence: BRD0073 Calibration: 0804001 Instrument: VMS1

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	2879987	10.21	3292493	10.21	
Chlorobenzene-d5	2132739	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	972818	17.07	1058187	17.06	

\* Values outside of QC limits

# VOA Quality Control Data

# PREPARATION BATCH SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Batch:	<u>BD80709</u>	Batch Matrix:	<u>Aqueous</u>
		Preparation:	<u>5030B</u>

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
MW 227D01	0804037-01	M1048279.D	04/07/08 07:00	Data Package
<del>MW 227D01</del>	<del>0804037-01</del>	<del>M1048302.D</del>	<del>04/07/08 07:00</del>	<del>Data Package</del>
<del>MW 227S01</del>	<del>0804037-02</del>	<del>M1048295.D</del>	<del>04/07/08 07:00</del>	<del>Data Package</del>
MW 227S01	0804037-02	M1048280.D	04/07/08 07:00	Data Package
MW 220S01	0804037-04RE1	M1048272.D	04/07/08 07:00	Data Package
MW 221S01	0804037-05RE1	M1048273.D	04/07/08 07:00	Data Package
MW 230S01	0804037-10	M1048274.D	04/07/08 07:00	Data Package
<del>MW 230S01</del>	<del>0804037-10</del>	<del>M1048297.D</del>	<del>04/07/08 07:00</del>	<del>Data Package</del>
<del>MW 226S01</del>	<del>0804037-11</del>	<del>M1048298.D</del>	<del>04/07/08 07:00</del>	<del>Data Package</del>
MW 226S01	0804037-11	M1048275.D	04/07/08 07:00	Data Package
MW 229S01	0804037-12	M1048276.D	04/07/08 07:00	Data Package
<del>MW 229S01</del>	<del>0804037-12</del>	<del>M1048299.D</del>	<del>04/07/08 07:00</del>	<del>Data Package</del>
<del>MW 226D01</del>	<del>0804037-13</del>	<del>M1048303.D</del>	<del>04/07/08 07:00</del>	<del>Data Package</del>
MW 226D01	0804037-13	M1048277.D	04/07/08 07:00	Data Package
Blank	BD80709-BLK1	M1048262.D	04/07/08 07:00	
LCS	BD80709-BS1	M1048258.D	04/07/08 07:00	
LCS Dup	BD80709-BSD1	M1048259.D	04/07/08 07:00	

# PREPARATION BATCH SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Batch:	<u>BD80807</u>	Batch Matrix:	<u>Aqueous</u>
			Preparation: <u>5030B</u>

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
MW 227D01	0804037-01RE1	M1048302.D	04/08/08 07:00	Data Package
MW 227S01	0804037-02RE1	M1048295.D	04/08/08 07:00	Data Package
MW 227S01 Dup	0804037-03	M1048306.D	04/08/08 07:00	Data Package
<del>MW 227S01 Dup</del>	<del>0804037-03</del>	<del>M1048296.D</del>	<del>04/08/08 07:00</del>	<del>Data Package</del>
MW 227S01 Dup	0804037-03RE1	M1048296.D	04/08/08 07:00	Data Package
<del>MW 221S01</del>	<del>0804037-05</del>	<del>M1048273.D</del>	<del>04/08/08 07:00</del>	<del>Data Package</del>
MW 221S01	0804037-05	M1048305.D	04/08/08 07:00	Data Package
MW 228S01	0804037-07	M1048308.D	04/08/08 07:00	Data Package MS/MSD
<del>MW 228S01</del>	<del>0804037-07</del>	<del>M1048304.D</del>	<del>04/08/08 07:00</del>	<del>Data Package MS/MSD</del>
MW 228S01	0804037-07RE1	M1048304.D	04/08/08 07:00	Data Package MS/MSD
<del>MW 230D01</del>	<del>0804037-09</del>	<del>M1048301.D</del>	<del>04/08/08 07:00</del>	<del>Data Package</del>
MW 230D01	0804037-09	M1048307.D	04/08/08 07:00	Data Package
MW 230D01	0804037-09RE1	M1048301.D	04/08/08 07:00	Data Package
MW 230S01	0804037-10RE1	M1048297.D	04/08/08 07:00	Data Package
MW 226S01	0804037-11RE1	M1048298.D	04/08/08 07:00	Data Package
MW 229S01	0804037-12RE1	M1048299.D	04/08/08 07:00	Data Package
MW 226D01	0804037-13RE1	M1048303.D	04/08/08 07:00	Data Package
Equipment Blank	0804037-14	M1048300.D	04/08/08 07:00	Data Package
Blank	BD80807-BLK1	M1048292.D	04/08/08 07:00	
LCS	BD80807-BS1	M1048288.D	04/08/08 07:00	
LCS Dup	BD80807-BSD1	M1048289.D	04/08/08 07:00	
MW 228S01	BD80807-MS1	M1048309.D	04/08/08 07:00	
MW 228S01	BD80807-MSD1	M1048310.D	04/08/08 07:00	

# PREPARATION BATCH SUMMARY

**8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Batch: BD80909 Batch Matrix: Aqueous Preparation: 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
MW 220S01	0804037-04	M1048322.D	04/09/08 07:00	Data Package
<del>MW 220S01</del>	<del>0804037-04</del>	<del>M1048272.D</del>	<del>04/09/08 07:00</del>	<del>Data Package</del>
MW 228D01	0804037-06	M1048323.D	04/09/08 07:00	Data Package
<del>MW 228D01</del>	<del>0804037-06</del>	<del>M1048320.D</del>	<del>04/09/08 07:00</del>	<del>Data Package</del>
MW 228D01	0804037-06RE1	M1048320.D	04/09/08 07:00	Data Package
MW 228S01 Dup	0804037-08	M1048324.D	04/09/08 07:00	Data Package
<del>MW 228S01 Dup</del>	<del>0804037-08</del>	<del>M1048321.D</del>	<del>04/09/08 07:00</del>	<del>Data Package</del>
MW 228S01 Dup	0804037-08RE1	M1048321.D	04/09/08 07:00	Data Package
Blank	BD80909-BLK1	M1048319.D	04/09/08 07:00	
LCS	BD80909-BS1	M1048315.D	04/09/08 07:00	
LCS Dup	BD80909-BSD1	M1048316.D	04/09/08 07:00	

**METHOD BLANK DATA SHEET****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80709-BLK1 File ID: M1048262.D  
 Prepared: 04/07/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/07/08 11:36 Instrument: VMS1  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.0010	U
71-55-6	1,1,1-Trichloroethane	0.0010	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0005	U
79-00-5	1,1,2-Trichloroethane	0.0010	U
75-34-3	1,1-Dichloroethane	0.0010	U
75-35-4	1,1-Dichloroethene	0.0010	U
563-58-6	1,1-Dichloropropene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0010	U
96-18-4	1,2,3-Trichloropropane	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.0050	U
106-93-4	1,2-Dibromoethane	0.0010	U
95-50-1	1,2-Dichlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0010	U
78-87-5	1,2-Dichloropropane	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0010	U
142-28-9	1,3-Dichloropropane	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U
123-91-1	1,4-Dioxane - Screen	0.500	U
544-10-5	1-Chlorohexane	0.0010	U
594-20-7	2,2-Dichloropropane	0.0010	U
78-93-3	2-Butanone	0.0250	U
95-49-8	2-Chlorotoluene	0.0010	U
591-78-6	2-Hexanone	0.0100	U
106-43-4	4-Chlorotoluene	0.0010	U
99-87-6	4-Isopropyltoluene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0250	U
67-64-1	Acetone	0.0250	U

**METHOD BLANK DATA SHEET****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80709-BLK1 File ID: M1048262.D  
 Prepared: 04/07/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/07/08 11:36 Instrument: VMS1  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
71-43-2	Benzene	0.0010	U
108-86-1	Bromobenzene	0.0020	U
74-97-5	Bromochloromethane	0.0010	U
75-27-4	Bromodichloromethane	0.0006	U
75-25-2	Bromoform	0.0010	U
74-83-9	Bromomethane	0.0020	U
75-15-0	Carbon Disulfide	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U
108-90-7	Chlorobenzene	0.0010	U
75-00-3	Chloroethane	0.0020	U
67-66-3	Chloroform	0.0010	U
74-87-3	Chloromethane	0.0020	U
156-59-2	cis-1,2-Dichloroethene	0.0010	U
10061-01-5	cis-1,3-Dichloropropene	0.0004	U
124-48-1	Dibromochloromethane	0.0010	U
74-95-3	Dibromomethane	0.0010	U
75-71-8	Dichlorodifluoromethane	0.0020	U
60-29-7	Diethyl Ether	0.0010	U
108-20-3	Di-isopropyl ether	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	0.0010	U
100-41-4	Ethylbenzene	0.0010	U
87-68-3	Hexachlorobutadiene	0.0006	U
67-72-1	Hexachloroethane	0.0010	U
98-82-8	Isopropylbenzene	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	0.0010	U
75-09-2	Methylene Chloride	0.0040	U
91-20-3	Naphthalene	0.0010	U
104-51-8	n-Butylbenzene	0.0010	U
103-65-1	n-Propylbenzene	0.0010	U
135-98-8	sec-Butylbenzene	0.0010	U

# METHOD BLANK DATA SHEET

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80709-BLK1 File ID: M1048262.D  
 Prepared: 04/07/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/07/08 11:36 Instrument: VMS1  
 Batch: BD80709 Sequence: BRD0064 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
100-42-5	Styrene	0.0010	U
98-06-6	tert-Butylbenzene	0.0010	U
994-05-8	Tertiary-amyl methyl ether	0.0010	U
127-18-4	Tetrachloroethene	0.0010	U
109-99-9	Tetrahydrofuran	0.0050	U
108-88-3	Toluene	0.0010	U
156-60-5	trans-1,2-Dichloroethene	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	0.0004	U
79-01-6	Trichloroethene	0.0010	U
75-69-4	Trichlorofluoromethane	0.0010	U
108-05-4	Vinyl Acetate	0.0050	U
75-01-4	Vinyl Chloride	0.0010	U
95-47-6	Xylene O	0.0010	U
1330-20-7	Xylene P,M	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	29.2	117	70 - 130	
4-Bromofluorobenzene	25.00	23.6	95	70 - 130	
Dibromofluoromethane	25.00	26.5	106	70 - 130	
Toluene-d8	25.00	23.9	96	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3098883	10.21	3449327	10.21	
Chlorobenzene-d5	2306435	14.39	2561062	14.39	
1,4-Dichlorobenzene-D4	1041693	17.07	1163116	17.07	

**METHOD BLANK DATA SHEET****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80807-BLK1 File ID: M1048292.D  
 Prepared: 04/08/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/08/08 11:39 Instrument: VMS1  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.0010	U
71-55-6	1,1,1-Trichloroethane	0.0010	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0005	U
79-00-5	1,1,2-Trichloroethane	0.0010	U
75-34-3	1,1-Dichloroethane	0.0010	U
75-35-4	1,1-Dichloroethene	0.0010	U
563-58-6	1,1-Dichloropropene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0010	U
96-18-4	1,2,3-Trichloropropane	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.0050	U
106-93-4	1,2-Dibromoethane	0.0010	U
95-50-1	1,2-Dichlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0010	U
78-87-5	1,2-Dichloropropane	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0010	U
142-28-9	1,3-Dichloropropane	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U
123-91-1	1,4-Dioxane - Screen	0.500	U
544-10-5	1-Chlorohexane	0.0010	U
594-20-7	2,2-Dichloropropane	0.0010	U
78-93-3	2-Butanone	0.0250	U
95-49-8	2-Chlorotoluene	0.0010	U
591-78-6	2-Hexanone	0.0100	U
106-43-4	4-Chlorotoluene	0.0010	U
99-87-6	4-Isopropyltoluene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0250	U
67-64-1	Acetone	0.0250	U

**METHOD BLANK DATA SHEET****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80807-BLK1 File ID: M1048292.D  
 Prepared: 04/08/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/08/08 11:39 Instrument: VMS1  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
71-43-2	Benzene	0.0010	U
108-86-1	Bromobenzene	0.0020	U
74-97-5	Bromochloromethane	0.0010	U
75-27-4	Bromodichloromethane	0.0006	U
75-25-2	Bromoform	0.0010	U
74-83-9	Bromomethane	0.0020	U
75-15-0	Carbon Disulfide	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U
108-90-7	Chlorobenzene	0.0010	U
75-00-3	Chloroethane	0.0020	U
67-66-3	Chloroform	0.0010	U
74-87-3	Chloromethane	0.0020	U
156-59-2	cis-1,2-Dichloroethene	0.0010	U
10061-01-5	cis-1,3-Dichloropropene	0.0004	U
124-48-1	Dibromochloromethane	0.0010	U
74-95-3	Dibromomethane	0.0010	U
75-71-8	Dichlorodifluoromethane	0.0020	U
60-29-7	Diethyl Ether	0.0010	U
108-20-3	Di-isopropyl ether	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	0.0010	U
100-41-4	Ethylbenzene	0.0010	U
87-68-3	Hexachlorobutadiene	0.0006	U
67-72-1	Hexachloroethane	0.0010	U
98-82-8	Isopropylbenzene	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	0.0010	U
75-09-2	Methylene Chloride	0.0040	U
91-20-3	Naphthalene	0.0010	U
104-51-8	n-Butylbenzene	0.0010	U
103-65-1	n-Propylbenzene	0.0010	U
135-98-8	sec-Butylbenzene	0.0010	U

# METHOD BLANK DATA SHEET

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80807-BLK1 File ID: M1048292.D  
 Prepared: 04/08/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/08/08 11:39 Instrument: VMS1  
 Batch: BD80807 Sequence: BRD0073 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
100-42-5	Styrene	0.0010	U
98-06-6	tert-Butylbenzene	0.0010	U
994-05-8	Tertiary-amyl methyl ether	0.0010	U
127-18-4	Tetrachloroethene	0.0010	U
109-99-9	Tetrahydrofuran	0.0050	U
108-88-3	Toluene	0.0010	U
156-60-5	trans-1,2-Dichloroethene	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	0.0004	U
79-01-6	Trichloroethene	0.0010	U
75-69-4	Trichlorofluoromethane	0.0010	U
108-05-4	Vinyl Acetate	0.0050	U
75-01-4	Vinyl Chloride	0.0010	U
95-47-6	Xylene O	0.0010	U
1330-20-7	Xylene P,M	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.8	111	70 - 130	
4-Bromofluorobenzene	25.00	23.9	96	70 - 130	
Dibromofluoromethane	25.00	25.7	103	70 - 130	
Toluene-d8	25.00	24.4	97	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3146506	10.21	3292493	10.21	
Chlorobenzene-d5	2294869	14.39	2376613	14.39	
1,4-Dichlorobenzene-D4	1053094	17.07	1058187	17.06	

**METHOD BLANK DATA SHEET****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80909-BLK1 File ID: M1048319.D  
 Prepared: 04/09/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/09/08 11:38 Instrument: VMS1  
 Batch: BD80909 Sequence: BRD0085 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.0010	U
71-55-6	1,1,1-Trichloroethane	0.0010	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0005	U
79-00-5	1,1,2-Trichloroethane	0.0010	U
75-34-3	1,1-Dichloroethane	0.0010	U
75-35-4	1,1-Dichloroethene	0.0010	U
563-58-6	1,1-Dichloropropene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0010	U
96-18-4	1,2,3-Trichloropropane	0.0010	U
120-82-1	1,2,4-Trichlorobenzene	0.0010	U
95-63-6	1,2,4-Trimethylbenzene	0.0010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.0050	U
106-93-4	1,2-Dibromoethane	0.0010	U
95-50-1	1,2-Dichlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0010	U
78-87-5	1,2-Dichloropropane	0.0010	U
108-67-8	1,3,5-Trimethylbenzene	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0010	U
142-28-9	1,3-Dichloropropane	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U
123-91-1	1,4-Dioxane - Screen	0.500	U
544-10-5	1-Chlorohexane	0.0010	U
594-20-7	2,2-Dichloropropane	0.0010	U
78-93-3	2-Butanone	0.0250	U
95-49-8	2-Chlorotoluene	0.0010	U
591-78-6	2-Hexanone	0.0100	U
106-43-4	4-Chlorotoluene	0.0010	U
99-87-6	4-Isopropyltoluene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0250	U
67-64-1	Acetone	0.0250	U

**METHOD BLANK DATA SHEET****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous Laboratory ID: BD80909-BLK1 File ID: M1048319.D  
 Prepared: 04/09/08 07:00 Preparation: 5030B Initial/Final: 10 ml / 10 ml  
 Analyzed: 04/09/08 11:38 Instrument: VMS1  
 Batch: BD80909 Sequence: BRD0085 Calibration: 0804001

CAS NO.	COMPOUND	CONC. (mg/L)	Q
71-43-2	Benzene	0.0010	U
108-86-1	Bromobenzene	0.0020	U
74-97-5	Bromochloromethane	0.0010	U
75-27-4	Bromodichloromethane	0.0006	U
75-25-2	Bromoform	0.0010	U
74-83-9	Bromomethane	0.0020	U
75-15-0	Carbon Disulfide	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U
108-90-7	Chlorobenzene	0.0010	U
75-00-3	Chloroethane	0.0020	U
67-66-3	Chloroform	0.0010	U
74-87-3	Chloromethane	0.0020	U
156-59-2	cis-1,2-Dichloroethene	0.0010	U
10061-01-5	cis-1,3-Dichloropropene	0.0004	U
124-48-1	Dibromochloromethane	0.0010	U
74-95-3	Dibromomethane	0.0010	U
75-71-8	Dichlorodifluoromethane	0.0020	U
60-29-7	Diethyl Ether	0.0010	U
108-20-3	Di-isopropyl ether	0.0010	U
637-92-3	Ethyl tertiary-butyl ether	0.0010	U
100-41-4	Ethylbenzene	0.0010	U
87-68-3	Hexachlorobutadiene	0.0006	U
67-72-1	Hexachloroethane	0.0010	U
98-82-8	Isopropylbenzene	0.0010	U
1634-04-4	Methyl tert-Butyl Ether	0.0010	U
75-09-2	Methylene Chloride	0.0040	U
91-20-3	Naphthalene	0.0010	U
104-51-8	n-Butylbenzene	0.0010	U
103-65-1	n-Propylbenzene	0.0010	U
135-98-8	sec-Butylbenzene	0.0010	U

# METHOD BLANK DATA SHEET

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>	Laboratory ID:	<u>BD80909-BLK1</u>
Prepared:	<u>04/09/08 07:00</u>	Preparation:	<u>5030B</u>
Analyzed:	<u>04/09/08 11:38</u>	Instrument:	<u>VMS1</u>
Batch:	<u>BD80909</u>	Sequence:	<u>BRD0085</u>
			Calibration: <u>0804001</u>

CAS NO.	COMPOUND	CONC. (mg/L)	Q
100-42-5	Styrene	0.0010	U
98-06-6	tert-Butylbenzene	0.0010	U
994-05-8	Tertiary-amyl methyl ether	0.0010	U
127-18-4	Tetrachloroethene	0.0010	U
109-99-9	Tetrahydrofuran	0.0050	U
108-88-3	Toluene	0.0010	U
156-60-5	trans-1,2-Dichloroethene	0.0010	U
10061-02-6	trans-1,3-Dichloropropene	0.0004	U
79-01-6	Trichloroethene	0.0010	U
75-69-4	Trichlorofluoromethane	0.0010	U
108-05-4	Vinyl Acetate	0.0050	U
75-01-4	Vinyl Chloride	0.0010	U
95-47-6	Xylene O	0.0010	U
1330-20-7	Xylene P,M	0.0020	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.00	27.6	110	70 - 130	
4-Bromofluorobenzene	25.00	24.7	99	70 - 130	
Dibromofluoromethane	25.00	25.5	102	70 - 130	
Toluene-d8	25.00	24.1	96	70 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	3201761	10.22	3429944	10.22	
Chlorobenzene-d5	2348120	14.39	2419813	14.39	
1,4-Dichlorobenzene-D4	1073004	17.07	1056695	17.07	

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY****8260B****MW 228S01**Laboratory: ESS Laboratory SDG: 0804037Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham SiteMatrix: AqueousBatch: BD80807 Laboratory ID: BD80807-MS1Preparation: 5030B Initial/Final: 10 ml / 10 mlSource Sample Name: MW 228S01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	0.01000	ND	0.0099	99	70 - 130
1,1,1-Trichloroethane	0.01000	0.114	0.112	-16 *	70 - 130
1,1,2,2-Tetrachloroethane	0.01000	ND	0.0083	83	70 - 130
1,1,2-Trichloroethane	0.01000	0.0003	0.0101	98	70 - 130
1,1-Dichloroethane	0.01000	0.0443	0.0474	31 *	70 - 130
1,1-Dichloroethene	0.01000	0.0103	0.0194	91	70 - 130
1,1-Dichloropropene	0.01000	ND	0.0105	105	70 - 130
1,2,3-Trichlorobenzene	0.01000	ND	0.0071	71	70 - 130
1,2,3-Trichloropropane	0.01000	ND	0.0081	81	70 - 130
1,2,4-Trichlorobenzene	0.01000	ND	0.0075	75	70 - 130
1,2,4-Trimethylbenzene	0.01000	ND	0.0090	90	70 - 130
1,2-Dibromo-3-Chloropropane	0.01000	ND	0.0080	80	70 - 130
1,2-Dibromoethane	0.01000	ND	0.0092	92	70 - 130
1,2-Dichlorobenzene	0.01000	ND	0.0087	87	70 - 130
1,2-Dichloroethane	0.01000	ND	0.0112	112	70 - 130
1,2-Dichloropropane	0.01000	ND	0.0121	121	70 - 130
1,3,5-Trimethylbenzene	0.01000	ND	0.0087	87	70 - 130
1,3-Dichlorobenzene	0.01000	ND	0.0088	88	70 - 130
1,3-Dichloropropane	0.01000	ND	0.0091	91	70 - 130
1,4-Dichlorobenzene	0.01000	ND	0.0088	88	70 - 130
1,4-Dioxane - Screen	0.2000	0.0577	0.203	73	0 - 332
1-Chlorohexane	0.01000	ND	0.0096	96	70 - 130
2,2-Dichloropropane	0.01000	ND	0.0101	101	70 - 130
2-Butanone	0.05000	ND	0.0385	77	70 - 130
2-Chlorotoluene	0.01000	ND	0.0088	88	70 - 130
2-Hexanone	0.05000	ND	0.0419	84	70 - 130
4-Chlorotoluene	0.01000	ND	0.0086	86	70 - 130
4-Isopropyltoluene	0.01000	ND	0.0086	86	70 - 130
4-Methyl-2-Pentanone	0.05000	ND	0.0461	92	70 - 130
Acetone	0.05000	ND	0.0443	89	70 - 130
Benzene	0.01000	ND	0.0099	99	70 - 130
Bromobenzene	0.01000	ND	0.0088	88	70 - 130

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY****8260B****MW 228S01**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80807 Laboratory ID: BD80807-MS1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

