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September 16, 2013

Project 130274

Mr. Joseph T. Martella, II  
Rhode Island Department of Environmental Management  
Office of Waste Management  
235 Promenade Street  
Providence, RI 02908-5767

**Re: Status Report: June and August 2013 Activities  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, RI  
Site Remediation Case No. 97-030**

Dear Mr. Martella:

Shaw Environmental, Inc., a CB&I company, has prepared this status report on behalf of Textron, Inc. (Textron). This status report is associated with the remediation of tetrachloroethene (PCE) contaminated groundwater at the former Gorham Manufacturing Facility at 333 Adelaide Avenue, Providence, Rhode Island (**Figure 1**).

PCE is the primary contaminant of concern for groundwater in this area. As discussed in the Remedial Action Work Plan (RAWP) and subsequent revisions, the PCE source area in the vicinity of the former building W is the area of concern with a site-specific remedial goal of 7,700 micrograms per liter (ug/L). This area was treated using in-situ applications of sodium permanganate. **Figure 2** shows the most recent treatment area.

This status report describes semi-annual groundwater monitoring activities conducted in accordance with the proposed groundwater monitoring program submitted to the Rhode Island Department of Environmental Management (RIDEM) in February 2007 (Shaw – Groundwater Monitoring Program letter, dated February 1, 2007).

This report also includes results of additional groundwater sampling and analysis conducted in June 2013.

## **FIELD ACTIVITIES**

The following field activities were conducted on June 21, 2013 and on August 12 and 13, 2013.

### Monitoring Activities

Field parameters were measured in treatment area wells and compliance wells on August 12 and 13, 2013. Field measurements included oxidation/reduction potential (ORP), dissolved oxygen (DO), pH, temperature, and specific conductance (SC). Groundwater elevation and light non-aqueous phase liquid (LNAPL) thickness measurements were also collected. During the synchronous gauging, light non-aqueous phase liquid (LNAPL) was detected in MW-221S at a thickness of 0.03 feet. Field parameter and gauging results are presented in **Tables 1** and **2**.

### Groundwater Sampling

Groundwater samples were collected for analysis for volatile organic compounds (VOCs) (EPA Method 8260C) from three monitoring wells (MW-112, MW-116D, and MW-116S) on June 21, 2013. On August 12 and 13, 2013 semi-annual groundwater samples were collected for analysis for VOCs (EPA Method 8260C) from 22 monitoring wells within and around the treatment area, including compliance wells. Duplicate samples were collected from, MW-101S (MW-101S DUP) for VOC analysis. One sample was collected for total petroleum hydrocarbon (TPH) analysis (modified EPA Method 8015 C) from monitoring well CW-6. One duplicate sample was collected from CW-6 (CW-6 DUP) for TPH analysis. Samples were also collected for lead analysis (EPA Method 6010C) from monitoring wells MW-109D and GZA-3. One duplicate sample was collected from GZA-3 (GZA-3 DUP) for lead analysis. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

## **SUMMARY OF ANALYTICAL DATA**

A summary of the analytical data associated with the groundwater sampling conducted in June and August 2013 is contained in **Table 3**. A copy of each laboratory analytical report is attached to this report. The measured PCE concentrations were below the treatment goal of 7,700 ug/L in all wells. Note that the PCE concentration in well MW-112 increased in August 2013 from the level found in June 2013. As a result, well MW-112 and wells MW-116D and MW-116S will continue to be monitor at an increased frequency until the PCE concentration in MW-112 stabilizes.

A summary of the compliance well results is contained in **Table 4**. The results for the compliance well sampling indicate that exceedances occurred for the Adelaide Avenue wells MW-112 and MW-209D for PCE. (Note: due to sample dilution by the laboratory, the reporting limits for 1,1-dichloroethene for well MW-112 and the reporting limits for

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vinyl chloride in wells MW-112, MW-209D, and MW-218D were above the compound respective compliance standards.)

## **FUTURE ACTIVITIES**

A limit VOC sampling event is schedule for wells MW-112, MW-116D, and MW-116S in September 2013. The next semi-annual sampling event is scheduled for February 2014.

If you have any questions regarding this report, please contact Ed Van Doren at (617) 589-4030.

Sincerely,



Edward P. VanDoren  
Project Manager  
Shaw Environmental, Inc.  
(A CB&I Company)

### Attachments:

#### Tables

- Table 1 – Summary Field Parameters
- Table 2 – Groundwater Elevations
- Table 3 – VOCs in Groundwater
- Table 4 – Compliance Wells Analytical Results

#### Figures

- Figure 1 – Site Plan
- Figure 2 – Injection Well Locations

GB Upper Concentration Limit Calculations  
Laboratory Analytical Reports

cc: Craig Roy, RIDEM OWR  
Greg Simpson, Textron  
Jamieson Schiff, Textron  
Dave Heislein, AMEC  
Thomas Dellar, City of Providence  
Jeff Morgan, Stop & Shop  
Ronald Ruth, Sherin and Lodgen

## CERTIFICATIONS

The following certifications are provided pursuant to Rule 9.19 of the Remediation Regulations:

I, Edward P. Van Doren, as an authorized representative of Shaw Environmental, Inc., a CB&I company, and the person responsible for the preparation of this Status Report dated September 10, 2013, certify that the information contained in this report is complete and accurate to the best of my knowledge.



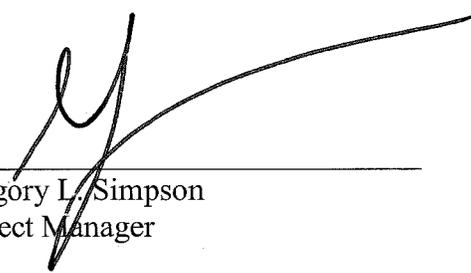
Edward P. Van Doren  
Project Manager

9-19-13

Date:

We, Textron, Inc., as the party responsible for submittal of this Status Report, certify that this report is a complete and accurate representation of the contaminated site and the release, and contains all known facts surrounding the release, to the best of our knowledge.

Certification on behalf of Textron Inc.



Gregory L. Simpson  
Project Manager

9/16/13

Date:

## **TABLES**

**Table 1**  
**Summary Field Parameters**  
**August 2013**

**Former Gorham Manufacturing Facility**  
**Providence, Rhode Island**

<b>Well ID</b>	<b>DATE</b>	<b>pH</b>	<b>Temperature (deg. C°)</b>	<b>Conductivity (mS/cm)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Oxidation Reduction Potential (mV)</b>
MW-101D	8/12/2013	6.28	15.26	0.571	0.35	26.8
MW-101S	8/12/2013	5.91	16.97	0.561	1.71	32.8
MW-112	8/12/2013	5.56	16.07	0.671	5.35	133.0
MW-116D	8/12/2013	4.74