Source Sample Name: MW 228S01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Bromochloromethane	0.01000	ND	0.0099	99	70 - 130
Bromodichloromethane	0.01000	ND	0.0120	120	70 - 130
Bromoform	0.01000	ND	0.0093	93	70 - 130
Bromomethane	0.01000	ND	0.0084	84	70 - 130
Carbon Disulfide	0.01000	ND	0.0110	110	70 - 130
Carbon Tetrachloride	0.01000	ND	0.0108	108	70 - 130
Chlorobenzene	0.01000	ND	0.0096	96	70 - 130
Chloroethane	0.01000	0.0012	0.0129	117	70 - 130
Chloroform	0.01000	0.0008	0.0111	103	70 - 130
Chloromethane	0.01000	ND	0.0100	100	70 - 130
cis-1,2-Dichloroethene	0.01000	0.0165	0.0253	88	70 - 130
cis-1,3-Dichloropropene	0.01000	ND	0.0101	101	70 - 130
Dibromochloromethane	0.01000	ND	0.0098	98	70 - 130
Dibromomethane	0.01000	ND	0.0096	96	70 - 130
Dichlorodifluoromethane	0.01000	ND	0.0091	91	70 - 130
Diethyl Ether	0.01000	ND	0.0197	197 *	70 - 130
Di-isopropyl ether	0.01000	ND	0.0097	97	70 - 130
Ethyl tertiary-butyl ether	0.01000	ND	0.0100	100	70 - 130
Ethylbenzene	0.01000	ND	0.0093	93	70 - 130
Hexachlorobutadiene	0.01000	ND	0.0075	75	70 - 130
Hexachloroethane	0.01000	ND	0.0104	104	70 - 130
Isopropylbenzene	0.01000	ND	0.0077	77	70 - 130
Methyl tert-Butyl Ether	0.01000	0.0008	0.0110	101	70 - 130
Methylene Chloride	0.01000	0.0007	0.0110	103	70 - 130
Naphthalene	0.01000	ND	0.0082	82	70 - 130
n-Butylbenzene	0.01000	ND	0.0086	86	70 - 130
n-Propylbenzene	0.01000	ND	0.0088	88	70 - 130
sec-Butylbenzene	0.01000	ND	0.0087	87	70 - 130
Styrene	0.01000	ND	0.0090	90	70 - 130
tert-Butylbenzene	0.01000	ND	0.0089	89	70 - 130
Tertiary-amyl methyl ether	0.01000	ND	0.0100	100	70 - 130
Tetrachloroethene	0.01000	3.61	0.360	-32500 *	70 - 130

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY**
**8260B**
**MW 228S01**

Laboratory: ESS Laboratory SDG: 0804037

Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site

Matrix: Aqueous

Batch: BD80807 Laboratory ID: BD80807-MS1

Preparation: 5030B Initial/Final: 10 ml / 10 ml

Source Sample Name: MW 228S01

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Tetrahydrofuran	0.01000	0.0022	0.0096	73	70 - 130
Toluene	0.01000	ND	0.0100	100	70 - 130
trans-1,2-Dichloroethene	0.01000	0.0008	0.0119	111	70 - 130
trans-1,3-Dichloropropene	0.01000	ND	0.0089	89	70 - 130
Trichloroethene	0.01000	0.578	0.428	-1500 *	70 - 130
Trichlorofluoromethane	0.01000	0.0040	0.0131	92	70 - 130
Vinyl Acetate	0.01000	ND	0.0091	91	70 - 130
Vinyl Chloride	0.01000	ND	0.0150	150 *	70 - 130
Xylene O	0.01000	ND	0.0093	93	70 - 130
Xylene P,M	0.02000	ND	0.0188	94	70 - 130

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS RPD	REC.
1,1,1,2-Tetrachloroethane	0.01000	0.0106	106	7	20	70 - 130
1,1,1-Trichloroethane	0.01000	0.113	-4 *	-118	20	70 - 130
1,1,2,2-Tetrachloroethane	0.01000	0.0084	84	2	20	70 - 130
1,1,2-Trichloroethane	0.01000	0.0100	97	0.6	20	70 - 130
1,1-Dichloroethane	0.01000	0.0477	34 *	10	20	70 - 130
1,1-Dichloroethene	0.01000	0.0196	93	2	20	70 - 130
1,1-Dichloropropene	0.01000	0.0104	104	0.8	20	70 - 130
1,2,3-Trichlorobenzene	0.01000	0.0080	80	12	20	70 - 130
1,2,3-Trichloropropane	0.01000	0.0083	83	2	20	70 - 130
1,2,4-Trichlorobenzene	0.01000	0.0084	84	12	20	70 - 130
1,2,4-Trimethylbenzene	0.01000	0.0090	90	0.2	20	70 - 130
1,2-Dibromo-3-Chloropropane	0.01000	0.0094	94	17	20	70 - 130
1,2-Dibromoethane	0.01000	0.0094	94	2	20	70 - 130
1,2-Dichlorobenzene	0.01000	0.0089	89	3	20	70 - 130
1,2-Dichloroethane	0.01000	0.0111	111	0.4	20	70 - 130
1,2-Dichloropropane	0.01000	0.0118	118	2	20	70 - 130
1,3,5-Trimethylbenzene	0.01000	0.0086	86	1	20	70 - 130
1,3-Dichlorobenzene	0.01000	0.0091	91	3	20	70 - 130
1,3-Dichloropropane	0.01000	0.0092	92	0.9	20	70 - 130

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY****8260B****MW 228S01**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80807 Laboratory ID: BD80807-MSD1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

Source Sample Name: MW 228S01

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,4-Dichlorobenzene	0.01000	0.0087	87	0.7	20	70 - 130
1,4-Dioxane - Screen	0.2000	0.344	143	65	200	0 - 332
1-Chlorohexane	0.01000	0.0093	93	3	20	70 - 130
2,2-Dichloropropane	0.01000	0.0100	100	1	20	70 - 130
2-Butanone	0.05000	0.0433	87	12	20	70 - 130
2-Chlorotoluene	0.01000	0.0088	88	1	20	70 - 130
2-Hexanone	0.05000	0.0424	85	1	20	70 - 130
4-Chlorotoluene	0.01000	0.0086	86	0.3	20	70 - 130
4-Isopropyltoluene	0.01000	0.0087	87	1	20	70 - 130
4-Methyl-2-Pentanone	0.05000	0.0484	97	5	20	70 - 130
Acetone	0.05000	0.0473	95	7	20	70 - 130
Benzene	0.01000	0.0100	100	0.8	20	70 - 130
Bromobenzene	0.01000	0.0090	90	1	20	70 - 130
Bromochloromethane	0.01000	0.0101	101	2	20	70 - 130
Bromodichloromethane	0.01000	0.0115	115	4	20	70 - 130
Bromoform	0.01000	0.0093	93	0	20	70 - 130
Bromomethane	0.01000	0.0091	91	8	20	70 - 130
Carbon Disulfide	0.01000	0.0112	112	2	20	70 - 130
Carbon Tetrachloride	0.01000	0.0109	109	1	20	70 - 130
Chlorobenzene	0.01000	0.0095	95	1	20	70 - 130
Chloroethane	0.01000	0.0131	119	2	20	70 - 130
Chloroform	0.01000	0.0110	102	0.3	20	70 - 130
Chloromethane	0.01000	0.0095	95	5	20	70 - 130
cis-1,2-Dichloroethene	0.01000	0.0256	90	3	20	70 - 130
cis-1,3-Dichloropropene	0.01000	0.0102	102	1	20	70 - 130
Dibromochloromethane	0.01000	0.0100	100	2	20	70 - 130
Dibromomethane	0.01000	0.0095	95	0.4	20	70 - 130
Dichlorodifluoromethane	0.01000	0.0093	93	2	20	70 - 130
Diethyl Ether	0.01000	0.0201	201 *	2	20	70 - 130
Di-isopropyl ether	0.01000	0.0097	97	0.5	20	70 - 130
Ethyl tertiary-butyl ether	0.01000	0.0103	103	4	20	70 - 130
Ethylbenzene	0.01000	0.0094	94	0.9	20	70 - 130
Hexachlorobutadiene	0.01000	0.0084	84	11	20	70 - 130

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY****8260B****MW 228S01**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80807 Laboratory ID: BD80807-MSD1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

Source Sample Name: MW 228S01

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Hexachloroethane	0.01000	0.0100	100	4	20	70 - 130
Isopropylbenzene	0.01000	0.0079	79	2	20	70 - 130
Methyl tert-Butyl Ether	0.01000	0.0110	102	0.4	20	70 - 130
Methylene Chloride	0.01000	0.0110	103	0.5	20	70 - 130
Naphthalene	0.01000	0.0090	90	9	20	70 - 130
n-Butylbenzene	0.01000	0.0088	88	2	20	70 - 130
n-Propylbenzene	0.01000	0.0089	89	0.7	20	70 - 130
sec-Butylbenzene	0.01000	0.0087	87	0.8	20	70 - 130
Styrene	0.01000	0.0088	88	1	20	70 - 130
tert-Butylbenzene	0.01000	0.0092	92	3	20	70 - 130
Tertiary-amyl methyl ether	0.01000	0.0101	101	2	20	70 - 130
Tetrachloroethene	0.01000	0.273	-33400 *	-3	20	70 - 130
Tetrahydrofuran	0.01000	0.0100	77	6	20	70 - 130
Toluene	0.01000	0.0098	98	2	20	70 - 130
trans-1,2-Dichloroethene	0.01000	0.0116	108	3	20	70 - 130
trans-1,3-Dichloropropene	0.01000	0.0087	87	2	20	70 - 130
Trichloroethene	0.01000	0.423	-1550 *	-3	20	70 - 130
Trichlorofluoromethane	0.01000	0.0133	94	2	20	70 - 130
Vinyl Acetate	0.01000	0.0090	90	0.9	20	70 - 130
Vinyl Chloride	0.01000	0.0142	142 *	6	20	70 - 130
Xylene O	0.01000	0.0095	95	2	20	70 - 130
Xylene P,M	0.02000	0.0189	95	0.6	20	70 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80709</u>	Laboratory ID:	<u>BD80709-BS1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 mL / 10 mL</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.00	9.94	99	70 - 130
1,1,1-Trichloroethane	10.00	10.2	102	70 - 130
1,1,2,2-Tetrachloroethane	10.00	9.23	92	70 - 130
1,1,2-Trichloroethane	10.00	9.59	96	70 - 130
1,1-Dichloroethane	10.00	9.91	99	70 - 130
1,1-Dichloroethene	10.00	10.5	105	70 - 130
1,1-Dichloropropene	10.00	9.55	96	70 - 130
1,2,3-Trichlorobenzene	10.00	8.57	86	70 - 130
1,2,3-Trichloropropane	10.00	8.73	87	70 - 130
1,2,4-Trichlorobenzene	10.00	8.65	86	70 - 130
1,2,4-Trimethylbenzene	10.00	9.30	93	70 - 130
1,2-Dibromo-3-Chloropropane	10.00	8.93	89	70 - 130
1,2-Dibromoethane	10.00	9.38	94	70 - 130
1,2-Dichlorobenzene	10.00	9.66	97	70 - 130
1,2-Dichloroethane	10.00	10.6	106	70 - 130
1,2-Dichloropropene	10.00	9.77	98	70 - 130
1,3,5-Trimethylbenzene	10.00	9.04	90	70 - 130
1,3-Dichlorobenzene	10.00	9.89	99	70 - 130
1,3-Dichloropropane	10.00	9.09	91	70 - 130
1,4-Dichlorobenzene	10.00	9.53	95	70 - 130
1,4-Dioxane - Screen	200.0	113	57	0 - 332
1-Chlorohexane	10.00	8.71	87	70 - 130
2,2-Dichloropropane	10.00	10.6	106	70 - 130
2-Butanone	50.00	47.2	94	70 - 130
2-Chlorotoluene	10.00	9.11	91	70 - 130
2-Hexanone	50.00	43.5	87	70 - 130
4-Chlorotoluene	10.00	8.75	88	70 - 130
4-Isopropyltoluene	10.00	9.02	90	70 - 130
4-Methyl-2-Pentanone	50.00	44.2	88	70 - 130
Acetone	50.00	62.8	126	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80709 Laboratory ID: BD80709-BS1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	10.00	9.12	91	70 - 130
Bromobenzene	10.00	9.71	97	70 - 130
Bromochloromethane	10.00	10.0	100	70 - 130
Bromodichloromethane	10.00	11.3	113	70 - 130
Bromoform	10.00	9.74	97	70 - 130
Bromomethane	10.00	8.01	80	70 - 130
Carbon Disulfide	10.00	10.4	104	70 - 130
Carbon Tetrachloride	10.00	10.4	104	70 - 130
Chlorobenzene	10.00	9.65	96	70 - 130
Chloroethane	10.00	11.1	111	70 - 130
Chloroform	10.00	9.87	99	70 - 130
Chloromethane	10.00	8.43	84	70 - 130
cis-1,2-Dichloroethene	10.00	10.4	104	70 - 130
cis-1,3-Dichloropropene	10.00	9.88	99	70 - 130
Dibromochloromethane	10.00	10.4	104	70 - 130
Dibromomethane	10.00	9.25	92	70 - 130
Dichlorodifluoromethane	10.00	8.67	87	70 - 130
Diethyl Ether	10.00	10.4	104	70 - 130
Di-isopropyl ether	10.00	9.21	92	70 - 130
Ethyl tertiary-butyl ether	10.00	9.74	97	70 - 130
Ethylbenzene	10.00	8.91	89	70 - 130
Hexachlorobutadiene	10.00	9.28	93	70 - 130
Hexachloroethane	10.00	10.3	103	70 - 130
Isopropylbenzene	10.00	8.21	82	70 - 130
Methyl tert-Butyl Ether	10.00	9.96	100	70 - 130
Methylene Chloride	10.00	10.5	105	70 - 130
Naphthalene	10.00	8.81	88	70 - 130
n-Butylbenzene	10.00	8.98	90	70 - 130
n-Propylbenzene	10.00	8.97	90	70 - 130
sec-Butylbenzene	10.00	8.93	89	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80709</u>	Laboratory ID:	<u>BD80709-BS1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Styrene	10.00	8.97	90	70 - 130
tert-Butylbenzene	10.00	9.45	94	70 - 130
Tertiary-amyl methyl ether	10.00	9.71	97	70 - 130
Tetrachloroethene	10.00	9.12	91	70 - 130
Tetrahydrofuran	10.00	7.23	72	70 - 130
Toluene	10.00	9.35	94	70 - 130
trans-1,2-Dichloroethene	10.00	10.1	101	70 - 130
trans-1,3-Dichloropropene	10.00	8.60	86	70 - 130
Trichloroethene	10.00	9.50	95	70 - 130
Trichlorofluoromethane	10.00	9.78	98	70 - 130
Vinyl Acetate	10.00	8.58	86	70 - 130
Vinyl Chloride	10.00	13.2	132 *	70 - 130
Xylene O	10.00	9.12	91	70 - 130
Xylene P,M	20.00	18.7	94	70 - 130

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	RPD	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.00	9.11	91	9	20	70 - 130
1,1,1-Trichloroethane	10.00	9.59	96	6	20	70 - 130
1,1,2,2-Tetrachloroethane	10.00	8.74	87	5	20	70 - 130
1,1,2-Trichloroethane	10.00	9.24	92	4	20	70 - 130
1,1-Dichloroethane	10.00	9.69	97	2	20	70 - 130
1,1-Dichloroethene	10.00	10.0	100	4	20	70 - 130
1,1-Dichloropropene	10.00	9.32	93	2	20	70 - 130
1,2,3-Trichlorobenzene	10.00	9.14	91	6	20	70 - 130
1,2,3-Trichloropropane	10.00	8.63	86	1	20	70 - 130
1,2,4-Trichlorobenzene	10.00	9.15	92	6	20	70 - 130
1,2,4-Trimethylbenzene	10.00	9.11	91	2	20	70 - 130
1,2-Dibromo-3-Chloropropane	10.00	8.60	86	4	20	70 - 130
1,2-Dibromoethane	10.00	8.86	89	6	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80709</u>	Laboratory ID:	<u>BD80709-BSD1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,2-Dichlorobenzene	10.00	9.53	95	1	20	70 - 130
1,2-Dichloroethane	10.00	10.5	105	1	20	70 - 130
1,2-Dichloropropane	10.00	9.43	94	4	20	70 - 130
1,3,5-Trimethylbenzene	10.00	8.85	88	2	20	70 - 130
1,3-Dichlorobenzene	10.00	9.43	94	5	20	70 - 130
1,3-Dichloropropane	10.00	8.81	88	3	20	70 - 130
1,4-Dichlorobenzene	10.00	9.35	94	2	20	70 - 130
1,4-Dioxane - Screen	200.0	173	86	41	200	0 - 332
1-Chlorohexane	10.00	8.42	84	3	20	70 - 130
2,2-Dichloropropane	10.00	9.97	100	6	20	70 - 130
2-Butanone	50.00	44.3	89	6	20	70 - 130
2-Chlorotoluene	10.00	8.93	89	2	20	70 - 130
2-Hexanone	50.00	41.8	84	4	20	70 - 130
4-Chlorotoluene	10.00	8.67	87	0.9	20	70 - 130
4-Isopropyltoluene	10.00	8.96	90	0.7	20	70 - 130
4-Methyl-2-Pentanone	50.00	45.8	92	4	20	70 - 130
Acetone	50.00	56.2	112	11	20	70 - 130
Benzene	10.00	8.90	89	2	20	70 - 130
Bromobenzene	10.00	9.68	97	0.3	20	70 - 130
Bromoform	10.00	9.91	99	1	20	70 - 130
Bromochloromethane	10.00	10.7	107	6	20	70 - 130
Bromodichloromethane	10.00	9.37	94	4	20	70 - 130
Bromomethane	10.00	7.69	77	4	20	70 - 130
Carbon Disulfide	10.00	9.94	99	5	20	70 - 130
Carbon Tetrachloride	10.00	9.73	97	6	20	70 - 130
Chlorobenzene	10.00	9.03	90	7	20	70 - 130
Chloroethane	10.00	10.9	109	1	20	70 - 130
Chloroform	10.00	9.68	97	2	20	70 - 130
Chloromethane	10.00	8.80	88	4	20	70 - 130
cis-1,2-Dichloroethene	10.00	9.93	99	4	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80709</u>	Laboratory ID:	<u>BD80709-BSD1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
cis-1,3-Dichloropropene	10.00	9.50	95	4	20	70 - 130
Dibromochloromethane	10.00	9.57	96	8	20	70 - 130
Dibromomethane	10.00	9.19	92	0.7	20	70 - 130
Dichlorodifluoromethane	10.00	9.10	91	5	20	70 - 130
Diethyl Ether	10.00	10.7	107	2	20	70 - 130
Di-isopropyl ether	10.00	8.95	90	3	20	70 - 130
Ethyl tertiary-butyl ether	10.00	9.48	95	3	20	70 - 130
Ethylbenzene	10.00	8.57	86	4	20	70 - 130
Hexachlorobutadiene	10.00	9.37	94	1	20	70 - 130
Hexachloroethane	10.00	10.0	100	3	20	70 - 130
Isopropylbenzene	10.00	7.81	78	5	20	70 - 130
Methyl tert-Butyl Ether	10.00	9.82	98	1	20	70 - 130
Methylene Chloride	10.00	10.0	100	4	20	70 - 130
Naphthalene	10.00	9.17	92	4	20	70 - 130
n-Butylbenzene	10.00	8.86	89	1	20	70 - 130
n-Propylbenzene	10.00	8.63	86	4	20	70 - 130
sec-Butylbenzene	10.00	8.93	89	0	20	70 - 130
Styrene	10.00	8.29	83	8	20	70 - 130
tert-Butylbenzene	10.00	9.25	92	2	20	70 - 130
Tertiary-amyl methyl ether	10.00	9.37	94	4	20	70 - 130
Tetrachloroethene	10.00	8.57	86	6	20	70 - 130
Tetrahydrofuran	10.00	7.23	72	0	20	70 - 130
Toluene	10.00	9.25	92	1	20	70 - 130
trans-1,2-Dichloroethene	10.00	9.71	97	4	20	70 - 130
trans-1,3-Dichloropropene	10.00	8.43	84	2	20	70 - 130
Trichloroethene	10.00	9.36	94	1	20	70 - 130
Trichlorofluoromethane	10.00	9.38	94	4	20	70 - 130
Vinyl Acetate	10.00	8.41	84	2	20	70 - 130
Vinyl Chloride	10.00	12.7	127	3	20	70 - 130
Xylene O	10.00	8.68	87	5	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Aqueous  
Batch: BD80709 Laboratory ID: BD80709-BSD1  
Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Xylene P,M	20.00	17.5	88	7	20	70 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80807</u>	Laboratory ID:	<u>BD80807-BS1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 mL / 10 mL</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.00	9.70	97	70 - 130
1,1,1-Trichloroethane	10.00	9.78	98	70 - 130
1,1,2,2-Tetrachloroethane	10.00	9.12	91	70 - 130
1,1,2-Trichloroethane	10.00	9.41	94	70 - 130
1,1-Dichloroethane	10.00	10.4	104	70 - 130
1,1-Dichloroethene	10.00	10.7	107	70 - 130
1,1-Dichloropropene	10.00	9.75	98	70 - 130
1,2,3-Trichlorobenzene	10.00	8.20	82	70 - 130
1,2,3-Trichloropropane	10.00	8.55	86	70 - 130
1,2,4-Trichlorobenzene	10.00	8.67	87	70 - 130
1,2,4-Trimethylbenzene	10.00	9.51	95	70 - 130
1,2-Dibromo-3-Chloropropane	10.00	8.52	85	70 - 130
1,2-Dibromoethane	10.00	9.20	92	70 - 130
1,2-Dichlorobenzene	10.00	9.65	96	70 - 130
1,2-Dichloroethane	10.00	10.9	109	70 - 130
1,2-Dichloropropene	10.00	10.0	100	70 - 130
1,3,5-Trimethylbenzene	10.00	9.21	92	70 - 130
1,3-Dichlorobenzene	10.00	9.80	98	70 - 130
1,3-Dichloropropane	10.00	9.42	94	70 - 130
1,4-Dichlorobenzene	10.00	9.62	96	70 - 130
1,4-Dioxane - Screen	200.0	98.3	49	0 - 332
1-Chlorohexane	10.00	8.98	90	70 - 130
2,2-Dichloropropane	10.00	9.84	98	70 - 130
2-Butanone	50.00	43.3	87	70 - 130
2-Chlorotoluene	10.00	9.21	92	70 - 130
2-Hexanone	50.00	42.0	84	70 - 130
4-Chlorotoluene	10.00	9.16	92	70 - 130
4-Isopropyltoluene	10.00	9.31	93	70 - 130
4-Methyl-2-Pentanone	50.00	45.8	92	70 - 130
Acetone	50.00	53.6	107	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80807 Laboratory ID: BD80807-BS1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	10.00	9.46	95	70 - 130
Bromobenzene	10.00	9.59	96	70 - 130
Bromochloromethane	10.00	9.95	100	70 - 130
Bromodichloromethane	10.00	11.2	112	70 - 130
Bromoform	10.00	9.51	95	70 - 130
Bromomethane	10.00	7.93	79	70 - 130
Carbon Disulfide	10.00	10.6	106	70 - 130
Carbon Tetrachloride	10.00	10.1	101	70 - 130
Chlorobenzene	10.00	9.76	98	70 - 130
Chloroethane	10.00	11.4	114	70 - 130
Chloroform	10.00	10.0	100	70 - 130
Chloromethane	10.00	9.50	95	70 - 130
cis-1,2-Dichloroethene	10.00	10.4	104	70 - 130
cis-1,3-Dichloropropene	10.00	9.61	96	70 - 130
Dibromochloromethane	10.00	10.3	103	70 - 130
Dibromomethane	10.00	9.75	98	70 - 130
Dichlorodifluoromethane	10.00	8.89	89	70 - 130
Diethyl Ether	10.00	11.3	113	70 - 130
Di-isopropyl ether	10.00	9.54	95	70 - 130
Ethyl tertiary-butyl ether	10.00	9.80	98	70 - 130
Ethylbenzene	10.00	9.29	93	70 - 130
Hexachlorobutadiene	10.00	8.96	90	70 - 130
Hexachloroethane	10.00	10.0	100	70 - 130
Isopropylbenzene	10.00	8.36	84	70 - 130
Methyl tert-Butyl Ether	10.00	9.78	98	70 - 130
Methylene Chloride	10.00	10.5	105	70 - 130
Naphthalene	10.00	8.77	88	70 - 130
n-Butylbenzene	10.00	9.03	90	70 - 130
n-Propylbenzene	10.00	9.25	92	70 - 130
sec-Butylbenzene	10.00	9.18	92	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80807</u>	Laboratory ID:	<u>BD80807-BS1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Styrene	10.00	9.09	91	70 - 130
tert-Butylbenzene	10.00	9.42	94	70 - 130
Tertiary-amyl methyl ether	10.00	9.65	96	70 - 130
Tetrachloroethene	10.00	9.10	91	70 - 130
Tetrahydrofuran	10.00	6.85	68 *	70 - 130
Toluene	10.00	9.50	95	70 - 130
trans-1,2-Dichloroethene	10.00	10.3	103	70 - 130
trans-1,3-Dichloropropene	10.00	8.86	89	70 - 130
Trichloroethene	10.00	9.90	99	70 - 130
Trichlorofluoromethane	10.00	9.67	97	70 - 130
Vinyl Acetate	10.00	8.71	87	70 - 130
Vinyl Chloride	10.00	13.4	134 *	70 - 130
Xylene O	10.00	9.52	95	70 - 130
Xylene P,M	20.00	18.8	94	70 - 130

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	RPD	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.00	9.57	96	1	20	70 - 130
1,1,1-Trichloroethane	10.00	9.77	98	0.1	20	70 - 130
1,1,2,2-Tetrachloroethane	10.00	9.16	92	0.4	20	70 - 130
1,1,2-Trichloroethane	10.00	9.71	97	3	20	70 - 130
1,1-Dichloroethane	10.00	10.2	102	3	20	70 - 130
1,1-Dichloroethene	10.00	10.5	105	2	20	70 - 130
1,1-Dichloropropene	10.00	9.84	98	0.9	20	70 - 130
1,2,3-Trichlorobenzene	10.00	9.28	93	12	20	70 - 130
1,2,3-Trichloropropane	10.00	9.01	90	5	20	70 - 130
1,2,4-Trichlorobenzene	10.00	9.10	91	5	20	70 - 130
1,2,4-Trimethylbenzene	10.00	9.53	95	0.2	20	70 - 130
1,2-Dibromo-3-Chloropropane	10.00	9.00	90	5	20	70 - 130
1,2-Dibromoethane	10.00	9.17	92	0.3	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80807</u>	Laboratory ID:	<u>BD80807-BSD1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,2-Dichlorobenzene	10.00	9.72	97	0.7	20	70 - 130
1,2-Dichloroethane	10.00	10.4	104	4	20	70 - 130
1,2-Dichloropropane	10.00	10.0	100	0.4	20	70 - 130
1,3,5-Trimethylbenzene	10.00	9.30	93	1	20	70 - 130
1,3-Dichlorobenzene	10.00	9.89	99	0.9	20	70 - 130
1,3-Dichloropropane	10.00	9.11	91	3	20	70 - 130
1,4-Dichlorobenzene	10.00	9.56	96	0.6	20	70 - 130
1,4-Dioxane - Screen	200.0	134	67	31	200	0 - 332
1-Chlorohexane	10.00	9.16	92	2	20	70 - 130
2,2-Dichloropropane	10.00	10.2	102	3	20	70 - 130
2-Butanone	50.00	42.1	84	3	20	70 - 130
2-Chlorotoluene	10.00	9.47	95	3	20	70 - 130
2-Hexanone	50.00	42.4	85	0.9	20	70 - 130
4-Chlorotoluene	10.00	9.11	91	0.5	20	70 - 130
4-Isopropyltoluene	10.00	9.48	95	2	20	70 - 130
4-Methyl-2-Pentanone	50.00	45.8	92	0.02	20	70 - 130
Acetone	50.00	52.0	104	3	20	70 - 130
Benzene	10.00	9.36	94	1	20	70 - 130
Bromobenzene	10.00	9.54	95	0.5	20	70 - 130
Bromoform	10.00	10.0	100	0.6	20	70 - 130
Bromochloromethane	10.00	11.4	114	2	20	70 - 130
Bromodichloromethane	10.00	9.51	95	0	20	70 - 130
Bromomethane	10.00	7.82	78	1	20	70 - 130
Carbon Disulfide	10.00	10.6	106	0.3	20	70 - 130
Carbon Tetrachloride	10.00	10.2	102	0.5	20	70 - 130
Chlorobenzene	10.00	9.56	96	2	20	70 - 130
Chloroethane	10.00	11.2	112	2	20	70 - 130
Chloroform	10.00	9.92	99	0.8	20	70 - 130
Chloromethane	10.00	9.73	97	2	20	70 - 130
cis-1,2-Dichloroethene	10.00	10.3	103	0.6	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80807</u>	Laboratory ID:	<u>BD80807-BSD1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
cis-1,3-Dichloropropene	10.00	9.52	95	0.9	20	70 - 130
Dibromochloromethane	10.00	9.92	99	3	20	70 - 130
Dibromomethane	10.00	9.60	96	2	20	70 - 130
Dichlorodifluoromethane	10.00	9.02	90	1	20	70 - 130
Diethyl Ether	10.00	12.7	127	12	20	70 - 130
Di-isopropyl ether	10.00	9.26	93	3	20	70 - 130
Ethyl tertiary-butyl ether	10.00	9.96	100	2	20	70 - 130
Ethylbenzene	10.00	9.10	91	2	20	70 - 130
Hexachlorobutadiene	10.00	9.50	95	6	20	70 - 130
Hexachloroethane	10.00	10.4	104	3	20	70 - 130
Isopropylbenzene	10.00	8.34	83	0.2	20	70 - 130
Methyl tert-Butyl Ether	10.00	9.89	99	1	20	70 - 130
Methylene Chloride	10.00	10.4	104	1	20	70 - 130
Naphthalene	10.00	9.55	96	9	20	70 - 130
n-Butylbenzene	10.00	9.38	94	4	20	70 - 130
n-Propylbenzene	10.00	9.36	94	1	20	70 - 130
sec-Butylbenzene	10.00	9.35	94	2	20	70 - 130
Styrene	10.00	8.94	89	2	20	70 - 130
tert-Butylbenzene	10.00	9.88	99	5	20	70 - 130
Tertiary-amyl methyl ether	10.00	9.77	98	1	20	70 - 130
Tetrachloroethene	10.00	9.01	90	1	20	70 - 130
Tetrahydrofuran	10.00	8.16	82	17	20	70 - 130
Toluene	10.00	9.47	95	0.3	20	70 - 130
trans-1,2-Dichloroethene	10.00	10.4	104	0.5	20	70 - 130
trans-1,3-Dichloropropene	10.00	8.95	90	1	20	70 - 130
Trichloroethene	10.00	9.69	97	2	20	70 - 130
Trichlorofluoromethane	10.00	9.82	98	2	20	70 - 130
Vinyl Acetate	10.00	8.76	88	0.6	20	70 - 130
Vinyl Chloride	10.00	13.6	136	*	2	70 - 130
Xylene O	10.00	9.35	94	2	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Aqueous  
Batch: BD80807 Laboratory ID: BD80807-BSD1  
Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Xylene P,M	20.00	18.4	92	2	20	70 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80909</u>	Laboratory ID:	<u>BD80909-BS1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 mL / 10 mL</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.00	9.60	96	70 - 130
1,1,1-Trichloroethane	10.00	9.63	96	70 - 130
1,1,2,2-Tetrachloroethane	10.00	9.60	96	70 - 130
1,1,2-Trichloroethane	10.00	9.59	96	70 - 130
1,1-Dichloroethane	10.00	9.85	98	70 - 130
1,1-Dichloroethene	10.00	10.6	106	70 - 130
1,1-Dichloropropene	10.00	9.88	99	70 - 130
1,2,3-Trichlorobenzene	10.00	8.61	86	70 - 130
1,2,3-Trichloropropane	10.00	9.44	94	70 - 130
1,2,4-Trichlorobenzene	10.00	8.69	87	70 - 130
1,2,4-Trimethylbenzene	10.00	9.89	99	70 - 130
1,2-Dibromo-3-Chloropropane	10.00	9.45	94	70 - 130
1,2-Dibromoethane	10.00	9.32	93	70 - 130
1,2-Dichlorobenzene	10.00	9.79	98	70 - 130
1,2-Dichloroethane	10.00	10.3	103	70 - 130
1,2-Dichloropropene	10.00	10.0	100	70 - 130
1,3,5-Trimethylbenzene	10.00	9.47	95	70 - 130
1,3-Dichlorobenzene	10.00	9.79	98	70 - 130
1,3-Dichloropropane	10.00	9.16	92	70 - 130
1,4-Dichlorobenzene	10.00	9.54	95	70 - 130
1,4-Dioxane - Screen	200.0	95.0	47	0 - 332
1-Chlorohexane	10.00	9.56	96	70 - 130
2,2-Dichloropropane	10.00	9.97	100	70 - 130
2-Butanone	50.00	44.2	88	70 - 130
2-Chlorotoluene	10.00	9.80	98	70 - 130
2-Hexanone	50.00	45.7	91	70 - 130
4-Chlorotoluene	10.00	9.38	94	70 - 130
4-Isopropyltoluene	10.00	9.44	94	70 - 130
4-Methyl-2-Pentanone	50.00	47.3	95	70 - 130
Acetone	50.00	55.8	112	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80909 Laboratory ID: BD80909-BS1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzene	10.00	9.40	94	70 - 130
Bromobenzene	10.00	9.85	98	70 - 130
Bromochloromethane	10.00	9.69	97	70 - 130
Bromodichloromethane	10.00	10.9	109	70 - 130
Bromoform	10.00	9.80	98	70 - 130
Bromomethane	10.00	9.17	92	70 - 130
Carbon Disulfide	10.00	10.6	106	70 - 130
Carbon Tetrachloride	10.00	9.71	97	70 - 130
Chlorobenzene	10.00	9.54	95	70 - 130
Chloroethane	10.00	10.9	109	70 - 130
Chloroform	10.00	9.70	97	70 - 130
Chloromethane	10.00	9.71	97	70 - 130
cis-1,2-Dichloroethene	10.00	10.1	101	70 - 130
cis-1,3-Dichloropropene	10.00	9.89	99	70 - 130
Dibromochloromethane	10.00	9.82	98	70 - 130
Dibromomethane	10.00	9.18	92	70 - 130
Dichlorodifluoromethane	10.00	8.25	82	70 - 130
Diethyl Ether	10.00	10.7	107	70 - 130
Di-isopropyl ether	10.00	9.48	95	70 - 130
Ethyl tertiary-butyl ether	10.00	9.88	99	70 - 130
Ethylbenzene	10.00	9.34	93	70 - 130
Hexachlorobutadiene	10.00	9.60	96	70 - 130
Hexachloroethane	10.00	11.0	110	70 - 130
Isopropylbenzene	10.00	8.61	86	70 - 130
Methyl tert-Butyl Ether	10.00	9.78	98	70 - 130
Methylene Chloride	10.00	10.3	103	70 - 130
Naphthalene	10.00	9.11	91	70 - 130
n-Butylbenzene	10.00	9.34	93	70 - 130
n-Propylbenzene	10.00	9.66	97	70 - 130
sec-Butylbenzene	10.00	9.47	95	70 - 130

**LCS / LCS DUPLICATE RECOVERY**

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80909</u>	Laboratory ID:	<u>BD80909-BS1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Styrene	10.00	9.13	91	70 - 130
tert-Butylbenzene	10.00	9.93	99	70 - 130
Tertiary-amyl methyl ether	10.00	9.71	97	70 - 130
Tetrachloroethene	10.00	9.04	90	70 - 130
Tetrahydrofuran	10.00	8.64	86	70 - 130
Toluene	10.00	9.42	94	70 - 130
trans-1,2-Dichloroethene	10.00	10.2	102	70 - 130
trans-1,3-Dichloropropene	10.00	8.80	88	70 - 130
Trichloroethene	10.00	9.71	97	70 - 130
Trichlorofluoromethane	10.00	9.34	93	70 - 130
Vinyl Acetate	10.00	8.90	89	70 - 130
Vinyl Chloride	10.00	12.9	129	70 - 130
Xylene O	10.00	9.22	92	70 - 130
Xylene P,M	20.00	18.9	94	70 - 130

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	RPD	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.00	10.4	104	8	20	70 - 130
1,1,1-Trichloroethane	10.00	10.4	104	8	20	70 - 130
1,1,2,2-Tetrachloroethane	10.00	10.4	104	8	20	70 - 130
1,1,2-Trichloroethane	10.00	10.4	104	8	20	70 - 130
1,1-Dichloroethane	10.00	10.8	108	9	20	70 - 130
1,1-Dichloroethene	10.00	11.6	116	9	20	70 - 130
1,1-Dichloropropene	10.00	10.5	105	6	20	70 - 130
1,2,3-Trichlorobenzene	10.00	9.81	98	13	20	70 - 130
1,2,3-Trichloropropane	10.00	10.0	100	6	20	70 - 130
1,2,4-Trichlorobenzene	10.00	9.99	100	14	20	70 - 130
1,2,4-Trimethylbenzene	10.00	10.6	106	6	20	70 - 130
1,2-Dibromo-3-Chloropropane	10.00	11.1	111	16	20	70 - 130
1,2-Dibromoethane	10.00	10.2	102	9	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Matrix: Aqueous  
 Batch: BD80909 Laboratory ID: BD80909-BSD1  
 Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,2-Dichlorobenzene	10.00	10.4	104	7	20	70 - 130
1,2-Dichloroethane	10.00	11.0	110	7	20	70 - 130
1,2-Dichloropropane	10.00	10.8	108	7	20	70 - 130
1,3,5-Trimethylbenzene	10.00	10.2	102	8	20	70 - 130
1,3-Dichlorobenzene	10.00	10.5	105	7	20	70 - 130
1,3-Dichloropropane	10.00	9.80	98	7	20	70 - 130
1,4-Dichlorobenzene	10.00	10.3	103	7	20	70 - 130
1,4-Dioxane - Screen	200.0	161	81	52	200	0 - 332
1-Chlorohexane	10.00	10.2	102	7	20	70 - 130
2,2-Dichloropropane	10.00	10.6	106	6	20	70 - 130
2-Butanone	50.00	47.2	94	7	20	70 - 130
2-Chlorotoluene	10.00	10.2	102	4	20	70 - 130
2-Hexanone	50.00	50.2	100	9	20	70 - 130
4-Chlorotoluene	10.00	10.2	102	9	20	70 - 130
4-Isopropyltoluene	10.00	10.2	102	8	20	70 - 130
4-Methyl-2-Pentanone	50.00	51.2	102	8	20	70 - 130
Acetone	50.00	56.7	113	2	20	70 - 130
Benzene	10.00	10.1	101	8	20	70 - 130
Bromobenzene	10.00	10.5	105	7	20	70 - 130
Bromoform	10.00	10.4	104	6	20	70 - 130
Bromomethane	10.00	10.2	102	10	20	70 - 130
Carbon Disulfide	10.00	11.2	112	5	20	70 - 130
Carbon Tetrachloride	10.00	10.7	107	9	20	70 - 130
Chlorobenzene	10.00	10.3	103	8	20	70 - 130
Chloroethane	10.00	11.7	117	7	20	70 - 130
Chloroform	10.00	10.4	104	6	20	70 - 130
Chloromethane	10.00	10.0	100	3	20	70 - 130
cis-1,2-Dichloroethene	10.00	11.3	113	11	20	70 - 130

# LCS / LCS DUPLICATE RECOVERY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Matrix:	<u>Aqueous</u>		
Batch:	<u>BD80909</u>	Laboratory ID:	<u>BD80909-BSD1</u>
Preparation:	<u>5030B</u>	Initial/Final:	<u>10 ml / 10 ml</u>

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
cis-1,3-Dichloropropene	10.00	10.7	107	8	20	70 - 130
Dibromochloromethane	10.00	10.8	108	9	20	70 - 130
Dibromomethane	10.00	10.2	102	11	20	70 - 130
Dichlorodifluoromethane	10.00	8.77	88	6	20	70 - 130
Diethyl Ether	10.00	11.3	113	6	20	70 - 130
Di-isopropyl ether	10.00	10.1	101	7	20	70 - 130
Ethyl tertiary-butyl ether	10.00	10.6	106	7	20	70 - 130
Ethylbenzene	10.00	10.1	101	8	20	70 - 130
Hexachlorobutadiene	10.00	10.5	105	9	20	70 - 130
Hexachloroethane	10.00	11.3	113	3	20	70 - 130
Isopropylbenzene	10.00	9.17	92	6	20	70 - 130
Methyl tert-Butyl Ether	10.00	10.4	104	6	20	70 - 130
Methylene Chloride	10.00	10.7	107	4	20	70 - 130
Naphthalene	10.00	10.4	104	14	20	70 - 130
n-Butylbenzene	10.00	10.4	104	11	20	70 - 130
n-Propylbenzene	10.00	10.4	104	7	20	70 - 130
sec-Butylbenzene	10.00	10.3	103	8	20	70 - 130
Styrene	10.00	9.86	99	8	20	70 - 130
tert-Butylbenzene	10.00	10.5	105	6	20	70 - 130
Tertiary-amyl methyl ether	10.00	10.7	107	10	20	70 - 130
Tetrachloroethene	10.00	9.83	98	8	20	70 - 130
Tetrahydrofuran	10.00	9.76	98	12	20	70 - 130
Toluene	10.00	10.2	102	8	20	70 - 130
trans-1,2-Dichloroethene	10.00	11.2	112	9	20	70 - 130
trans-1,3-Dichloropropene	10.00	9.36	94	6	20	70 - 130
Trichloroethene	10.00	10.4	104	6	20	70 - 130
Trichlorofluoromethane	10.00	9.86	99	5	20	70 - 130
Vinyl Acetate	10.00	9.65	96	8	20	70 - 130
Vinyl Chloride	10.00	14.0	140 *	8	20	70 - 130
Xylene O	10.00	10.3	103	11	20	70 - 130

**LCS / LCS DUPLICATE RECOVERY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Matrix: Aqueous  
Batch: BD80909 Laboratory ID: BD80909-BSD1  
Preparation: 5030B Initial/Final: 10 ml / 10 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Xylene P,M	20.00	20.3	102	8	20	70 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

# VOA Calibration Data

**ANALYSIS BATCH (SEQUENCE) SUMMARY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Sequence: BRC0282 Instrument: VMS1  
Matrix: Aqueous Calibration: 0804001

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	BRC0282-TUN1	M1048142.D	03/31/08 11:35
Cal Standard	BRC0282-CAL1	M1048143.D	03/31/08 13:19
Cal Standard	BRC0282-CAL2	M1048144.D	03/31/08 13:46
Cal Standard	BRC0282-CAL3	M1048145.D	03/31/08 14:13
Cal Standard	BRC0282-CAL4	M1048146.D	03/31/08 14:41
Cal Standard	BRC0282-CAL5	M1048147.D	03/31/08 15:08
Cal Standard	BRC0282-CAL6	M1048148.D	03/31/08 15:36
Cal Standard	BRC0282-CAL7	M1048149.D	03/31/08 16:03
Secondary Cal Check	BRC0282-SCV1	M1048152.D	03/31/08 17:25

**ANALYSIS BATCH (SEQUENCE) SUMMARY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Sequence: BRD0064 Instrument: VMS1  
Matrix: Aqueous Calibration: 0804001

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	BRD0064-TUN1	M1048256.D	04/07/08 08:24
Calibration Check	BRD0064-CCV1	M1048257.D	04/07/08 08:52
LCS	BD80709-BS1	M1048258.D	04/07/08 09:46
LCS Dup	BD80709-BSD1	M1048259.D	04/07/08 10:14
Blank	BD80709-BLK1	M1048262.D	04/07/08 11:36
MW 220S01	0804037-04RE1	M1048272.D	04/07/08 16:18
MW 221S01	0804037-05RE1	M1048273.D	04/07/08 16:47
<del>MW 230S01</del>	<del>0804037-10</del>	<del>M1048297.D</del>	<del>04/07/08 17:14</del>
MW 230S01	0804037-10	M1048274.D	04/07/08 17:14
MW 226S01	0804037-11	M1048275.D	04/07/08 17:42
<del>MW 226S01</del>	<del>0804037-11</del>	<del>M1048298.D</del>	<del>04/07/08 17:42</del>
MW 229S01	0804037-12	M1048276.D	04/07/08 18:09
<del>MW 229S01</del>	<del>0804037-12</del>	<del>M1048299.D</del>	<del>04/07/08 18:09</del>
MW 226D01	0804037-13	M1048277.D	04/07/08 18:37
<del>MW 226D01</del>	<del>0804037-13</del>	<del>M1048303.D</del>	<del>04/07/08 18:37</del>
<del>MW 227D01</del>	<del>0804037-01</del>	<del>M1048302.D</del>	<del>04/07/08 19:31</del>
MW 227D01	0804037-01	M1048279.D	04/07/08 19:31
MW 227S01	0804037-02	M1048280.D	04/07/08 19:59
<del>MW 227S01</del>	<del>0804037-02</del>	<del>M1048295.D</del>	<del>04/07/08 19:59</del>

# ANALYSIS BATCH (SEQUENCE) SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0073</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MW 221S01	0804037-05	M1048273.D	04/07/08 16:47
MW 221S01	0804037-05	M1048305.D	04/07/08 16:47 04/08/08 17:55
MS Tune	BRD0073-TUN1	M1048286.D	04/08/08 08:26
Calibration Check	BRD0073-CCV1	M1048287.D	04/08/08 08:54
LCS	BD80807-BS1	M1048288.D	04/08/08 09:48
LCS Dup	BD80807-BSD1	M1048289.D	04/08/08 10:16
Blank	BD80807-BLK1	M1048292.D	04/08/08 11:39
MW 227S01	0804037-02RE1	M1048295.D	04/08/08 13:06
MW 227S01 Dup	0804037-03	M1048296.D	04/08/08 13:35
MW 227S01 Dup	0804037-03	M1048306.D	04/08/08 13:35 18:22
MW 227S01 Dup	0804037-03RE1	M1048296.D	04/08/08 13:35
MW 230S01	0804037-10RE1	M1048297.D	04/08/08 14:04
MW 226S01	0804037-11RE1	M1048298.D	04/08/08 14:34
MW 229S01	0804037-12RE1	M1048299.D	04/08/08 15:03
Equipment Blank	0804037-14	M1048300.D	04/08/08 15:30
MW 230D01	0804037-09	M1048307.D	04/08/08 15:59 18:50
MW 230D01	0804037-09	M1048301.D	04/08/08 15:59
MW 230D01	0804037-09RE1	M1048301.D	04/08/08 15:59
MW 227D01	0804037-01RE1	M1048302.D	04/08/08 16:29
MW 226D01	0804037-13RE1	M1048303.D	04/08/08 16:58
MW 228S01	0804037-07	M1048308.D	04/08/08 17:27 19:17
MW 228S01	0804037-07	M1048304.D	04/08/08 17:27
MW 228S01	0804037-07RE1	M1048304.D	04/08/08 17:27
MW 228S01	BD80807-MS1	M1048309.D	04/08/08 19:44
MW 228S01	BD80807-MSD1	M1048310.D	04/08/08 20:11

**ANALYSIS BATCH (SEQUENCE) SUMMARY****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Sequence: BRD0085 Instrument: VMS1  
Matrix: Aqueous Calibration: 0804001

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time	
MW 220S01	0804037-04	M1048322.D	04/07/08 16:18	04 / 09 / 08 13:04
<del>MW 220S01</del>	<del>0804037-04</del>	<del>M1048272.D</del>	<del>04/07/08 16:18</del>	
MS Tune	BRD0085-TUN1	M1048313.D	04/09/08 08:27	
Calibration Check	BRD0085-CCV1	M1048314.D	04/09/08 08:54	
LCS	BD80909-BS1	M1048315.D	04/09/08 09:49	
LCS Dup	BD80909-BSD1	M1048316.D	04/09/08 10:16	
Blank	BD80909-BLK1	M1048319.D	04/09/08 11:38	
MW 228D01	0804037-06	M1048323.D	04/09/08 12:08	13 : 32
<del>MW 228D01</del>	<del>0804037-06</del>	<del>M1048320.D</del>	<del>04/09/08 12:08</del>	
MW 228D01	0804037-06RE1	M1048320.D	04/09/08 12:08	
MW 228S01 Dup	0804037-08	M1048324.D	04/09/08 12:37	13 : 59
<del>MW 228S01 Dup</del>	<del>0804037-08</del>	<del>M1048321.D</del>	<del>04/09/08 12:37</del>	
MW 228S01 Dup	0804037-08RE1	M1048321.D	04/09/08 12:37	

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Lab File ID: M1048256.D Injection Date: 04/07/08  
Instrument ID: VMS1 Injection Time: 08:24  
Sequence: BRD0064 Lab Sample ID: BRD0064-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.7	PASS
75	30 - 60% of 95	38.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.09	PASS
173	Less than 2% of 174	0.696	PASS
174	50 - 100% of 95	82.4	PASS
175	5 - 9% of 174	8.76	PASS
176	95 - 101% of 174	98.9	PASS
177	5 - 9% of 176	6.8	PASS

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Lab File ID: M1048286.D Injection Date: 04/08/08  
Instrument ID: VMS1 Injection Time: 08:26  
Sequence: BRD0073 Lab Sample ID: BRD0073-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.5	PASS
75	30 - 60% of 95	41.7	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.3	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	81.3	PASS
175	5 - 9% of 174	7.53	PASS
176	95 - 101% of 174	97.6	PASS
177	5 - 9% of 176	5.28	PASS

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Lab File ID: M1048313.D Injection Date: 04/09/08  
Instrument ID: VMS1 Injection Time: 08:27  
Sequence: BRD0085 Lab Sample ID: BRD0085-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	15.9	PASS
75	30 - 60% of 95	36.7	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	5.92	PASS
173	Less than 2% of 174	0.376	PASS
174	50 - 100% of 95	88.3	PASS
175	5 - 9% of 174	8.01	PASS
176	95 - 101% of 174	98	PASS
177	5 - 9% of 176	7.78	PASS

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048257.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0064</u>	Injection Date:	<u>04/07/08</u>
Lab Sample ID:	<u>BRD0064-CCV1</u>	Injection Time:	<u>08:52</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	25.00	26.9	0.3394603	0.3650361		7.5	30
1,1,1,2-Tetrachloroethane	A	25.00	26.9	0.3394603	0.3650361		7.5	30
1,1,1-Trichloroethane	A	25.00	27.6	0.3110596	0.3439828		10.6	30
1,1,1-Trichloroethane	A	25.00	27.6	0.3110596	0.3439828		10.6	30
1,1,2,2-Tetrachloroethane	A	25.00	25.2	0.8534852	0.85899	0.3	0.6	30
1,1,2,2-Tetrachloroethane	A	25.00	25.2	0.8534852	0.85899	0.3	0.6	30
1,1,2-Trichloroethane	A	25.00	25.9	0.196062	0.2034481		3.8	30
1,1,2-Trichloroethane	A	25.00	25.9	0.196062	0.2034481		3.8	30
1,1-Dichloroethane	A	25.00	26.6	0.4676268	0.4982931	0.1	6.6	30
1,1-Dichloroethane	A	25.00	26.6	0.4676268	0.4982931	0.1	6.6	30
1,1-Dichloroethene	A	25.00	24.8	0.244583	0.2428578		-0.7	20
1,1-Dichloroethene	A	25.00	24.8	0.244583	0.2428578		-0.7	20
1,1-Dichloropropene	A	25.00	25.5	0.348074	0.3548913		2.0	30
1,1-Dichloropropene	A	25.00	25.5	0.348074	0.3548913		2.0	30
1,2,3-Trichlorobenzene	A	25.00	23.0	0.5745021	0.5279989		-8.1	30
1,2,3-Trichlorobenzene	A	25.00	23.0	0.5745021	0.5279989		-8.1	30
1,2,3-Trichloropropane	A	25.00	25.9	0.6871129	0.7115739		3.6	30
1,2,3-Trichloropropane	A	25.00	25.9	0.6871129	0.7115739		3.6	30
1,2,4-Trichlorobenzene	A	25.00	24.3	0.6826864	0.664135		-2.7	30
1,2,4-Trichlorobenzene	A	25.00	24.3	0.6826864	0.664135		-2.7	30
1,2,4-Trimethylbenzene	A	25.00	24.9	2.038259	2.027705		-0.5	30
1,2,4-Trimethylbenzene	A	25.00	24.9	2.038259	2.027705		-0.5	30
1,2-Dibromo-3-Chloropropane	A	25.00	25.8	7.312109E-02	0.0754886		3.2	30
1,2-Dibromo-3-Chloropropane	A	25.00	25.8	7.312109E-02	0.0754886		3.2	30
1,2-Dibromoethane	A	25.00	25.8	0.3324679	0.3433064		3.3	30
1,2-Dibromoethane	A	25.00	25.8	0.3324679	0.3433064		3.3	30
1,2-Dichlorobenzene	A	25.00	25.9	1.448399	1.501631		3.7	30
1,2-Dichlorobenzene	A	25.00	25.9	1.448399	1.501631		3.7	30
1,2-Dichloroethane	A	25.00	29.2	0.2286516	0.2671802		16.9	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048257.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0064</u>	Injection Date:	<u>04/07/08</u>
Lab Sample ID:	<u>BRD0064-CCV1</u>	Injection Time:	<u>08:52</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dichloroethane	A	25.00	29.2	0.2286516	0.2671802		16.9	30
1,2-Dichloropropane	A	25.00	26.4	0.2781706	0.2935341		5.5	20
1,2-Dichloropropane	A	25.00	26.4	0.2781706	0.2935341		5.5	20
1,3,5-Trimethylbenzene	A	25.00	24.4	1.995331	1.948162		-2.4	30
1,3,5-Trimethylbenzene	A	25.00	24.4	1.995331	1.948162		-2.4	30
1,3-Dichlorobenzene	A	25.00	26.1	1.55689	1.626643		4.5	30
1,3-Dichlorobenzene	A	25.00	26.1	1.55689	1.626643		4.5	30
1,3-Dichloropropane	A	25.00	23.8	0.5134075	0.4892888		-4.7	30
1,3-Dichloropropane	A	25.00	23.8	0.5134075	0.4892888		-4.7	30
1,4-Dichlorobenzene	A	25.00	25.8	1.657544	1.710301		3.2	30
1,4-Dichlorobenzene	A	25.00	25.8	1.657544	1.710301		3.2	30
1,4-Dioxane - Screen	A	500.0	437	1.30114E-03	1.136077E-03		-12.7	30
1,4-Dioxane - Screen	A	500.0	437	1.30114E-03	1.136077E-03		-12.7	30
1-Chlorohexane	A	25.00	24.3	0.4165814	0.4056317		-2.6	30
1-Chlorohexane	A	25.00	24.3	0.4165814	0.4056317		-2.6	30
2,2-Dichloropropane	A	25.00	29.9	0.2771819	0.3317914		19.7	30
2,2-Dichloropropane	A	25.00	29.9	0.2771819	0.3317914		19.7	30
2-Butanone	A	125.0	133	1.587848E-02	1.687552E-02		6.3	30
2-Butanone	A	125.0	133	1.587848E-02	1.687552E-02		6.3	30
2-Chlorotoluene	A	25.00	24.0	2.194776	2.10629		-4.0	30
2-Chlorotoluene	A	25.00	24.0	2.194776	2.10629		-4.0	30
2-Hexanone	A	125.0	122	0.1589153	0.1553582		-2.2	30
2-Hexanone	A	125.0	122	0.1589153	0.1553582		-2.2	30
4-Chlorotoluene	A	25.00	24.2	2.26507	2.193741		-3.1	30
4-Chlorotoluene	A	25.00	24.2	2.26507	2.193741		-3.1	30
4-Isopropyltoluene	A	25.00	25.6	1.774982	1.815404		2.3	30
4-Isopropyltoluene	A	25.00	25.6	1.774982	1.815404		2.3	30
4-Methyl-2-Pentanone	A	125.0	133	5.596375E-02	0.0594066		6.2	30
4-Methyl-2-Pentanone	A	125.0	133	5.596375E-02	0.0594066		6.2	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048257.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0064</u>	Injection Date:	<u>04/07/08</u>
Lab Sample ID:	<u>BRD0064-CCV1</u>	Injection Time:	<u>08:52</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	125.0	146	5.864814E-03	6.831709E-03		16.5	30
Acetone	A	125.0	146	5.864814E-03	6.831709E-03		16.5	30
Benzene	A	25.00	24.7	1.100371	1.085977		-1.3	30
Benzene	A	25.00	24.7	1.100371	1.085977		-1.3	30
Bromobenzene	A	25.00	26.0	1.066193	1.108709		4.0	30
Bromobenzene	A	25.00	26.0	1.066193	1.108709		4.0	30
Bromochloromethane	A	25.00	27.6	0.1775582	0.1958826		10.3	30
Bromochloromethane	A	25.00	27.6	0.1775582	0.1958826		10.3	30
Bromodichloromethane	A	25.00	28.8	0.3418241	0.3790609		10.9	30
Bromodichloromethane	A	25.00	28.8	0.3418241	0.3790609		10.9	30
Bromoform	L	25.00	25.1	0.2299586	0.2655644	0.1	0.4	30
Bromoform	L	25.00	25.1	0.2299586	0.2655644	0.1	0.4	30
Bromomethane	A	25.00	17.6	0.2003193	0.1409608		-29.6	30
Bromomethane	A	25.00	17.6	0.2003193	0.1409608		-29.6	30
Carbon Disulfide	A	25.00	25.3	1.009735	1.021634		1.2	30
Carbon Disulfide	A	25.00	25.3	1.009735	1.021634		1.2	30
Carbon Tetrachloride	A	25.00	28.1	0.2494957	0.2800361		12.2	30
Carbon Tetrachloride	A	25.00	28.1	0.2494957	0.2800361		12.2	30
Chlorobenzene	A	25.00	25.2	1.014047	1.023764	0.3	1.0	30
Chlorobenzene	A	25.00	25.2	1.014047	1.023764	0.3	1.0	30
Chloroethane	A	25.00	29.8	0.1149597	0.1369342		19.1	30
Chloroethane	A	25.00	29.8	0.1149597	0.1369342		19.1	30
Chloroform	A	25.00	26.7	0.4976749	0.5323908		7.0	20
Chloroform	A	25.00	26.7	0.4976749	0.5323908		7.0	20
Chloromethane	A	25.00	24.0	0.3542793	0.3395454	0.1	-4.2	30
Chloromethane	A	25.00	24.0	0.3542793	0.3395454	0.1	-4.2	30
cis-1,2-Dichloroethene	A	25.00	26.1	0.3177882	0.3316537		4.4	30
cis-1,2-Dichloroethene	A	25.00	26.1	0.3177882	0.3316537		4.4	30
cis-1,3-Dichloropropene	A	25.00	28.8	0.3645374	0.4202457		15.3	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048257.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0064</u>	Injection Date:	<u>04/07/08</u>
Lab Sample ID:	<u>BRD0064-CCV1</u>	Injection Time:	<u>08:52</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
cis-1,3-Dichloropropene	A	25.00	28.8	0.3645374	0.4202457		15.3	30
Dibromochloromethane	L	25.00	25.5	0.3490035	0.4175932		1.9	30
Dibromochloromethane	L	25.00	25.5	0.3490035	0.4175932		1.9	30
Dibromomethane	A	25.00	26.7	0.1934236	0.2065519		6.8	30
Dibromomethane	A	25.00	26.7	0.1934236	0.2065519		6.8	30
Dichlorodifluoromethane	A	25.00	25.6	0.2637561	0.2700909		2.4	30
Dichlorodifluoromethane	A	25.00	25.6	0.2637561	0.2700909		2.4	30
Diethyl Ether	A	25.00	27.9	7.347477E-02	8.454229E-02		15.1	30
Diethyl Ether	A	25.00	27.9	7.347477E-02	8.454229E-02		15.1	30
Di-isopropyl ether	A	25.00	25.0	0.952768	0.9506765		-0.2	30
Di-isopropyl ether	A	25.00	25.0	0.952768	0.9506765		-0.2	30
Ethyl tertiary-butyl ether	A	25.00	27.4	0.6242981	0.6843854		9.6	30
Ethyl tertiary-butyl ether	A	25.00	27.4	0.6242981	0.6843854		9.6	30
Ethylbenzene	A	25.00	24.1	1.546959	1.493902		-3.4	20
Ethylbenzene	A	25.00	24.1	1.546959	1.493902		-3.4	20
Hexachlorobutadiene	A	25.00	23.9	0.2741554	0.2624622		-4.3	30
Hexachlorobutadiene	A	25.00	23.9	0.2741554	0.2624622		-4.3	30
Hexachloroethane	L	25.00	25.2	0.3517104	0.429915		1.0	30
Hexachloroethane	L	25.00	25.2	0.3517104	0.429915		1.0	30
Isopropylbenzene	A	25.00	24.4	2.591551	2.530847		-2.3	30
Isopropylbenzene	A	25.00	24.4	2.591551	2.530847		-2.3	30
Methyl tert-Butyl Ether	A	25.00	27.1	0.4654496	0.5048365		8.5	30
Methyl tert-Butyl Ether	A	25.00	27.1	0.4654496	0.5048365		8.5	30
Methylene Chloride	A	25.00	24.5	0.3472599	0.3405661		-1.9	30
Methylene Chloride	A	25.00	24.5	0.3472599	0.3405661		-1.9	30
Naphthalene	A	25.00	24.4	1.191446	1.162166		-2.5	30
Naphthalene	A	25.00	24.4	1.191446	1.162166		-2.5	30
n-Butylbenzene	A	25.00	24.9	1.688339	1.681816		-0.4	30
n-Butylbenzene	A	25.00	24.9	1.688339	1.681816		-0.4	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048257.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0064</u>	Injection Date:	<u>04/07/08</u>
Lab Sample ID:	<u>BRD0064-CCV1</u>	Injection Time:	<u>08:52</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
n-Propylbenzene	A	25.00	24.7	3.300052	3.262461		-1.1	30
n-Propylbenzene	A	25.00	24.7	3.300052	3.262461		-1.1	30
sec-Butylbenzene	A	25.00	24.5	2.229556	2.182056		-2.1	30
sec-Butylbenzene	A	25.00	24.5	2.229556	2.182056		-2.1	30
Styrene	A	25.00	25.0	0.9423163	0.9419924		-0.03	30
Styrene	A	25.00	25.0	0.9423163	0.9419924		-0.03	30
tert-Butylbenzene	A	25.00	25.0	1.529304	1.529762		0.03	30
tert-Butylbenzene	A	25.00	25.0	1.529304	1.529762		0.03	30
Tertiary-amyl methyl ether	A	25.00	26.6	0.552306	0.5882913		6.5	30
Tertiary-amyl methyl ether	A	25.00	26.6	0.552306	0.5882913		6.5	30
Tetrachloroethene	A	25.00	23.9	0.3592911	0.3434563		-4.4	30
Tetrachloroethene	A	25.00	23.9	0.3592911	0.3434563		-4.4	30
Tetrahydrofuran	A	25.00	22.1	4.153566E-02	3.674282E-02		-11.5	30
Tetrahydrofuran	A	25.00	22.1	4.153566E-02	3.674282E-02		-11.5	30
Toluene	A	25.00	25.7	0.6192587	0.6372869		2.9	20
Toluene	A	25.00	25.7	0.6192587	0.6372869		2.9	20
trans-1,2-Dichloroethene	A	25.00	25.5	0.2901774	0.296065		2.0	30
trans-1,2-Dichloroethene	A	25.00	25.5	0.2901774	0.296065		2.0	30
trans-1,3-Dichloropropene	L	25.00	26.6	0.2616513	0.3241528		6.4	30
trans-1,3-Dichloropropene	L	25.00	26.6	0.2616513	0.3241528		6.4	30
Trichloroethene	A	25.00	25.4	0.2948186	0.2989232		1.4	30
Trichloroethene	A	25.00	25.4	0.2948186	0.2989232		1.4	30
Trichlorofluoromethane	A	25.00	27.0	0.23909	0.2581947		8.0	30
Trichlorofluoromethane	A	25.00	27.0	0.23909	0.2581947		8.0	30
Vinyl Acetate	A	25.00	24.0	0.4335189	0.4170814		-3.8	30
Vinyl Acetate	A	25.00	24.0	0.4335189	0.4170814		-3.8	30
Vinyl Chloride	A	25.00	29.8	0.2269918	0.2703177		19.1	20
Vinyl Chloride	A	25.00	29.8	0.2269918	0.2703177		19.1	20
Xylene O	A	25.00	25.2	0.5723843	0.5758428		0.6	30

# CONTINUING CALIBRATION CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Instrument ID: VMS1 Calibration: 0804001  
 Lab File ID: M1048257.D Calibration Date: 03/31/08 00:00  
 Sequence: BRD0064 Injection Date: 04/07/08  
 Lab Sample ID: BRD0064-CCV1 Injection Time: 08:52

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Xylene O	A	25.00	25.2	0.5723843	0.5758428		0.6	30
Xylene P,M	A	50.00	49.5	0.5618456	0.5565884		-0.9	30
Xylene P,M	A	50.00	49.5	0.5618456	0.5565884		-0.9	30

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048287.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0073</u>	Injection Date:	<u>04/08/08</u>
Lab Sample ID:	<u>BRD0073-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	25.00	25.7	0.3394603	0.3494376		2.9	30
1,1,1,2-Tetrachloroethane	A	25.00	25.7	0.3394603	0.3494376		2.9	30
1,1,1-Trichloroethane	A	25.00	26.0	0.3110596	0.3232806		3.9	30
1,1,1-Trichloroethane	A	25.00	26.0	0.3110596	0.3232806		3.9	30
1,1,2,2-Tetrachloroethane	A	25.00	25.4	0.8534852	0.8653952	0.3	1.4	30
1,1,2,2-Tetrachloroethane	A	25.00	25.4	0.8534852	0.8653952	0.3	1.4	30
1,1,2-Trichloroethane	A	25.00	25.3	0.196062	0.1983931		1.2	30
1,1,2-Trichloroethane	A	25.00	25.3	0.196062	0.1983931		1.2	30
1,1-Dichloroethane	A	25.00	25.8	0.4676268	0.4819461	0.1	3.1	30
1,1-Dichloroethane	A	25.00	25.8	0.4676268	0.4819461	0.1	3.1	30
1,1-Dichloroethene	A	25.00	23.6	0.244583	0.2312418		-5.5	20
1,1-Dichloroethene	A	25.00	23.6	0.244583	0.2312418		-5.5	20
1,1-Dichloropropene	A	25.00	24.7	0.348074	0.3441623		-1.1	30
1,1-Dichloropropene	A	25.00	24.7	0.348074	0.3441623		-1.1	30
1,2,3-Trichlorobenzene	A	25.00	21.9	0.5745021	0.5042861		-12.2	30
1,2,3-Trichlorobenzene	A	25.00	21.9	0.5745021	0.5042861		-12.2	30
1,2,3-Trichloropropane	A	25.00	25.7	0.6871129	0.707254		2.9	30
1,2,3-Trichloropropane	A	25.00	25.7	0.6871129	0.707254		2.9	30
1,2,4-Trichlorobenzene	A	25.00	23.3	0.6826864	0.6369602		-6.7	30
1,2,4-Trichlorobenzene	A	25.00	23.3	0.6826864	0.6369602		-6.7	30
1,2,4-Trimethylbenzene	A	25.00	25.1	2.038259	2.043665		0.3	30
1,2,4-Trimethylbenzene	A	25.00	25.1	2.038259	2.043665		0.3	30
1,2-Dibromo-3-Chloropropane	A	25.00	25.2	7.312109E-02	7.385651E-02		1.0	30
1,2-Dibromo-3-Chloropropane	A	25.00	25.2	7.312109E-02	7.385651E-02		1.0	30
1,2-Dibromoethane	A	25.00	25.1	0.3324679	0.3337342		0.4	30
1,2-Dibromoethane	A	25.00	25.1	0.3324679	0.3337342		0.4	30
1,2-Dichlorobenzene	A	25.00	25.3	1.448399	1.464116		1.1	30
1,2-Dichlorobenzene	A	25.00	25.3	1.448399	1.464116		1.1	30
1,2-Dichloroethane	A	25.00	27.8	0.2286516	0.2537612		11.0	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048287.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0073</u>	Injection Date:	<u>04/08/08</u>
Lab Sample ID:	<u>BRD0073-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dichloroethane	A	25.00	27.8	0.2286516	0.2537612		11.0	30
1,2-Dichloropropane	A	25.00	25.9	0.2781706	0.2885215		3.7	20
1,2-Dichloropropane	A	25.00	25.9	0.2781706	0.2885215		3.7	20
1,3,5-Trimethylbenzene	A	25.00	24.5	1.995331	1.955443		-2.0	30
1,3,5-Trimethylbenzene	A	25.00	24.5	1.995331	1.955443		-2.0	30
1,3-Dichlorobenzene	A	25.00	25.5	1.55689	1.589646		2.1	30
1,3-Dichlorobenzene	A	25.00	25.5	1.55689	1.589646		2.1	30
1,3-Dichloropropane	A	25.00	24.1	0.5134075	0.4943851		-3.7	30
1,3-Dichloropropane	A	25.00	24.1	0.5134075	0.4943851		-3.7	30
1,4-Dichlorobenzene	A	25.00	24.9	1.657544	1.650988		-0.4	30
1,4-Dichlorobenzene	A	25.00	24.9	1.657544	1.650988		-0.4	30
1,4-Dioxane - Screen	A	500.0	213	1.30114E-03	5.534712E-04		-57.5	30 *
1,4-Dioxane - Screen	A	500.0	213	1.30114E-03	5.534712E-04		-57.5	30 *
1-Chlorohexane	A	25.00	24.1	0.4165814	0.4010998		-3.7	30
1-Chlorohexane	A	25.00	24.1	0.4165814	0.4010998		-3.7	30
2,2-Dichloropropane	A	25.00	27.7	0.2771819	0.3070014		10.8	30
2,2-Dichloropropane	A	25.00	27.7	0.2771819	0.3070014		10.8	30
2-Butanone	A	125.0	125	1.587848E-02	1.592064E-02		0.3	30
2-Butanone	A	125.0	125	1.587848E-02	1.592064E-02		0.3	30
2-Chlorotoluene	A	25.00	24.1	2.194776	2.113403		-3.7	30
2-Chlorotoluene	A	25.00	24.1	2.194776	2.113403		-3.7	30
2-Hexanone	A	125.0	121	0.1589153	0.1533795		-3.5	30
2-Hexanone	A	125.0	121	0.1589153	0.1533795		-3.5	30
4-Chlorotoluene	A	25.00	23.9	2.26507	2.165321		-4.4	30
4-Chlorotoluene	A	25.00	23.9	2.26507	2.165321		-4.4	30
4-Isopropyltoluene	A	25.00	25.2	1.774982	1.787697		0.7	30
4-Isopropyltoluene	A	25.00	25.2	1.774982	1.787697		0.7	30
4-Methyl-2-Pentanone	A	125.0	131	5.596375E-02	5.881434E-02		5.1	30
4-Methyl-2-Pentanone	A	125.0	131	5.596375E-02	5.881434E-02		5.1	30

# CONTINUING CALIBRATION CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Instrument ID: VMS1 Calibration: 0804001  
 Lab File ID: M1048287.D Calibration Date: 03/31/08 00:00  
 Sequence: BRD0073 Injection Date: 04/08/08  
 Lab Sample ID: BRD0073-CCV1 Injection Time: 08:54

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	125.0	128	5.864814E-03	6.023339E-03		2.7	30
Acetone	A	125.0	128	5.864814E-03	6.023339E-03		2.7	30
Benzene	A	25.00	23.9	1.100371	1.053435		-4.3	30
Benzene	A	25.00	23.9	1.100371	1.053435		-4.3	30
Bromobenzene	A	25.00	25.0	1.066193	1.066874		0.06	30
Bromobenzene	A	25.00	25.0	1.066193	1.066874		0.06	30
Bromochloromethane	A	25.00	25.9	0.1775582	0.1838015		3.5	30
Bromochloromethane	A	25.00	25.9	0.1775582	0.1838015		3.5	30
Bromodichloromethane	A	25.00	27.2	0.3418241	0.3576123		4.6	30
Bromodichloromethane	A	25.00	27.2	0.3418241	0.3576123		4.6	30
Bromoform	L	25.00	23.4	0.2299586	0.2463699	0.1	-6.2	30
Bromoform	L	25.00	23.4	0.2299586	0.2463699	0.1	-6.2	30
Bromomethane	A	25.00	16.9	0.2003193	0.1352635		-32.5	30 *
Bromomethane	A	25.00	16.9	0.2003193	0.1352635		-32.5	30 *
Carbon Disulfide	A	25.00	24.2	1.009735	0.9771228		-3.2	30
Carbon Disulfide	A	25.00	24.2	1.009735	0.9771228		-3.2	30
Carbon Tetrachloride	A	25.00	26.8	0.2494957	0.2671921		7.1	30
Carbon Tetrachloride	A	25.00	26.8	0.2494957	0.2671921		7.1	30
Chlorobenzene	A	25.00	24.4	1.014047	0.9888206	0.3	-2.5	30
Chlorobenzene	A	25.00	24.4	1.014047	0.9888206	0.3	-2.5	30
Chloroethane	A	25.00	27.8	0.1149597	0.1277284		11.1	30
Chloroethane	A	25.00	27.8	0.1149597	0.1277284		11.1	30
Chloroform	A	25.00	25.6	0.4976749	0.5095413		2.4	20
Chloroform	A	25.00	25.6	0.4976749	0.5095413		2.4	20
Chloromethane	A	25.00	23.1	0.3542793	0.3274248	0.1	-7.6	30
Chloromethane	A	25.00	23.1	0.3542793	0.3274248	0.1	-7.6	30
cis-1,2-Dichloroethene	A	25.00	24.6	0.3177882	0.3133726		-1.4	30
cis-1,2-Dichloroethene	A	25.00	24.6	0.3177882	0.3133726		-1.4	30
cis-1,3-Dichloropropene	A	25.00	26.7	0.3645374	0.3893706		6.8	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048287.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0073</u>	Injection Date:	<u>04/08/08</u>
Lab Sample ID:	<u>BRD0073-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
cis-1,3-Dichloropropene	A	25.00	26.7	0.3645374	0.3893706		6.8	30
Dibromochloromethane	L	25.00	24.3	0.3490035	0.3978729		-2.7	30
Dibromochloromethane	L	25.00	24.3	0.3490035	0.3978729		-2.7	30
Dibromomethane	A	25.00	25.8	0.1934236	0.1992007		3.0	30
Dibromomethane	A	25.00	25.8	0.1934236	0.1992007		3.0	30
Dichlorodifluoromethane	A	25.00	23.4	0.2637561	0.2469822		-6.4	30
Dichlorodifluoromethane	A	25.00	23.4	0.2637561	0.2469822		-6.4	30
Diethyl Ether	A	25.00	27.8	7.347477E-02	8.424984E-02		14.7	30
Diethyl Ether	A	25.00	27.8	7.347477E-02	8.424984E-02		14.7	30
Di-isopropyl ether	A	25.00	23.7	0.952768	0.9028639		-5.2	30
Di-isopropyl ether	A	25.00	23.7	0.952768	0.9028639		-5.2	30
Ethyl tertiary-butyl ether	A	25.00	26.2	0.6242981	0.6531561		4.6	30
Ethyl tertiary-butyl ether	A	25.00	26.2	0.6242981	0.6531561		4.6	30
Ethylbenzene	A	25.00	23.8	1.546959	1.47078		-4.9	20
Ethylbenzene	A	25.00	23.8	1.546959	1.47078		-4.9	20
Hexachlorobutadiene	A	25.00	22.4	0.2741554	0.2454831		-10.5	30
Hexachlorobutadiene	A	25.00	22.4	0.2741554	0.2454831		-10.5	30
Hexachloroethane	L	25.00	24.6	0.3517104	0.4166957		-1.8	30
Hexachloroethane	L	25.00	24.6	0.3517104	0.4166957		-1.8	30
Isopropylbenzene	A	25.00	24.6	2.591551	2.547279		-1.7	30
Isopropylbenzene	A	25.00	24.6	2.591551	2.547279		-1.7	30
Methyl tert-Butyl Ether	A	25.00	25.2	0.4654496	0.4686968		0.7	30
Methyl tert-Butyl Ether	A	25.00	25.2	0.4654496	0.4686968		0.7	30
Methylene Chloride	A	25.00	23.1	0.3472599	0.3212484		-7.5	30
Methylene Chloride	A	25.00	23.1	0.3472599	0.3212484		-7.5	30
Naphthalene	A	25.00	24.6	1.191446	1.17394		-1.5	30
Naphthalene	A	25.00	24.6	1.191446	1.17394		-1.5	30
n-Butylbenzene	A	25.00	24.1	1.688339	1.628632		-3.5	30
n-Butylbenzene	A	25.00	24.1	1.688339	1.628632		-3.5	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048287.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0073</u>	Injection Date:	<u>04/08/08</u>
Lab Sample ID:	<u>BRD0073-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
n-Propylbenzene	A	25.00	25.1	3.300052	3.315554		0.5	30
n-Propylbenzene	A	25.00	25.1	3.300052	3.315554		0.5	30
sec-Butylbenzene	A	25.00	24.4	2.229556	2.177863		-2.3	30
sec-Butylbenzene	A	25.00	24.4	2.229556	2.177863		-2.3	30
Styrene	A	25.00	24.3	0.9423163	0.9174687		-2.6	30
Styrene	A	25.00	24.3	0.9423163	0.9174687		-2.6	30
tert-Butylbenzene	A	25.00	24.7	1.529304	1.510535		-1.2	30
tert-Butylbenzene	A	25.00	24.7	1.529304	1.510535		-1.2	30
Tertiary-amyl methyl ether	A	25.00	25.0	0.552306	0.5524631		0.03	30
Tertiary-amyl methyl ether	A	25.00	25.0	0.552306	0.5524631		0.03	30
Tetrachloroethene	A	25.00	23.5	0.3592911	0.3378712		-6.0	30
Tetrachloroethene	A	25.00	23.5	0.3592911	0.3378712		-6.0	30
Tetrahydrofuran	A	25.00	21.7	4.153566E-02	3.608633E-02		-13.1	30
Tetrahydrofuran	A	25.00	21.7	4.153566E-02	3.608633E-02		-13.1	30
Toluene	A	25.00	24.4	0.6192587	0.6041073		-2.4	20
Toluene	A	25.00	24.4	0.6192587	0.6041073		-2.4	20
trans-1,2-Dichloroethene	A	25.00	24.4	0.2901774	0.2827423		-2.6	30
trans-1,2-Dichloroethene	A	25.00	24.4	0.2901774	0.2827423		-2.6	30
trans-1,3-Dichloropropene	L	25.00	25.4	0.2616513	0.3082178		1.4	30
trans-1,3-Dichloropropene	L	25.00	25.4	0.2616513	0.3082178		1.4	30
Trichloroethene	A	25.00	24.8	0.2948186	0.2927788		-0.7	30
Trichloroethene	A	25.00	24.8	0.2948186	0.2927788		-0.7	30
Trichlorofluoromethane	A	25.00	26.0	0.23909	0.2481709		3.8	30
Trichlorofluoromethane	A	25.00	26.0	0.23909	0.2481709		3.8	30
Vinyl Acetate	A	25.00	23.1	0.4335189	0.4011137		-7.5	30
Vinyl Acetate	A	25.00	23.1	0.4335189	0.4011137		-7.5	30
Vinyl Chloride	A	25.00	27.6	0.2269918	0.2508333		10.5	20
Vinyl Chloride	A	25.00	27.6	0.2269918	0.2508333		10.5	20
Xylene O	A	25.00	24.3	0.5723843	0.5563207		-2.8	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048287.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0073</u>	Injection Date:	<u>04/08/08</u>
Lab Sample ID:	<u>BRD0073-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Xylene O	A	25.00	24.3	0.5723843	0.5563207		-2.8	30
Xylene P,M	A	50.00	48.6	0.5618456	0.54597		-2.8	30
Xylene P,M	A	50.00	48.6	0.5618456	0.54597		-2.8	30

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048314.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0085</u>	Injection Date:	<u>04/09/08</u>
Lab Sample ID:	<u>BRD0085-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	25.00	26.1	0.3394603	0.3540712		4.3	30
1,1,1,2-Tetrachloroethane	A	25.00	26.1	0.3394603	0.3540712		4.3	30
1,1,1-Trichloroethane	A	25.00	25.9	0.3110596	0.3222105		3.6	30
1,1,1-Trichloroethane	A	25.00	25.9	0.3110596	0.3222105		3.6	30
1,1,2,2-Tetrachloroethane	A	25.00	25.5	0.8534852	0.8698593	0.3	1.9	30
1,1,2,2-Tetrachloroethane	A	25.00	25.5	0.8534852	0.8698593	0.3	1.9	30
1,1,2-Trichloroethane	A	25.00	24.8	0.196062	0.1947396		-0.7	30
1,1,2-Trichloroethane	A	25.00	24.8	0.196062	0.1947396		-0.7	30
1,1-Dichloroethane	A	25.00	26.3	0.4676268	0.4922002	0.1	5.3	30
1,1-Dichloroethane	A	25.00	26.3	0.4676268	0.4922002	0.1	5.3	30
1,1-Dichloroethene	A	25.00	24.9	0.244583	0.2433156		-0.5	20
1,1-Dichloroethene	A	25.00	24.9	0.244583	0.2433156		-0.5	20
1,1-Dichloropropene	A	25.00	26.0	0.348074	0.3622989		4.1	30
1,1-Dichloropropene	A	25.00	26.0	0.348074	0.3622989		4.1	30
1,2,3-Trichlorobenzene	A	25.00	21.4	0.5745021	0.4906695		-14.6	30
1,2,3-Trichlorobenzene	A	25.00	21.4	0.5745021	0.4906695		-14.6	30
1,2,3-Trichloropropane	A	25.00	25.8	0.6871129	0.7078173		3.0	30
1,2,3-Trichloropropane	A	25.00	25.8	0.6871129	0.7078173		3.0	30
1,2,4-Trichlorobenzene	A	25.00	23.6	0.6826864	0.6440799		-5.7	30
1,2,4-Trichlorobenzene	A	25.00	23.6	0.6826864	0.6440799		-5.7	30
1,2,4-Trimethylbenzene	A	25.00	26.0	2.038259	2.119408		4.0	30
1,2,4-Trimethylbenzene	A	25.00	26.0	2.038259	2.119408		4.0	30
1,2-Dibromo-3-Chloropropane	A	25.00	25.6	7.312109E-02	7.497149E-02		2.5	30
1,2-Dibromo-3-Chloropropane	A	25.00	25.6	7.312109E-02	7.497149E-02		2.5	30
1,2-Dibromoethane	A	25.00	24.8	0.3324679	0.3293589		-0.9	30
1,2-Dibromoethane	A	25.00	24.8	0.3324679	0.3293589		-0.9	30
1,2-Dichlorobenzene	A	25.00	25.3	1.448399	1.46513		1.2	30
1,2-Dichlorobenzene	A	25.00	25.3	1.448399	1.46513		1.2	30
1,2-Dichloroethane	A	25.00	27.4	0.2286516	0.2504175		9.5	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048314.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0085</u>	Injection Date:	<u>04/09/08</u>
Lab Sample ID:	<u>BRD0085-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dichloroethane	A	25.00	27.4	0.2286516	0.2504175		9.5	30
1,2-Dichloropropane	A	25.00	26.4	0.2781706	0.2940086		5.7	20
1,2-Dichloropropane	A	25.00	26.4	0.2781706	0.2940086		5.7	20
1,3,5-Trimethylbenzene	A	25.00	25.0	1.995331	1.999397		0.2	30
1,3,5-Trimethylbenzene	A	25.00	25.0	1.995331	1.999397		0.2	30
1,3-Dichlorobenzene	A	25.00	25.9	1.55689	1.61271		3.6	30
1,3-Dichlorobenzene	A	25.00	25.9	1.55689	1.61271		3.6	30
1,3-Dichloropropane	A	25.00	24.1	0.5134075	0.4957015		-3.4	30
1,3-Dichloropropane	A	25.00	24.1	0.5134075	0.4957015		-3.4	30
1,4-Dichlorobenzene	A	25.00	25.2	1.657544	1.672039		0.9	30
1,4-Dichlorobenzene	A	25.00	25.2	1.657544	1.672039		0.9	30
1,4-Dioxane - Screen	A	500.0	260	1.30114E-03	6.754629E-04		-48.1	30 *
1,4-Dioxane - Screen	A	500.0	260	1.30114E-03	6.754629E-04		-48.1	30 *
1-Chlorohexane	A	25.00	24.9	0.4165814	0.4146308		-0.5	30
1-Chlorohexane	A	25.00	24.9	0.4165814	0.4146308		-0.5	30
2,2-Dichloropropane	A	25.00	28.0	0.2771819	0.3105208		12.0	30
2,2-Dichloropropane	A	25.00	28.0	0.2771819	0.3105208		12.0	30
2-Butanone	A	125.0	125	1.587848E-02	1.582533E-02		-0.3	30
2-Butanone	A	125.0	125	1.587848E-02	1.582533E-02		-0.3	30
2-Chlorotoluene	A	25.00	25.0	2.194776	2.192088		-0.1	30
2-Chlorotoluene	A	25.00	25.0	2.194776	2.192088		-0.1	30
2-Hexanone	A	125.0	120	0.1589153	0.1527542		-3.9	30
2-Hexanone	A	125.0	120	0.1589153	0.1527542		-3.9	30
4-Chlorotoluene	A	25.00	24.8	2.26507	2.244184		-0.9	30
4-Chlorotoluene	A	25.00	24.8	2.26507	2.244184		-0.9	30
4-Isopropyltoluene	A	25.00	26.3	1.774982	1.865675		5.1	30
4-Isopropyltoluene	A	25.00	26.3	1.774982	1.865675		5.1	30
4-Methyl-2-Pentanone	A	125.0	129	5.596375E-02	5.770479E-02		3.1	30
4-Methyl-2-Pentanone	A	125.0	129	5.596375E-02	5.770479E-02		3.1	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048314.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0085</u>	Injection Date:	<u>04/09/08</u>
Lab Sample ID:	<u>BRD0085-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	125.0	127	5.864814E-03	5.965578E-03		1.7	30
Acetone	A	125.0	127	5.864814E-03	5.965578E-03		1.7	30
Benzene	A	25.00	25.2	1.100371	1.106852		0.6	30
Benzene	A	25.00	25.2	1.100371	1.106852		0.6	30
Bromobenzene	A	25.00	25.5	1.066193	1.086761		1.9	30
Bromobenzene	A	25.00	25.5	1.066193	1.086761		1.9	30
Bromochloromethane	A	25.00	25.4	0.1775582	0.1806808		1.8	30
Bromochloromethane	A	25.00	25.4	0.1775582	0.1806808		1.8	30
Bromodichloromethane	A	25.00	27.8	0.3418241	0.3655567		6.9	30
Bromodichloromethane	A	25.00	27.8	0.3418241	0.3655567		6.9	30
Bromoform	L	25.00	23.5	0.2299586	0.2465145	0.1	-6.2	30
Bromoform	L	25.00	23.5	0.2299586	0.2465145	0.1	-6.2	30
Bromomethane	A	25.00	21.4	0.2003193	0.1717255		-14.3	30
Bromomethane	A	25.00	21.4	0.2003193	0.1717255		-14.3	30
Carbon Disulfide	A	25.00	25.3	1.009735	1.021492		1.2	30
Carbon Disulfide	A	25.00	25.3	1.009735	1.021492		1.2	30
Carbon Tetrachloride	A	25.00	27.4	0.2494957	0.2735701		9.6	30
Carbon Tetrachloride	A	25.00	27.4	0.2494957	0.2735701		9.6	30
Chlorobenzene	A	25.00	24.7	1.014047	1.00201	0.3	-1.2	30
Chlorobenzene	A	25.00	24.7	1.014047	1.00201	0.3	-1.2	30
Chloroethane	A	25.00	27.6	0.1149597	0.1270513		10.5	30
Chloroethane	A	25.00	27.6	0.1149597	0.1270513		10.5	30
Chloroform	A	25.00	25.8	0.4976749	0.5138448		3.2	20
Chloroform	A	25.00	25.8	0.4976749	0.5138448		3.2	20
Chloromethane	A	25.00	23.7	0.3542793	0.3352203	0.1	-5.4	30
Chloromethane	A	25.00	23.7	0.3542793	0.3352203	0.1	-5.4	30
cis-1,2-Dichloroethene	A	25.00	25.5	0.3177882	0.3242394		2.0	30
cis-1,2-Dichloroethene	A	25.00	25.5	0.3177882	0.3242394		2.0	30
cis-1,3-Dichloropropene	A	25.00	27.3	0.3645374	0.3987091		9.4	30

# CONTINUING CALIBRATION CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Instrument ID: VMS1 Calibration: 0804001  
 Lab File ID: M1048314.D Calibration Date: 03/31/08 00:00  
 Sequence: BRD0085 Injection Date: 04/09/08  
 Lab Sample ID: BRD0085-CCV1 Injection Time: 08:54

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
cis-1,3-Dichloropropene	A	25.00	27.3	0.3645374	0.3987091		9.4	30
Dibromochloromethane	L	25.00	24.4	0.3490035	0.3995325		-2.3	30
Dibromochloromethane	L	25.00	24.4	0.3490035	0.3995325		-2.3	30
Dibromomethane	A	25.00	25.3	0.1934236	0.1958915		1.3	30
Dibromomethane	A	25.00	25.3	0.1934236	0.1958915		1.3	30
Dichlorodifluoromethane	A	25.00	22.3	0.2637561	0.2353001		-10.8	30
Dichlorodifluoromethane	A	25.00	22.3	0.2637561	0.2353001		-10.8	30
Diethyl Ether	A	25.00	28.2	7.347477E-02	8.553842E-02		16.4	30
Diethyl Ether	A	25.00	28.2	7.347477E-02	8.553842E-02		16.4	30
Di-isopropyl ether	A	25.00	24.6	0.952768	0.9372876		-1.6	30
Di-isopropyl ether	A	25.00	24.6	0.952768	0.9372876		-1.6	30
Ethyl tertiary-butyl ether	A	25.00	26.2	0.6242981	0.653294		4.6	30
Ethyl tertiary-butyl ether	A	25.00	26.2	0.6242981	0.653294		4.6	30
Ethylbenzene	A	25.00	25.1	1.546959	1.554659		0.5	20
Ethylbenzene	A	25.00	25.1	1.546959	1.554659		0.5	20
Hexachlorobutadiene	A	25.00	23.6	0.2741554	0.2588779		-5.6	30
Hexachlorobutadiene	A	25.00	23.6	0.2741554	0.2588779		-5.6	30
Hexachloroethane	L	25.00	26.0	0.3517104	0.443425		3.9	30
Hexachloroethane	L	25.00	26.0	0.3517104	0.443425		3.9	30
Isopropylbenzene	A	25.00	25.3	2.591551	2.6244		1.3	30
Isopropylbenzene	A	25.00	25.3	2.591551	2.6244		1.3	30
Methyl tert-Butyl Ether	A	25.00	25.6	0.4654496	0.4756212		2.2	30
Methyl tert-Butyl Ether	A	25.00	25.6	0.4654496	0.4756212		2.2	30
Methylene Chloride	A	25.00	23.8	0.3472599	0.3307503		-4.8	30
Methylene Chloride	A	25.00	23.8	0.3472599	0.3307503		-4.8	30
Naphthalene	A	25.00	23.5	1.191446	1.117999		-6.2	30
Naphthalene	A	25.00	23.5	1.191446	1.117999		-6.2	30
n-Butylbenzene	A	25.00	25.9	1.688339	1.746423		3.4	30
n-Butylbenzene	A	25.00	25.9	1.688339	1.746423		3.4	30

# CONTINUING CALIBRATION CHECK

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Instrument ID:	<u>VMS1</u>	Calibration:	<u>0804001</u>
Lab File ID:	<u>M1048314.D</u>	Calibration Date:	<u>03/31/08 00:00</u>
Sequence:	<u>BRD0085</u>	Injection Date:	<u>04/09/08</u>
Lab Sample ID:	<u>BRD0085-CCV1</u>	Injection Time:	<u>08:54</u>

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
n-Propylbenzene	A	25.00	26.0	3.300052	3.432535		4.0	30
n-Propylbenzene	A	25.00	26.0	3.300052	3.432535		4.0	30
sec-Butylbenzene	A	25.00	25.4	2.229556	2.264584		1.6	30
sec-Butylbenzene	A	25.00	25.4	2.229556	2.264584		1.6	30
Styrene	A	25.00	24.6	0.9423163	0.9260484		-1.7	30
Styrene	A	25.00	24.6	0.9423163	0.9260484		-1.7	30
tert-Butylbenzene	A	25.00	26.1	1.529304	1.59844		4.5	30
tert-Butylbenzene	A	25.00	26.1	1.529304	1.59844		4.5	30
Tertiary-amyl methyl ether	A	25.00	24.8	0.552306	0.5472903		-0.9	30
Tertiary-amyl methyl ether	A	25.00	24.8	0.552306	0.5472903		-0.9	30
Tetrachloroethene	A	25.00	23.8	0.3592911	0.3415743		-4.9	30
Tetrachloroethene	A	25.00	23.8	0.3592911	0.3415743		-4.9	30
Tetrahydrofuran	A	25.00	21.6	4.153566E-02	3.602566E-02		-13.3	30
Tetrahydrofuran	A	25.00	21.6	4.153566E-02	3.602566E-02		-13.3	30
Toluene	A	25.00	25.1	0.6192587	0.6222533		0.5	20
Toluene	A	25.00	25.1	0.6192587	0.6222533		0.5	20
trans-1,2-Dichloroethene	A	25.00	24.9	0.2901774	0.2888068		-0.5	30
trans-1,2-Dichloroethene	A	25.00	24.9	0.2901774	0.2888068		-0.5	30
trans-1,3-Dichloropropene	L	25.00	25.1	0.2616513	0.3044592		0.2	30
trans-1,3-Dichloropropene	L	25.00	25.1	0.2616513	0.3044592		0.2	30
Trichloroethene	A	25.00	25.1	0.2948186	0.2963375		0.5	30
Trichloroethene	A	25.00	25.1	0.2948186	0.2963375		0.5	30
Trichlorofluoromethane	A	25.00	25.4	0.23909	0.2425544		1.4	30
Trichlorofluoromethane	A	25.00	25.4	0.23909	0.2425544		1.4	30
Vinyl Acetate	A	25.00	23.2	0.4335189	0.4025331		-7.1	30
Vinyl Acetate	A	25.00	23.2	0.4335189	0.4025331		-7.1	30
Vinyl Chloride	A	25.00	28.0	0.2269918	0.2537557		11.8	20
Vinyl Chloride	A	25.00	28.0	0.2269918	0.2537557		11.8	20
Xylene O	A	25.00	25.0	0.5723843	0.5727091		0.06	30

# CONTINUING CALIBRATION CHECK

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Instrument ID: VMS1 Calibration: 0804001  
 Lab File ID: M1048314.D Calibration Date: 03/31/08 00:00  
 Sequence: BRD0085 Injection Date: 04/09/08  
 Lab Sample ID: BRD0085-CCV1 Injection Time: 08:54

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Xylene O	A	25.00	25.0	0.5723843	0.5727091		0.06	30
Xylene P,M	A	50.00	50.6	0.5618456	0.5680474		1.1	30
Xylene P,M	A	50.00	50.6	0.5618456	0.5680474		1.1	30

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRC0282</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>Cal Standard (BRC0282-CAL1 )</b> Lab File ID: M1048143.D Analyzed: 03/31/08 13:19								
1,2-Dichloroethane-d4	0.4000	105		9.28	9.288333	-0.0083	+/-1.0	
4-Bromofluorobenzene	0.4000	100		15.7	15.705	-0.0050	+/-1.0	
Dibromofluoromethane	0.4000	88		8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	0.4000	88		12.5	12.5	0.0000	+/-1.0	
<b>Cal Standard (BRC0282-CAL2 )</b> Lab File ID: M1048144.D Analyzed: 03/31/08 13:46								
1,2-Dichloroethane-d4	1.000	110		9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	1.000	99		15.7	15.705	-0.0050	+/-1.0	
Dibromofluoromethane	1.000	108		8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	1.000	94		12.5	12.5	0.0000	+/-1.0	
<b>Cal Standard (BRC0282-CAL3 )</b> Lab File ID: M1048145.D Analyzed: 03/31/08 14:13								
1,2-Dichloroethane-d4	5.000	111		9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	5.000	101		15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	5.000	103		8.76	8.768334	-0.0083	+/-1.0	
Toluene-d8	5.000	101		12.5	12.5	0.0000	+/-1.0	
<b>Cal Standard (BRC0282-CAL4 )</b> Lab File ID: M1048146.D Analyzed: 03/31/08 14:41								
1,2-Dichloroethane-d4	10.00	116		9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	10.00	107		15.7	15.705	-0.0050	+/-1.0	
Dibromofluoromethane	10.00	107		8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	10.00	105		12.5	12.5	0.0000	+/-1.0	
<b>Cal Standard (BRC0282-CAL5 )</b> Lab File ID: M1048147.D Analyzed: 03/31/08 15:08								
1,2-Dichloroethane-d4	25.00	115		9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	108		15.7	15.705	-0.0050	+/-1.0	
Dibromofluoromethane	25.00	108		8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	103		12.5	12.5	0.0000	+/-1.0	
<b>Cal Standard (BRC0282-CAL6 )</b> Lab File ID: M1048148.D Analyzed: 03/31/08 15:36								
1,2-Dichloroethane-d4	50.00	112		9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	50.00	106		15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	50.00	105		8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	50.00	104		12.5	12.5	0.0000	+/-1.0	
<b>Cal Standard (BRC0282-CAL7 )</b> Lab File ID: M1048149.D Analyzed: 03/31/08 16:03								
1,2-Dichloroethane-d4	100.0	114		9.28	9.288333	-0.0083	+/-1.0	
4-Bromofluorobenzene	100.0	108		15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	100.0	109		8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	100.0	108		12.5	12.5	0.0000	+/-1.0	

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0064</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>Calibration Check (BRD0064-CCV1 )</b>								
1,2-Dichloroethane-d4	25.00	116	0 - 200	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	0 - 200	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	110	0 - 200	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	95	0 - 200	12.5	12.5	0.0000	+/-1.0	
<b>LCS (BD80709-BS1 )</b>								
			Lab File ID: M1048258.D		Analyzed: 04/07/08 09:46			
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	99	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	108	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>LCS Dup (BD80709-BSD1 )</b>								
			Lab File ID: M1048259.D		Analyzed: 04/07/08 10:14			
1,2-Dichloroethane-d4	25.00	114	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.7	15.705	-0.0050	+/-1.0	
Dibromofluoromethane	25.00	108	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>Blank (BD80709-BLK1 )</b>								
			Lab File ID: M1048262.D		Analyzed: 04/07/08 11:36			
1,2-Dichloroethane-d4	25.00	117	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	95	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 220S01 (0804037-04RE1 )</b>								
			Lab File ID: M1048272.D		Analyzed: 04/07/08 16:18			
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	99	70 - 130	15.7	15.705	-0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 221S01 (0804037-05RE1 )</b>								
			Lab File ID: M1048273.D		Analyzed: 04/07/08 16:47			
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	99	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	98	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 230S01 (0804037-10 )</b>								
			Lab File ID: M1048274.D		Analyzed: 04/07/08 17:14			
1,2-Dichloroethane-d4	25.00	113	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.5	12.5	0.0000	+/-1.0	

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Sequence: BRD0064 Instrument: VMS1  
 Matrix: Aqueous Calibration: 0804001

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>MW 226S01 (0804037-11 )</b> Lab File ID: M1048275.D Analyzed: 04/07/08 17:42								
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 229S01 (0804037-12 )</b> Lab File ID: M1048276.D Analyzed: 04/07/08 18:09								
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	98	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>MW 226D01 (0804037-13 )</b> Lab File ID: M1048277.D Analyzed: 04/07/08 18:37								
1,2-Dichloroethane-d4	25.00	109	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>MW 227D01 (0804037-01 )</b> Lab File ID: M1048279.D Analyzed: 04/07/08 19:31								
1,2-Dichloroethane-d4	25.00	109	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>MW 227S01 (0804037-02 )</b> Lab File ID: M1048280.D Analyzed: 04/07/08 19:59								
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.5	12.5	0.0000	+/-1.0	

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0073</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>MW 221S01 (0804037-05)</b>					Lab File ID: M1048305.D	Analyzed: 04/07/08 16:47		
1,2-Dichloroethane-d4	25.00	113	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.78	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	94	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>Calibration Check (BRD0073-CCV1 )</b>					Lab File ID: M1048287.D	Analyzed: 04/08/08 08:54		
1,2-Dichloroethane-d4	25.00	109	0 - 200	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	95	0 - 200	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	0 - 200	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	94	0 - 200	12.5	12.5	0.0000	+/-1.0	
<b>LCS (BD80807-BS1 )</b>					Lab File ID: M1048288.D	Analyzed: 04/08/08 09:48		
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	98	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	107	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	100	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>LCS Dup (BD80807-BSD1 )</b>					Lab File ID: M1048289.D	Analyzed: 04/08/08 10:16		
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	107	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>Blank (BD80807-BLK1 )</b>					Lab File ID: M1048292.D	Analyzed: 04/08/08 11:39		
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>MW 227S01 (0804037-02RE1 )</b>					Lab File ID: M1048295.D	Analyzed: 04/08/08 13:06		
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	102	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>MW 227S01 Dup (0804037-03 )</b>					Lab File ID: M1048306.D	Analyzed: 04/08/08 13:35		
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	98	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.51	12.5	0.0100	+/-1.0	

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Sequence: BRD0073 Instrument: VMS1  
 Matrix: Aqueous Calibration: 0804001

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>MW 227S01 Dup (0804037-03RE1 )</b>					Lab File ID: M1048296.D	Analyzed: 04/08/08 13:35		
1,2-Dichloroethane-d4	25.00	113	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 230S01 (0804037-10RE1 )</b>					Lab File ID: M1048297.D	Analyzed: 04/08/08 14:04		
1,2-Dichloroethane-d4	25.00	114	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	95	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	107	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 226S01 (0804037-11RE1 )</b>					Lab File ID: M1048298.D	Analyzed: 04/08/08 14:34		
1,2-Dichloroethane-d4	25.00	109	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	93	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	104	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 229S01 (0804037-12RE1 )</b>					Lab File ID: M1048299.D	Analyzed: 04/08/08 15:03		
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	93	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	104	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>Equipment Blank (0804037-14 )</b>					Lab File ID: M1048300.D	Analyzed: 04/08/08 15:30		
1,2-Dichloroethane-d4	25.00	114	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 230D01 (0804037-09 )</b>					Lab File ID: M1048307.D	Analyzed: 04/08/08 15:59		
1,2-Dichloroethane-d4	25.00	107	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	100	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 230D01 (0804037-09RE1 )</b>					Lab File ID: M1048301.D	Analyzed: 04/08/08 15:59		
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	95	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.5	12.5	0.0000	+/-1.0	

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
 Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
 Sequence: BRD0073 Instrument: VMS1  
 Matrix: Aqueous Calibration: 0804001

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>MW 227D01 (0804037-01RE1 )</b>						Lab File ID: M1048302.D Analyzed: 04/08/08 16:29		
1,2-Dichloroethane-d4	25.00	114	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	94	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 226D01 (0804037-13RE1 )</b>						Lab File ID: M1048303.D Analyzed: 04/08/08 16:58		
1,2-Dichloroethane-d4	25.00	113	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	102	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>MW 228S01 (0804037-07 )</b>						Lab File ID: M1048308.D Analyzed: 04/08/08 17:27		
1,2-Dichloroethane-d4	25.00	108	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 228S01 (0804037-07RE1 )</b>						Lab File ID: M1048304.D Analyzed: 04/08/08 17:27		
1,2-Dichloroethane-d4	25.00	114	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	92	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	106	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	94	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>Matrix Spike (BD80807-MS1 )</b>						Lab File ID: M1048309.D Analyzed: 04/08/08 19:44		
1,2-Dichloroethane-d4	25.00	105	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	99	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	102	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>Matrix Spike Dup (BD80807-MSD1 )</b>						Lab File ID: M1048310.D Analyzed: 04/08/08 20:11		
1,2-Dichloroethane-d4	25.00	104	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	99	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	102	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	98	70 - 130	12.5	12.5	0.0000	+/-1.0	

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0085</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>MW 220S01 (0804037-04)</b>			Lab File ID: M1048322.D			Analyzed: 04/07/08 16:18		
1,2-Dichloroethane-d4	25.00	110	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	95	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	94	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>Calibration Check (BRD0085-CCV1 )</b>			Lab File ID: M1048314.D			Analyzed: 04/09/08 08:54		
1,2-Dichloroethane-d4	25.00	106	0 - 200	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	97	0 - 200	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	104	0 - 200	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	97	0 - 200	12.51	12.5	0.0100	+/-1.0	
<b>LCS (BD80909-BS1 )</b>			Lab File ID: M1048315.D			Analyzed: 04/09/08 09:49		
1,2-Dichloroethane-d4	25.00	111	70 - 130	9.29	9.288333	0.0017	+/-1.0	
4-Bromofluorobenzene	25.00	98	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.77	8.768334	0.0017	+/-1.0	
Toluene-d8	25.00	98	70 - 130	12.5	12.5	0.0000	+/-1.0	
<b>LCS Dup (BD80909-BSD1 )</b>			Lab File ID: M1048316.D			Analyzed: 04/09/08 10:16		
1,2-Dichloroethane-d4	25.00	107	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	99	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>Blank (BD80909-BLK1 )</b>			Lab File ID: M1048319.D			Analyzed: 04/09/08 11:38		
1,2-Dichloroethane-d4	25.00	110	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	99	70 - 130	15.72	15.705	0.0150	+/-1.0	
Dibromofluoromethane	25.00	102	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	96	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 228D01 (0804037-06)</b>			Lab File ID: M1048323.D			Analyzed: 04/09/08 12:08		
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	105	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	97	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 228D01 (0804037-06RE1 )</b>			Lab File ID: M1048320.D			Analyzed: 04/09/08 12:08		
1,2-Dichloroethane-d4	25.00	109	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	98	70 - 130	15.72	15.705	0.0150	+/-1.0	
Dibromofluoromethane	25.00	102	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	98	70 - 130	12.51	12.5	0.0100	+/-1.0	

**SURROGATE STANDARD RECOVERY AND RT SUMMARY**  
**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0085</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>MW 228S01 Dup (0804037-08 )</b>					Lab File ID: M1048324.D	Analyzed: 04/09/08 12:37		
1,2-Dichloroethane-d4	25.00	112	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	96	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	103	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	98	70 - 130	12.51	12.5	0.0100	+/-1.0	
<b>MW 228S01 Dup (0804037-08RE1 )</b>					Lab File ID: M1048321.D	Analyzed: 04/09/08 12:37		
1,2-Dichloroethane-d4	25.00	109	70 - 130	9.3	9.288333	0.0117	+/-1.0	
4-Bromofluorobenzene	25.00	97	70 - 130	15.71	15.705	0.0050	+/-1.0	
Dibromofluoromethane	25.00	101	70 - 130	8.78	8.768334	0.0117	+/-1.0	
Toluene-d8	25.00	95	70 - 130	12.51	12.5	0.0100	+/-1.0	

# INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRC0282</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (BRC0282-CAL1 )</b> Lab File ID: M1048143.D Analyzed: 03/31/08 13:19									
Fluorobenzene	2903750	10.2	2902131	10.21	100	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	1888743	14.39	1933446	14.39	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	827756	17.06	873844	17.07	95	50 - 200	-0.0100	+/-0.50	
<b>Cal Standard (BRC0282-CAL2 )</b> Lab File ID: M1048144.D Analyzed: 03/31/08 13:46									
Fluorobenzene	2793172	10.2	2902131	10.21	96	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	1901669	14.38	1933446	14.39	98	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	842245	17.06	873844	17.07	96	50 - 200	-0.0100	+/-0.50	
<b>Cal Standard (BRC0282-CAL3 )</b> Lab File ID: M1048145.D Analyzed: 03/31/08 14:13									
Fluorobenzene	2902131	10.21	2902131	10.21	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1933446	14.39	1933446	14.39	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	873844	17.07	873844	17.07	100	50 - 200	0.0000	+/-0.50	
<b>Cal Standard (BRC0282-CAL4 )</b> Lab File ID: M1048146.D Analyzed: 03/31/08 14:41									
Fluorobenzene	2833400	10.2	2902131	10.21	98	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	1916324	14.38	1933446	14.39	99	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	866072	17.06	873844	17.07	99	50 - 200	-0.0100	+/-0.50	
<b>Cal Standard (BRC0282-CAL5 )</b> Lab File ID: M1048147.D Analyzed: 03/31/08 15:08									
Fluorobenzene	2791359	10.21	2902131	10.21	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1922125	14.38	1933446	14.39	99	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	884195	17.06	873844	17.07	101	50 - 200	-0.0100	+/-0.50	
<b>Cal Standard (BRC0282-CAL6 )</b> Lab File ID: M1048148.D Analyzed: 03/31/08 15:36									
Fluorobenzene	3000382	10.21	2902131	10.21	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2021748	14.38	1933446	14.39	105	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	949074	17.07	873844	17.07	109	50 - 200	0.0000	+/-0.50	
<b>Cal Standard (BRC0282-CAL7 )</b> Lab File ID: M1048149.D Analyzed: 03/31/08 16:03									
Fluorobenzene	2954066	10.21	2902131	10.21	102	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1995327	14.39	1933446	14.39	103	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	917466	17.07	873844	17.07	105	50 - 200	0.0000	+/-0.50	
<b>Secondary Cal Check (BRC0282-SCV1 )</b> Lab File ID: M1048152.D Analyzed: 03/31/08 17:25									
Fluorobenzene	2751883	10.21	2902131	10.21	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1858478	14.38	1933446	14.39	96	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	830778	17.07	873844	17.07	95	50 - 200	0.0000	+/-0.50	

# INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0064</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (BRD0064-CCV1 )</b> Lab File ID: M1048257.D Analyzed: 04/07/08 08:52									
Fluorobenzene	3449327	10.21				50 - 200		+/-0.50	
Chlorobenzene-d5	2561062	14.39				50 - 200		+/-0.50	
1,4-Dichlorobenzene-D4	1163116	17.07				50 - 200		+/-0.50	
<b>LCS (BD80709-BS1 )</b> Lab File ID: M1048258.D Analyzed: 04/07/08 09:46									
Fluorobenzene	3389863	10.21	3449327	10.21	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2391170	14.39	2561062	14.39	93	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1086647	17.06	1163116	17.07	93	50 - 200	-0.0100	+/-0.50	
<b>LCS Dup (BD80709-BSD1 )</b> Lab File ID: M1048259.D Analyzed: 04/07/08 10:14									
Fluorobenzene	3397309	10.21	3449327	10.21	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2488631	14.38	2561062	14.39	97	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1101361	17.07	1163116	17.07	95	50 - 200	0.0000	+/-0.50	
<b>Blank (BD80709-BLK1 )</b> Lab File ID: M1048262.D Analyzed: 04/07/08 11:36									
Fluorobenzene	3098883	10.21	3449327	10.21	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2306435	14.39	2561062	14.39	90	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1041693	17.07	1163116	17.07	90	50 - 200	0.0000	+/-0.50	
<b>MW 220S01 (0804037-04RE1 )</b> Lab File ID: M1048272.D Analyzed: 04/07/08 16:18									
Fluorobenzene	3413100	10.21	3449327	10.21	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2615456	14.39	2561062	14.39	102	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1227371	17.07	1163116	17.07	106	50 - 200	0.0000	+/-0.50	
<b>MW 221S01 (0804037-05RE1 )</b> Lab File ID: M1048273.D Analyzed: 04/07/08 16:47									
Fluorobenzene	3214094	10.21	3449327	10.21	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2474136	14.39	2561062	14.39	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1147151	17.07	1163116	17.07	99	50 - 200	0.0000	+/-0.50	
<b>MW 230S01 (0804037-10 )</b> Lab File ID: M1048274.D Analyzed: 04/07/08 17:14									
Fluorobenzene	3273232	10.21	3449327	10.21	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2568016	14.39	2561062	14.39	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1165081	17.06	1163116	17.07	100	50 - 200	-0.0100	+/-0.50	
<b>MW 226S01 (0804037-11 )</b> Lab File ID: M1048275.D Analyzed: 04/07/08 17:42									
Fluorobenzene	3435292	10.21	3449327	10.21	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2646498	14.38	2561062	14.39	103	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1213731	17.07	1163116	17.07	104	50 - 200	0.0000	+/-0.50	
<b>MW 229S01 (0804037-12 )</b> Lab File ID: M1048276.D Analyzed: 04/07/08 18:09									
Fluorobenzene	3285252	10.21	3449327	10.21	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2494707	14.38	2561062	14.39	97	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1161640	17.06	1163116	17.07	100	50 - 200	-0.0100	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**  
**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0064</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>MW 226D01 (0804037-13 )</b>		Lab File ID: M1048277.D				Analyzed: 04/07/08 18:37			
Fluorobenzene	3382560	10.21	3449327	10.21	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2571602	14.38	2561062	14.39	100	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1155234	17.06	1163116	17.07	99	50 - 200	-0.0100	+/-0.50	
<b>MW 227D01 (0804037-01 )</b>		Lab File ID: M1048279.D				Analyzed: 04/07/08 19:31			
Fluorobenzene	3097349	10.21	3449327	10.21	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2329472	14.39	2561062	14.39	91	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1062024	17.07	1163116	17.07	91	50 - 200	0.0000	+/-0.50	
<b>MW 227S01 (0804037-02 )</b>		Lab File ID: M1048280.D				Analyzed: 04/07/08 19:59			
Fluorobenzene	3216284	10.21	3449327	10.21	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2382828	14.39	2561062	14.39	93	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1082537	17.06	1163116	17.07	93	50 - 200	-0.0100	+/-0.50	

# INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0073</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>MW 221S01 (0804037-05 )</b> Lab File ID: M1048305.D Analyzed: 04/07/08 16:47									
Fluorobenzene	2768005	10.21	3292493	10.21	84	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2069035	14.39	2376613	14.39	87	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	996513	17.07	1058187	17.06	94	50 - 200	0.0100	+/-0.50	
<b>Calibration Check (BRD0073-CCV1 )</b> Lab File ID: M1048287.D Analyzed: 04/08/08 08:54									
Fluorobenzene	3292493	10.21				50 - 200		+/-0.50	
Chlorobenzene-d5	2376613	14.39				50 - 200		+/-0.50	
1,4-Dichlorobenzene-D4	1058187	17.06				50 - 200		+/-0.50	
<b>LCS (BD80807-BS1 )</b> Lab File ID: M1048288.D Analyzed: 04/08/08 09:48									
Fluorobenzene	3108533	10.21	3292493	10.21	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2177352	14.39	2376613	14.39	92	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	984567	17.06	1058187	17.06	93	50 - 200	0.0000	+/-0.50	
<b>LCS Dup (BD80807-BSD1 )</b> Lab File ID: M1048289.D Analyzed: 04/08/08 10:16									
Fluorobenzene	3051022	10.21	3292493	10.21	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2190990	14.38	2376613	14.39	92	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	964407	17.07	1058187	17.06	91	50 - 200	0.0100	+/-0.50	
<b>Blank (BD80807-BLK1 )</b> Lab File ID: M1048292.D Analyzed: 04/08/08 11:39									
Fluorobenzene	3146506	10.21	3292493	10.21	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2294869	14.39	2376613	14.39	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1053094	17.07	1058187	17.06	100	50 - 200	0.0100	+/-0.50	
<b>MW 227S01 (0804037-02RE1 )</b> Lab File ID: M1048295.D Analyzed: 04/08/08 13:06									
Fluorobenzene	3156459	10.21	3292493	10.21	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2335323	14.39	2376613	14.39	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1049941	17.07	1058187	17.06	99	50 - 200	0.0100	+/-0.50	
<b>MW 227S01 Dup (0804037-03 )</b> Lab File ID: M1048306.D Analyzed: 04/08/08 13:35									
Fluorobenzene	2903074	10.22	3292493	10.21	88	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2136745	14.39	2376613	14.39	90	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1012607	17.07	1058187	17.06	96	50 - 200	0.0100	+/-0.50	
<b>MW 227S01 Dup (0804037-03RE1 )</b> Lab File ID: M1048296.D Analyzed: 04/08/08 13:35									
Fluorobenzene	2888023	10.21	3292493	10.21	88	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2149492	14.39	2376613	14.39	90	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	977165	17.07	1058187	17.06	92	50 - 200	0.0100	+/-0.50	
<b>MW 230S01 (0804037-10RE1 )</b> Lab File ID: M1048297.D Analyzed: 04/08/08 14:04									
Fluorobenzene	2940993	10.22	3292493	10.21	89	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2215335	14.39	2376613	14.39	93	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	993014	17.07	1058187	17.06	94	50 - 200	0.0100	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**  
**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0073</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>MW 226S01 (0804037-11RE1 )</b>		Lab File ID: M1048298.D				Analyzed: 04/08/08 14:34			
Fluorobenzene	2857814	10.22	3292493	10.21	87	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2154705	14.39	2376613	14.39	91	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	954716	17.07	1058187	17.06	90	50 - 200	0.0100	+/-0.50	
<b>MW 229S01 (0804037-12RE1 )</b>		Lab File ID: M1048299.D				Analyzed: 04/08/08 15:03			
Fluorobenzene	3007251	10.22	3292493	10.21	91	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2222758	14.39	2376613	14.39	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1010201	17.07	1058187	17.06	95	50 - 200	0.0100	+/-0.50	
<b>Equipment Blank (0804037-14 )</b>		Lab File ID: M1048300.D				Analyzed: 04/08/08 15:30			
Fluorobenzene	2879987	10.21	3292493	10.21	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2132739	14.39	2376613	14.39	90	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	972818	17.07	1058187	17.06	92	50 - 200	0.0100	+/-0.50	
<b>MW 230D01 (0804037-09 )</b>		Lab File ID: M1048307.D				Analyzed: 04/08/08 15:59			
Fluorobenzene	3086659	10.22	3292493	10.21	94	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2233734	14.39	2376613	14.39	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1019755	17.07	1058187	17.06	96	50 - 200	0.0100	+/-0.50	
<b>MW 230D01 (0804037-09RE1 )</b>		Lab File ID: M1048301.D				Analyzed: 04/08/08 15:59			
Fluorobenzene	2877893	10.21	3292493	10.21	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2109391	14.39	2376613	14.39	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	945203	17.07	1058187	17.06	89	50 - 200	0.0100	+/-0.50	
<b>MW 227D01 (0804037-01RE1 )</b>		Lab File ID: M1048302.D				Analyzed: 04/08/08 16:29			
Fluorobenzene	2846210	10.21	3292493	10.21	86	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2096603	14.39	2376613	14.39	88	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	956004	17.07	1058187	17.06	90	50 - 200	0.0100	+/-0.50	
<b>MW 226D01 (0804037-13RE1 )</b>		Lab File ID: M1048303.D				Analyzed: 04/08/08 16:58			
Fluorobenzene	2869503	10.22	3292493	10.21	87	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2100432	14.39	2376613	14.39	88	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	952831	17.07	1058187	17.06	90	50 - 200	0.0100	+/-0.50	
<b>MW 228S01 (0804037-07 )</b>		Lab File ID: M1048308.D				Analyzed: 04/08/08 17:27			
Fluorobenzene	2906630	10.21	3292493	10.21	88	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2149164	14.39	2376613	14.39	90	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	986280	17.07	1058187	17.06	93	50 - 200	0.0100	+/-0.50	
<b>MW 228S01 (0804037-07RE1 )</b>		Lab File ID: M1048304.D				Analyzed: 04/08/08 17:27			
Fluorobenzene	2840065	10.22	3292493	10.21	86	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	2156418	14.4	2376613	14.39	91	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	958933	17.07	1058187	17.06	91	50 - 200	0.0100	+/-0.50	

**INTERNAL STANDARD AREA AND RT SUMMARY**  
**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0073</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Matrix Spike (BD80807-MS1 )</b> Lab File ID: M1048309.D Analyzed: 04/08/08 19:44									
Fluorobenzene	3125133	10.21	3292493	10.21	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2299342	14.39	2376613	14.39	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1095113	17.07	1058187	17.06	103	50 - 200	0.0100	+/-0.50	
<b>Matrix Spike Dup (BD80807-MSD1 )</b> Lab File ID: M1048310.D Analyzed: 04/08/08 20:11									
Fluorobenzene	3178450	10.21	3292493	10.21	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2279079	14.39	2376613	14.39	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1083803	17.07	1058187	17.06	102	50 - 200	0.0100	+/-0.50	

# INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Sequence:	<u>BRD0085</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration:	<u>0804001</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>MW 220S01 (0804037-04)</b> Lab File ID: M1048322.D Analyzed: 04/07/08 16:18									
Fluorobenzene	3152477	10.22	3429944	10.22	92	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2331058	14.4	2419813	14.39	96	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1040323	17.07	1056695	17.07	98	50 - 200	0.0000	+/-0.50	
<b>Calibration Check (BRD0085-CCV1 )</b> Lab File ID: M1048314.D Analyzed: 04/09/08 08:54									
Fluorobenzene	3429944	10.22				50 - 200		+/-0.50	
Chlorobenzene-d5	2419813	14.39				50 - 200		+/-0.50	
1,4-Dichlorobenzene-D4	1056695	17.07				50 - 200		+/-0.50	
<b>LCS (BD80909-BS1 )</b> Lab File ID: M1048315.D Analyzed: 04/09/08 09:49									
Fluorobenzene	3409147	10.22	3429944	10.22	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2368807	14.39	2419813	14.39	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1031346	17.07	1056695	17.07	98	50 - 200	0.0000	+/-0.50	
<b>LCS Dup (BD80909-BSD1 )</b> Lab File ID: M1048316.D Analyzed: 04/09/08 10:16									
Fluorobenzene	3382140	10.21	3429944	10.22	99	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	2354600	14.39	2419813	14.39	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1040451	17.07	1056695	17.07	98	50 - 200	0.0000	+/-0.50	
<b>Blank (BD80909-BLK1 )</b> Lab File ID: M1048319.D Analyzed: 04/09/08 11:38									
Fluorobenzene	3201761	10.22	3429944	10.22	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2348120	14.39	2419813	14.39	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1073004	17.07	1056695	17.07	102	50 - 200	0.0000	+/-0.50	
<b>MW 228D01 (0804037-06)</b> Lab File ID: M1048323.D Analyzed: 04/09/08 12:08									
Fluorobenzene	3031784	10.22	3429944	10.22	88	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2259342	14.4	2419813	14.39	93	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1034705	17.08	1056695	17.07	98	50 - 200	0.0100	+/-0.50	
<b>MW 228D01 (0804037-06RE1 )</b> Lab File ID: M1048320.D Analyzed: 04/09/08 12:08									
Fluorobenzene	3242636	10.22	3429944	10.22	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2334801	14.4	2419813	14.39	96	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1082053	17.07	1056695	17.07	102	50 - 200	0.0000	+/-0.50	
<b>MW 228S01 Dup (0804037-08 )</b> Lab File ID: M1048324.D Analyzed: 04/09/08 12:37									
Fluorobenzene	3183186	10.22	3429944	10.22	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2304911	14.39	2419813	14.39	95	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-D4	1082064	17.07	1056695	17.07	102	50 - 200	0.0000	+/-0.50	
<b>MW 228S01 Dup (0804037-08RE1 )</b> Lab File ID: M1048321.D Analyzed: 04/09/08 12:37									
Fluorobenzene	3232495	10.22	3429944	10.22	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	2365689	14.4	2419813	14.39	98	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-D4	1076149	17.08	1056695	17.07	102	50 - 200	0.0100	+/-0.50	

# INITIAL CALIBRATION STANDARDS

## 8260B

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Sequence: BRC0282 Instrument: VMS1  
Calibration: 0804001

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
8C31047	8260 BFB Tune @ 5ppb MS-1 AQ	BRC0282-TUN1	M1048142.D	03/31/08 11:35
8C31048	8260 ICAL1 MS-1 AQ	BRC0282-CAL1	M1048143.D	03/31/08 13:19
8C31049	8260 ICAL2 MS-1 AQ	BRC0282-CAL2	M1048144.D	03/31/08 13:46
8C31050	8260 ICAL3 MS-1 AQ	BRC0282-CAL3	M1048145.D	03/31/08 14:13
8C31051	8260 ICAL4 MS-1 AQ	BRC0282-CAL4	M1048146.D	03/31/08 14:41
8C31052	8260 ICAL5 MS-1 AQ	BRC0282-CAL5	M1048147.D	03/31/08 15:08
8C31053	8260 ICAL6 MS-1 AQ	BRC0282-CAL6	M1048148.D	03/31/08 15:36
8C31054	8260 ICAL7 MS-1 AQ	BRC0282-CAL7	M1048149.D	03/31/08 16:03
8C31055	8260 SCV1 MS-1 AQ	BRC0282-SCV1	M1048152.D	03/31/08 17:25

**MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Lab File ID: M1048142.D Injection Date: 03/31/08  
Instrument ID: VMS1 Injection Time: 11:35  
Sequence: BRC0282 Lab Sample ID: BRC0282-TUN1  
Calibration: 0804001

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
96	5 - 9% of 95	6.88	PASS
95	Base peak, 100% relative abundance	100	PASS
75	30 - 60% of 95	39	PASS
50	15 - 40% of 95	17.1	PASS
177	5 - 9% of 176	6.88	PASS
176	95 - 101% of 174	97.3	PASS
175	5 - 9% of 174	7.46	PASS
174	50 - 100% of 95	76.2	PASS
173	Less than 2% of 174	0	PASS

# INITIAL CALIBRATION DATA

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	0.4	<u>0.2897099</u>	1	0.3091101	5	0.3144851	10	0.3405818	25	0.3450525	50	0.3528291
1,1,1-Trichloroethane	0.4	<u>0.2724279</u>	1	0.302425	5	0.28911	10	0.3184937	25	0.317804	50	0.3098939
1,1,2,2-Tetrachloroethane	0.4	0.8372032	1	0.7591318	5	0.8408766	10	0.9031726	25	0.8819717	50	0.8706307
1,1,2-Trichloroethane	0.4	<u>0.1494619</u>	1	0.1852106	5	0.1880618	10	0.1992959	25	0.1994333	50	0.1987107
1,1-Dichloroethane	0.4	<u>0.3967068</u>	1	0.4710505	5	0.4502726	10	0.4769111	25	0.4707703	50	0.4638809
1,1-Dichloroethene	0.4	<u>0.2085019</u>	1	0.2410163	5	0.2396153	10	0.2440681	25	0.2470657	50	0.2435022
1,1-Dichloropropene	0.4	<u>0.2941885</u>	1	0.3369646	5	0.3296181	10	0.3583116	25	0.3502394	50	0.3503859
1,2,3-Trichlorobenzene	0.4	<u>0.6137074</u>	1	0.574625	5	0.5141593	10	0.588626	25	0.5825683	50	0.5734848
1,2,3-Trichloropropane	0.4	<u>0.572859</u>	1	0.6078398	5	0.642546	10	0.7026927	25	0.7000854	50	0.7119355
1,2,4-Trichlorobenzene	0.4	<u>0.7129214</u>	1	0.623245	5	0.6253977	10	0.6980597	25	0.702923	50	0.6971306
1,2,4-Trimethylbenzene	0.4	<u>4.776867</u>	1	1.878343	5	1.905987	10	2.153811	25	2.079082	50	2.048629
1,2-Dibromo-3-Chloropropane	0.4		1	<u>4.811545E-02</u>	5	6.842755E-02	10	6.774552E-02	25	0.0727905	50	7.654356E-02
1,2-Dibromoethane	0.4	<u>0.2778965</u>	1	0.3031022	5	0.3150075	10	0.3379008	25	0.3373163	50	0.3438384
1,2-Dichlorobenzene	0.4	<u>4.327384</u>	1	1.442158	5	1.391827	10	1.506809	25	1.438983	50	1.415937
1,2-Dichloroethane	0.4	<u>0.1844167</u>	1	0.2065125	5	0.2235581	10	0.2399273	25	0.2360288	50	0.2301767
1,2-Dichloropropane	0.4	<u>0.2379681</u>	1	0.2631238	5	0.2676482	10	0.2845962	25	0.2837052	50	0.2799197
1,3,5-Trimethylbenzene	0.4	<u>4.78102</u>	1	1.873653	5	1.891087	10	2.101318	25	2.013459	50	1.979096
1,3-Dichlorobenzene	0.4	<u>4.44638</u>	1	1.480686	5	1.50813	10	1.622787	25	1.554802	50	1.539555
1,3-Dichloropropane	0.4	<u>0.4482809</u>	1	0.4671949	5	0.5079144	10	0.526054	25	0.5198731	50	0.5222548
1,4-Dichlorobenzene	0.4	<u>4.525057</u>	1	1.611437	5	1.611277	10	1.745219	25	1.644793	50	1.629797
1,4-Dioxane - Screen	8		20	9.456095E-04	100	1.254681E-03	200	1.349748E-03	500	1.363834E-03	1000	1.392314E-03
1-Chlorohexane	0.4	<u>0.3465268</u>	1	0.3560951	5	0.3823588	10	0.4264049	25	0.4326722	50	0.4395046
2,2-Dichloropropane	0.4	<u>0.2301334</u>	1	0.2733362	5	0.257671	10	0.2785796	25	0.2790308	50	0.2823084
2-Butanone	2	<u>4.028842E-02</u>	5	1.424366E-02	25	1.441286E-02	50	0.0160648	125	1.668513E-02	250	1.673044E-02
2-Chlorotoluene	0.4	<u>4.895864</u>	1	2.12364	5	2.14675	10	2.313321	25	2.196704	50	2.148722
2-Hexanone	2	<u>9.812743E-02</u>	5	0.1386729	25	0.1485638	50	0.1578436	125	0.1667514	250	0.1686262
4-Chlorotoluene	0.4	<u>4.935655</u>	1	2.261189	5	2.172785	10	2.36812	25	2.239705	50	2.223666
4-Isopropyltoluene	0.4	<u>4.522339</u>	1	1.699951	5	1.647142	10	1.854136	25	1.787989	50	1.778347
4-Methyl-2-Pentanone	2	<u>3.944468E-02</u>	5	4.681953E-02	25	5.045568E-02	50	5.666973E-02	125	0.0600223	250	6.078636E-02
Acetone	2	<u>4.472665E-03</u>	5	<u>8.046407E-03</u>	25	6.001107E-03	50	5.384167E-03	125	6.361704E-03	250	5.702141E-03
Benzene	0.4	<u>0.9643995</u>	1	1.103906	5	1.075978	10	1.126629	25	1.105865	50	1.086058

# INITIAL CALIBRATION DATA

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Bromobenzene	0.4	<u>0.9322645</u>	1	1.03138	5	1.030247	10	1.11112	25	1.064116	50	1.05527
Bromochloromethane	0.4	<u>0.159901</u>	1	0.1765376	5	0.1705747	10	0.1848098	25	0.1803154	50	0.1756761
Bromodichloromethane	0.4	<u>0.2507103</u>	1	0.2847659	5	0.3162624	10	0.3516085	25	0.3563784	50	0.3622219
Bromoform	0.4	<u>0.1593652</u>	1	0.1614371	5	0.1940706	10	0.2276363	25	0.2428474	50	0.2666205
Bromomethane	0.4	<u>0.2817693</u>	1	0.2216118	5	0.1690861	10	0.1817198	25	0.1892974	50	0.2070321
Carbon Disulfide	0.4	<u>0.8517004</u>	1	0.9437389	5	0.9630802	10	1.028771	25	1.038292	50	1.030965
Carbon Tetrachloride	0.4	<u>0.1807792</u>	1	0.2113099	5	0.2376719	10	0.253704	25	0.2547379	50	0.2602899
Chlorobenzene	0.4	<u>0.9338883</u>	1	1.006774	5	0.976937	10	1.048164	25	1.007477	50	1.005309
Chloroethane	0.4	<u>0.1266896</u>	1	0.1170264	5	0.1169106	10	0.1181937	25	0.1159041	50	0.1091649
Chloroform	0.4	<u>0.3771204</u>	1	0.4588153	5	0.4862479	10	0.5184707	25	0.5087024	50	0.5010062
Chloromethane	0.4	<u>0.3849333</u>	1	0.3757287	5	0.3682656	10	0.389682	25	0.3627344	50	0.321896
cis-1,2-Dichloroethene	0.4	<u>0.2888937</u>	1	0.3039645	5	0.3079099	10	0.3284905	25	0.3207022	50	0.319017
cis-1,3-Dichloropropene	0.4	0.2767972	1	0.3135951	5	0.3514693	10	0.3894111	25	0.3917035	50	0.404376
Dibromochloromethane	0.4	0.2185647	1	0.2970943	5	0.3286438	10	0.3699922	25	0.3959238	50	0.4047077
Dibromomethane	0.4	<u>0.1634094</u>	1	0.1751951	5	0.184654	10	0.2023302	25	0.1985108	50	0.1973197
Dichlorodifluoromethane	0.4	<u>0.244576</u>	1	0.2657821	5	0.2497596	10	0.2596889	25	0.2637937	50	0.2634118
Diethyl Ether	0.4	<u>5.411106E-02</u>	1	6.300185E-02	5	7.400424E-02	10	7.858492E-02	25	7.830809E-02	50	<u>7.905827E-02</u>
Di-isopropyl ether	0.4	<u>0.862204</u>	1	0.9295793	5	0.9170296	10	0.9824186	25	0.9716163	50	0.9456558
Ethyl tertiary-butyl ether	0.4	<u>0.5279595</u>	1	0.600151	5	0.6076862	10	0.6482583	25	0.6388462	50	0.6172211
Ethylbenzene	0.4	<u>1.350799</u>	1	1.45204	5	1.527164	10	1.617781	25	1.559989	50	1.590754
Hexachlorobutadiene	0.4	0.289563	1	0.2693397	5	0.2444258	10	0.286841	25	0.2640594	50	0.2697045
Hexachloroethane	0.4	0.232934	1	0.2875351	5	0.300271	10	0.365853	25	0.3824767	50	0.4221141
Isopropylbenzene	0.4	<u>2.196601</u>	1	2.395443	5	2.475871	10	2.753408	25	2.673287	50	2.580024
Methyl tert-Butyl Ether	0.4	<u>0.4304348</u>	1	0.4443604	5	0.451911	10	0.4739491	25	0.4787274	50	0.4698235
Methylene Chloride	0.4	<u>0.4003874</u>	1	0.4009778	5	0.3364407	10	0.3446151	25	0.3369807	50	0.3292244
Naphthalene	0.4	<u>4.159158</u>	1	1.047201	5	1.07383	10	1.233942	25	1.252166	50	1.23232
n-Butylbenzene	0.4	<u>4.446456</u>	1	1.519748	5	1.559443	10	1.744832	25	1.717427	50	1.737496
n-Propylbenzene	0.4	<u>2.949918</u>	1	3.105688	5	3.220569	10	3.496773	25	3.387021	50	3.384271
sec-Butylbenzene	0.4	<u>4.964649</u>	1	2.021858	5	2.147157	10	2.338527	25	2.252544	50	2.236742
Styrene	0.4	<u>0.7227691</u>	1	0.8102751	5	0.8816693	10	0.9796556	25	0.9786991	50	0.9829365
tert-Butylbenzene	0.4	<u>4.39179</u>	1	1.464123	5	1.471475	10	1.597604	25	1.530995	50	1.499314

# INITIAL CALIBRATION DATA

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Tertiary-amyl methyl ether	0.4	<u>0.472557</u>	1	0.5463949	5	0.5240339	10	0.5632429	25	0.5628506	50	0.5521424
Tetrachloroethene	0.4	<u>0.293052</u>	1	0.3527691	5	0.3481426	10	0.3621856	25	0.3581916	50	0.3605484
Tetrahydrofuran	0.4	<u>0.0393672</u>	1	4.344523E-02	5	3.992583E-02	10	3.966436E-02	25	4.236467E-02	50	4.031787E-02
Toluene	0.4	<u>0.5227723</u>	1	0.5815073	5	0.6023074	10	0.6391032	25	0.6356098	50	0.6142193
trans-1,2-Dichloroethene	0.4	<u>0.2410676</u>	1	0.2678048	5	0.2804732	10	0.3043675	25	0.2943548	50	0.2925564
trans-1,3-Dichloropropene	0.4	0.1723203	1	0.2239121	5	0.2463328	10	0.2776629	25	0.2958437	50	0.2980086
Trichloroethene	0.4	<u>0.2609557</u>	1	0.2984421	5	0.2804508	10	0.3086601	25	0.2964094	50	0.2854921
Trichlorofluoromethane	0.4	<u>0.1866337</u>	1	0.231878	5	0.2321518	10	0.2493285	25	0.2409618	50	0.2353494
Vinyl Acetate	0.4	<u>0.3865045</u>	1	0.4018639	5	0.3936245	10	0.4331033	25	0.449217	50	0.4512129
Vinyl Chloride	0.4	<u>0.2045634</u>	1	0.2325403	5	0.2284476	10	0.2383453	25	0.2262045	50	0.2224827
Xylene O	0.4	<u>0.4884532</u>	1	0.5254595	5	0.5550556	10	0.5953847	25	0.5897509	50	0.5775722
Xylene P,M	0.8	<u>0.4628905</u>	2	0.5090528	10	0.552317	20	0.5813644	50	0.573034	100	0.5700363
1,2-Dichloroethane-d4	0.4	<u>0.1829961</u>	1	0.1901333	5	0.1909045	10	0.1997732	25	0.198379	50	0.1939545
4-Bromofluorobenzene	0.4	<u>0.4320003</u>	1	0.4279925	5	0.4353988	10	0.4629058	25	0.4633034	50	0.4562213
Dibromofluoromethane	0.4	<u>0.2845028</u>	1	0.3453153	5	0.3303021	10	0.3430666	25	0.3469808	50	0.3379658
Toluene-d8	0.4	<u>1.079355</u>	1	1.157155	5	1.233438	10	1.291186	25	1.266388	50	1.278619

# INITIAL CALIBRATION DATA (Continued)

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	100	0.374703										
1,1,1-Trichloroethane	100	0.3286312										
1,1,2,2-Tetrachloroethane	100	0.8814098										
1,1,2-Trichloroethane	100	0.2056595										
1,1-Dichloroethane	100	0.4728752										
1,1-Dichloroethene	100	0.2522304										
1,1-Dichloropropene	100	0.3629247										
1,2,3-Trichlorobenzene	100	0.6135492										
1,2,3-Trichloropropane	100	0.7575777										
1,2,4-Trichlorobenzene	100	0.7493626										
1,2,4-Trimethylbenzene	100	2.163703										
1,2-Dibromo-3-Chloropropane	100	8.009834E-02										
1,2-Dibromoethane	100	0.3576423										
1,2-Dichlorobenzene	100	1.494678										
1,2-Dichloroethane	100	0.2357059										
1,2-Dichloropropane	100	0.2900303										
1,3,5-Trimethylbenzene	100	2.113374										
1,3-Dichlorobenzene	100	1.63538										
1,3-Dichloropropane	100	0.5371536										
1,4-Dichlorobenzene	100	1.702744										
1,4-Dioxane - Screen	2000	1.500656E-03										
1-Chlorohexane	100	0.4624528										
2,2-Dichloropropane	100	0.2921657										
2-Butanone	500	1.713399E-02										
2-Chlorotoluene	100	2.239517										
2-Hexanone	500	0.1730338										
4-Chlorotoluene	100	2.324953										
4-Isopropyltoluene	100	1.882326										
4-Methyl-2-Pentanone	500	6.102892E-02										
Acetone	500	5.874953E-03										
Benzene	100	1.103792										

# INITIAL CALIBRATION DATA (Continued)

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Bromobenzene	100	1.105023										
Bromochloromethane	100	0.1774354										
Bromodichloromethane	100	0.3797073										
Bromoform	100	0.2871395										
Bromomethane	100	0.2331689										
Carbon Disulfide	100	1.053562										
Carbon Tetrachloride	100	0.2792604										
Chlorobenzene	100	1.039622										
Chloroethane	100	0.1125585										
Chloroform	100	0.5128071										
Chloromethane	100	0.3073691										
cis-1,2-Dichloroethene	100	0.326645										
cis-1,3-Dichloropropene	100	0.4244099										
Dibromochloromethane	100	0.4280978										
Dibromomethane	100	0.2025319										
Dichlorodifluoromethane	100	0.2801004										
Diethyl Ether	100	8.178423E-02										
Di-isopropyl ether	100	0.9703084										
Ethyl tertiary-butyl ether	100	0.6336255										
Ethylbenzene	100	1.534023										
Hexachlorobutadiene	100	0.2951543										
Hexachloroethane	100	0.4707886										
Isopropylbenzene	100	2.671272										
Methyl tert-Butyl Ether	100	0.4739262										
Methylene Chloride	100	0.3353209										
Naphthalene	100	1.309218										
n-Butylbenzene	100	1.851088										
n-Propylbenzene	100	3.205991										
sec-Butylbenzene	100	2.380507										
Styrene	100	1.020662										
tert-Butylbenzene	100	1.612313										

**INITIAL CALIBRATION DATA (Continued)****8260B**

Laboratory: ESS Laboratory SDG: 0804037  
Client: MACTEC Engineering & Consulting, Inc. Project: Providence Gorham Site  
Calibration: 0804001 Instrument: VMS1  
Matrix: Aqueous Calibration Date: 03/31/08 00:00

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Tertiary-amyl methyl ether	100	0.5651714										
Tetrachloroethene	100	0.3739095										
Tetrahydrofuran	100	4.349598E-02										
Toluene	100	0.6428054										
trans-1,2-Dichloroethene	100	0.3015077										
trans-1,3-Dichloropropene	100	0.3174786										
Trichloroethene	100	0.2994571										
Trichlorofluoromethane	100	0.2448702										
Vinyl Acetate	100	0.4720915										
Vinyl Chloride	100	0.2139304										
Xylene O	100	0.5910829										
Xylene P,M	200	0.5852693										
1,2-Dichloroethane-d4	100	0.196845										
4-Bromofluorobenzene	100	0.4646503										
Dibromofluoromethane	100	0.3492809										
Toluene-d8	100	1.320874										

# INITIAL CALIBRATION DATA (Continued)

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1,2-Tetrachloroethane	0.3394603	7.213662	14.32833	2.361777E-02			15	
1,1,1-Trichloroethane	0.3110596	4.471271	9.498333	0.0432609			15	
1,1,2,2-Tetrachloroethane	0.8534852	5.594799	15.27714	0.0325807			SPCC (0.3)	
1,1,2-Trichloroethane	0.196062	3.968538	12.34	6.164233E-03			15	
1,1-Dichloroethane	0.4676268	2.029991	7.77	1.784319E-02			SPCC (0.1)	
1,1-Dichloroethene	0.244583	1.860073	6.615	8.139154E-02			CCC (30)	
1,1-Dichloropropene	0.348074	3.632712	9.705	5.793717E-02			15	
1,2,3-Trichlorobenzene	0.5745021	5.736982	20.195	2.575139E-02			15	
1,2,3-Trichloropropane	0.6871129	7.773051	15.43	1.701412E-02			15	
1,2,4-Trichlorobenzene	0.6826864	7.210475	19.58	3.417535E-02			15	
1,2,4-Trimethylbenzene	2.038259	5.965823	16.81667	2.752023E-02			15	
1,2-Dibromo-3-Chloropropane	7.312109E-02	7.218221	17.978	3.052683E-02			15	
1,2-Dibromoethane	0.3324679	5.990407	13.37	1.484015E-03			15	
1,2-Dichlorobenzene	1.448399	3.077611	17.47	1.913191E-02			15	
1,2-Dichloroethane	0.2286516	5.355429	9.378333	4.773904E-02			15	
1,2-Dichloropropene	0.2781706	3.779827	10.68333	5.023833E-02			CCC (30)	
1,3,5-Trimethylbenzene	1.995331	5.082961	16.405	3.164427E-02			15	
1,3-Dichlorobenzene	1.55689	3.958691	17.02333	3.465739E-02			15	
1,3-Dichloropropane	0.5134075	4.778731	12.65667	0.0365437			15	
1,4-Dichlorobenzene	1.657544	3.296586	17.095	3.224339E-02			15	
1,4-Dioxane - Screen	1.30114E-03	14.70227	10.91333	4.803716E-02			15	
1-Chlorohexane	0.4165814	9.490214	14.30833	2.466383E-02			15	
2,2-Dichloropropane	0.2771819	4.118619	8.726666	0.0587026			15	
2-Butanone	1.587848E-02	7.87014	8.225	6.868155E-02			15	
2-Chlorotoluene	2.194776	3.25677	16.22333	2.922661E-02			15	
2-Hexanone	0.1589153	8.315331	12.83333	4.158666E-02			15	
4-Chlorotoluene	2.26507	3.12769	16.30167	2.253902E-02			15	
4-Isopropyltoluene	1.774982	5.03536	17.115	2.372518E-02			15	
4-Methyl-2-Pentanone	5.596375E-02	10.71644	11.69833	4.006268E-02			15	
Acetone	5.864814E-03	6.165845	6.144	9.189471E-02			15	
Benzene	1.100371	1.596889	9.973333	4.758507E-02			15	
Bromobenzene	1.066193	3.290436	15.93333	3.173249E-02			15	

# INITIAL CALIBRATION DATA (Continued)

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Bromochloromethane	0.1775582	2.683961	8.586667	6.020003E-02			15	
Bromodichloromethane	0.3418241	10.19128	10.79	0.01928			15	
Bromoform	0.2299586	20.18092	14.99833	2.645206E-02	0.99918		SPCC (0.1)	
Bromomethane	0.2003193	12.26956	5.211667	7.784887E-02			15	
Carbon Disulfide	1.009735	4.447043	7.061667	5.427119E-02			15	
Carbon Tetrachloride	0.2494957	9.219632	9.93	8.925604E-02			15	
Chlorobenzene	1.014047	2.559274	14.42167	2.857534E-02			SPCC (0.3)	
Chloroethane	0.1149597	2.982369	5.373333	9.583287E-02			15	
Chloroform	0.4976749	4.434075	8.631667	4.121888E-02			CCC (30)	
Chloromethane	0.3542793	9.128739	4.466667	0.1146273			SPCC (0.1)	
cis-1,2-Dichloroethene	0.3177882	3.12039	8.398333	4.271731E-02			15	
cis-1,3-Dichloropropene	0.3645374	14.5987	11.57286	4.800349E-02			15	
Dibromochloromethane	0.3490035	20.96579	13.03286	4.033507E-02	0.99963		0.99	
Dibromomethane	0.1934236	5.722274	10.65	1.081857E-02			15	
Dichlorodifluoromethane	0.2637561	3.729497	4.213333	0.1213099			15	
Diethyl Ether	7.347477E-02	9.921923	6.265	9.299074E-02			15	
Di-isopropyl ether	0.952768	2.740015	8.221667	5.147704E-02			15	
Ethyl tertiary-butyl ether	0.6242981	3.023796	8.666667	5.818785E-02			15	
Ethylbenzene	1.546959	3.73281	14.64	1.664754E-02			CCC (30)	
Hexachlorobutadiene	0.2741554	6.436086	19.96143	3.142003E-02			15	
Hexachloroethane	0.3517104	23.54786	18.05143	3.266232E-02	0.99831		0.99	
Isopropylbenzene	2.591551	5.211575	15.65833	2.602629E-02			15	
Methyl tert-Butyl Ether	0.4654496	2.988715	7.606667	6.747958E-02			15	
Methylene Chloride	0.3472599	7.708887	6.768333	6.193017E-02			15	
Naphthalene	1.191446	8.856579	19.92833	0.0268962			15	
n-Butylbenzene	1.688339	7.396785	17.54833	2.370889E-02			15	
n-Propylbenzene	3.300052	4.418326	16.11333	2.495369E-02			15	
sec-Butylbenzene	2.229556	5.853796	16.93167	2.345547E-02			15	
Styrene	0.9423163	8.439008	15.21	3.28691E-03			15	
tert-Butylbenzene	1.529304	4.140773	16.70833	0.013582			15	
Tertiary-amyl methyl ether	0.552306	2.840513	10.12667	5.334905E-02			15	
Tetrachloroethene	0.3592911	2.46343	13.58667	4.117611E-02			15	

# INITIAL CALIBRATION DATA (Continued)

**8260B**

Laboratory:	<u>ESS Laboratory</u>	SDG:	<u>0804037</u>
Client:	<u>MACTEC Engineering &amp; Consulting, Inc.</u>	Project:	<u>Providence Gorham Site</u>
Calibration:	<u>0804001</u>	Instrument:	<u>VMS1</u>
Matrix:	<u>Aqueous</u>	Calibration Date:	<u>03/31/08 00:00</u>

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Tetrahydrofuran	4.153566E-02	4.273396	9.011667	4.837169E-02			15	
Toluene	0.6192587	3.924771	12.59833	3.227668E-02			CCC (30)	
trans-1,2-Dichloroethene	0.2901774	4.74409	7.498333	0.0547997			15	
trans-1,3-Dichloropropene	0.2616513	19.42713	12.12	1.620168E-02	0.99957		0.99	
Trichloroethene	0.2948186	3.46631	10.73	0.0120037			15	
Trichlorofluoromethane	0.23909	2.992088	6.02	0.1029558			15	
Vinyl Acetate	0.4335189	7.027796	7.88	9.924249E-03			15	
Vinyl Chloride	0.2269918	3.703504	4.705	0.1788025			CCC (30)	
Xylene O	0.5723843	4.758598	15.28833	3.037879E-02			15	
Xylene P,M	0.5618456	5.034037	14.85	1.584845E-02			15	
1,2-Dichloroethane-d4	0.1949982	2.040406	9.288333	4.438089E-02			15	
4-Bromofluorobenzene	0.4517453	3.536455	15.705	3.580263E-02			15	
Dibromofluoromethane	0.3421519	2.03717	8.768334	4.937639E-02			15	
Toluene-d8	1.257943	4.542055	12.5	0			15	

# VOA Logbooks

# HOLDING TIME SUMMARY

**8260B**

Laboratory: ESS Laboratory

SDG: 0804037

Client: MACTEC Engineering & Consulting, Inc.

Project: Providence Gorham Site

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
MW 227D01	03/31/08 10:18	04/02/08 16:10	04/07/08 07:00	6.86	14.00	04/07/08 19:31	7.38	14.00	
MW 227D01	03/31/08 10:18	04/02/08 16:10	04/08/08 07:00	7.86	14.00	04/08/08 16:29	8.26	14.00	
MW 227S01	03/31/08 12:15	04/02/08 16:10	04/07/08 07:00	6.78	14.00	04/07/08 19:59	7.32	14.00	
MW 227S01	03/31/08 12:15	04/02/08 16:10	04/08/08 07:00	7.78	14.00	04/08/08 13:06	8.04	14.00	
MW 227S01 Dup	03/31/08 12:15	04/02/08 16:10	04/08/08 07:00	7.78	14.00	04/08/08 13:35	8.06	14.00	
MW 227S01 Dup	03/31/08 12:15	04/02/08 16:10	04/08/08 07:00	7.78	14.00	04/08/08 13:35	8.06	14.00	
MW 220S01	03/31/08 14:25	04/02/08 16:10	04/09/08 07:00	8.69	14.00	04/07/08 16:18	7.08	14.00	
MW 220S01	03/31/08 14:25	04/02/08 16:10	04/07/08 07:00	6.69	14.00	04/07/08 16:18	7.08	14.00	
MW 221S01	03/31/08 16:30	04/02/08 16:10	04/08/08 07:00	7.60	14.00	04/07/08 16:47	7.01	14.00	
MW 221S01	03/31/08 16:30	04/02/08 16:10	04/07/08 07:00	6.60	14.00	04/07/08 16:47	7.01	14.00	
MW 228D01	04/01/08 10:15	04/02/08 16:10	04/09/08 07:00	7.86	14.00	04/09/08 12:08	8.08	14.00	
MW 228D01	04/01/08 10:15	04/02/08 16:10	04/09/08 07:00	7.86	14.00	04/09/08 12:08	8.08	14.00	
MW 228S01	04/01/08 14:42	04/02/08 16:10	04/08/08 07:00	6.68	14.00	04/08/08 17:27	7.11	14.00	
MW 228S01	04/01/08 14:42	04/02/08 16:10	04/08/08 07:00	6.68	14.00	04/08/08 17:27	7.11	14.00	
MW 228S01 Dup	04/01/08 12:20	04/02/08 16:10	04/09/08 07:00	7.78	14.00	04/09/08 12:37	8.01	14.00	
MW 228S01 Dup	04/01/08 12:20	04/02/08 16:10	04/09/08 07:00	7.78	14.00	04/09/08 12:37	8.01	14.00	
MW 230D01	04/01/08 14:42	04/02/08 16:10	04/08/08 07:00	6.68	14.00	04/08/08 15:59	7.05	14.00	
MW 230D01	04/01/08 14:42	04/02/08 16:10	04/08/08 07:00	6.68	14.00	04/08/08 15:59	7.05	14.00	
MW 230S01	04/01/08 16:05	04/02/08 16:10	04/07/08 07:00	5.62	14.00	04/07/08 17:14	6.05	14.00	
MW 230S01	04/01/08 16:05	04/02/08 16:10	04/08/08 07:00	6.62	14.00	04/08/08 14:04	6.92	14.00	
MW 226S01	04/02/08 09:50	04/02/08 16:10	04/07/08 07:00	4.88	14.00	04/07/08 17:42	5.33	14.00	
MW 226S01	04/02/08 09:50	04/02/08 16:10	04/08/08 07:00	5.88	14.00	04/08/08 14:34	6.20	14.00	
MW 229S01	04/02/08 10:50	04/02/08 16:10	04/07/08 07:00	4.84	14.00	04/07/08 18:09	5.30	14.00	
MW 229S01	04/02/08 10:50	04/02/08 16:10	04/08/08 07:00	5.84	14.00	04/08/08 15:03	6.18	14.00	

**HOLDING TIME SUMMARY****8260B**Laboratory: ESS LaboratorySDG: 0804037Client: MACTEC Engineering & Consulting, Inc.Project: Providence Gorham Site

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
MW 226D01	04/02/08 08:50	04/02/08 16:10	04/07/08 07:00	4.92	14.00	04/07/08 18:37	5.41	14.00	
MW 226D01	04/02/08 08:50	04/02/08 16:10	04/08/08 07:00	5.92	14.00	04/08/08 16:58	6.34	14.00	
Equipment Blank	04/01/08 17:05	04/02/08 16:10	04/08/08 07:00	6.58	14.00	04/08/08 15:30	6.93	14.00	

**Sample and Cooler Receipt Checklist**Client: Mactec

Client Project ID: \_\_\_\_\_

Shipped/Delivered Via: ClientESS Project ID: 08040037Date Project Due: 4/9/08Days For Project: 5 Day**Items to be checked upon receipt:**

1. Air Bill Manifest Present?

 \* No

10. Are the samples properly preserved?

 Yes

Air No.: \_\_\_\_\_

2. Were Custody Seals Present?

 No

11. Proper sample containers used?

 Yes

3. Were Custody Seals Intact?

 N/A

12. Any air bubbles in the VOA vials?

 N/A

4. Is Radiation count &lt; 100 CPM?

 Yes

13. Holding times exceeded?

 No

5. Is a cooler present?

 Yes

14. Sufficient sample volumes?

 Yes**Cooler Temp: 4.4**

15. Any Subcontracting needed?

 No**Iced With: Icepacks**16. Are ESS labels on correct containers?  Yes  No

6. Was COC included with samples?

 Yes

ESS Sample IDs: \_\_\_\_\_

7. Was COC signed and dated by client?

 Yes

Sub Lab: \_\_\_\_\_

8. Does the COC match the sample

 Yes

Analysis: \_\_\_\_\_

9. Is COC complete and correct?

 Yes

TAT: \_\_\_\_\_

18. Was there need to call project manager to discuss status? If yes, please explain.

---



---



---



---

Who was called?: \_\_\_\_\_

By whom? \_\_\_\_\_

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	40 ml - VOA	3	HCL
2	Yes	40 ml - VOA	3	HCL
3	Yes	40 ml - VOA	3	HCL
4	Yes	40 ml - VOA	3	HCL
5	Yes	40 ml - VOA	3	HCL
6	Yes	40 ml - VOA	3	HCL
7	Yes	40 ml - VOA	6	HCL
8	Yes	40 ml - VOA	3	HCL
9	Yes	40 ml - VOA	3	HCL
10	Yes	40 ml - VOA	3	HCL
11	Yes	40 ml - VOA	3	HCL
12	Yes	40 ml - VOA	3	HCL
13	Yes	40 ml - VOA	3	HCL
14	Yes	40 ml - VOA	3	HCL

Completed By: JTD JTDDate/Time: 4-20-08Reviewed By: EODate/Time: 500 4/2/08

# ESS Laboratory

Division of Thielisch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211

Tel. (401) 461-7181 Fax (401) 461-4486

[www.esslaboratory.com](http://www.esslaboratory.com)

# CHAIN OF CUSTODY

Page 1 of 1

Turn Time	Standard	Other				
If faster than 5 days, prior approval by laboratory is required #						
State where samples were collected from:						
MA (RI)	CT	NH	NJ	NY	ME	Other
Is this project for any of the following: MA-MCP						
USACE Other						

Co. Name <i>MacTeC</i>	Project # <i>36500500-11-8</i>	Project Name (20 Char. or less) <i>7ektron Gw Wm</i>	Address <i>107 Acuulon Rd</i>	City <i>Wakefield</i>	State <i>MA</i>	Zip <i>01585</i>	Fax # <i>781-215-6606</i>	Email Address <i>dc_heissen@MacTeC.com</i>	Pres Code <i>PO#</i>	Number of Containers	Type of Containers	Reporting Limits	ESS LAB PROJECT ID	
Telephone # <i>781-215-6606</i>	Date	Collection Time	COMP	GRAB	MATRIX	GRAB	COMP	Sample Identification (20 Char. or less)	Code	Pres	MCPP-METALS (13) METHS (13)	MCPP-METALS (13) METHS (13)	Reporting Limits	ESS LAB PROJECT ID
ESS LAB Sample#											8270A 625 PAH	8270A 625 PAH	6-A	08041037
1	3-31-07	10:18	GW	MW	227D01	GW	MW	227D01	✓	✓	EPH	EPH	Yes	No
2	3-31-07	12:15	GW	MW	227S01	GW	MW	227S01	✓	✓	EPH	EPH	Yes	No
3	3-31-08	12:15	GW	MW	227S01DUP	GW	MW	227S01DUP	✓	✓	EPH	EPH	Yes	No
4	3-31-08	14:25	GW	MW	220S01	GW	MW	220S01	✓	✓	EPH	EPH	Yes	No
5	3-31-08	16:30	GW	MW	221S01	GW	MW	221S01	✓	✓	EPH	EPH	Yes	No
6	4-01-07	10:15	GW	MW	228D01	GW	MW	228D01	✓	✓	EPH	EPH	Yes	No
7	4-01-08	14:42	GW	MW	228S01	GW	MW	228S01	✓	✓	EPH	EPH	Yes	No
8	4-01-07	12:20	GW	MW	228S01DUP	GW	MW	228S01DUP	✓	✓	EPH	EPH	Yes	No
9	4-01-08	14:42	GW	MW	230D01	GW	MW	230D01	✓	✓	EPH	EPH	Yes	No

Container Type: P-Poly	G-Glass	S-Sterile	V-VOA	Matrix: S-Soil	D-Solid	D-Sludge	WW-Waste Water	GW-Ground Water	SW-Surface Water	DW-Drinking Water	O-Oil	W-Wipes	F-Filters	
Cooler Present	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Internal Use Only											
Seals Intact	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	NA: <i>None</i>	<input type="checkbox"/> Pickup	Preservation Code: 1- NP, 2- HCl, 3- H <sub>2</sub> SO <sub>4</sub> , 4- HNO <sub>3</sub> , 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- _____									
Cooler Temp:	<i>44</i>		<input type="checkbox"/> Technicians	Sampled by: <i>Mark MacTeC</i>										
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	
<i>Mark</i>	<i>4-2-08 16:10</i>	<i>David</i>	<i>4-20-08 16:10</i>	<i>David</i>	<i>4-20-08 16:10</i>	<i>David</i>	<i>4-20-08 16:10</i>	<i>David</i>	<i>4-20-08 16:10</i>	<i>David</i>	<i>4-20-08 16:10</i>	<i>David</i>	<i>4-20-08 16:10</i>	

\* By circling MA-MCP client acknowledges samples were collected  
in accordance with MADDEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

# ESS Laboratory

Division of Thielich Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211

Tel. (401) 461-7181 Fax (401) 461-4486

[www.esslaboratory.com](http://www.esslaboratory.com)

# CHAIN OF CUSTODY

Page 2 of 2

Turn Time If faster than 5 days, prior approval by laboratory is required #	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Other _____					
State where samples were collected from:	MA <input checked="" type="checkbox"/>	RY <input type="checkbox"/>	CT <input type="checkbox"/>	NH <input type="checkbox"/>	NY <input type="checkbox"/>	ME <input type="checkbox"/>	Other _____
Is this project for any of the following: MA-MCP	USACE <input type="checkbox"/>	Navy <input type="checkbox"/>					

Co. Name	Project #	Project Name (20 Char. or less)					
Maecke	3660 Social	Textron/Barham					
Contact Person	Address	167 Audubon Rd.					
City	State	MA					
Telephone #	Fax #	Email Address					
181-245-6666	01880	elcheise.m@maecke.com					
ESS LAB Sample#	Date	Collection Time	Matrix	GRAB	COMP	Sample Identification (20 Char. or less)	Type of Containers Number of Containers Pres Code

Write Required Analysis							
10	4-01-08	16:05	X	GRAB	MW 2305C 1	2	V X No RPD Readings no order
11	4-02-08	09:50	X	GRAB	MW 226S01	2	V X No RPD Readings no order
12	4-02-08	10:50	X	GRAB	MW 229SC 1	2	V X No RPD Readings no order
13	4-02-08	08:50	X	GRAB	MW 226DC1	2	V X No RPD Readings no order
14	4-01-08	17:05	X	GRAB	Equipment Blank	2	V X No RPD Readings no order
15	4-01-08	11:12	Y	GRAB	MW 2285MSM5D	2	V X No RPD Readings no order
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75							
76							
77							
78							
79							
80							
81							
82							
83							
84							
85							
86							
87							
88							
89							
90							
91							
92							
93							
94							
95							
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
121							
122							
123							
124							
125							
126							
127							
128							
129							
130							
131							
132							
133							
134							
135							
136							
137							
138							
139							
140							
141							
142							
143							
144							
145							
146							
147							
148							
149							
150							
151							
152							
153							
154							
155							
156							
157							
158							
159							
160							
161							
162							
163							
164							
165							
166							
167							
168							
169							
170							
171							
172							
173							
174							
175							
176							
177							
178							
179							
180							
181							
182							
183							
184							
185							
186							
187							
188							
189							
190							
191							
192							
193							
194							
195							
196							
197							
198							
199							
200							
201							
202							
203							
204							
205							
206							
207							
208							
209							
210							
211							
212							
213							
214							
215							
216							
217							
218							
219							
220							
221							
222							
223							
224							
225							
226							
227							
228							
229							
230							
231							
232							
233							
234							
235							
236							
237							
238							
239							
240							
241							
242							
243							
244							
245							
246							
247							
248							
249							
250							
251							
252							
253							
254							
255							
256							
257							
258							
259							
260							
261							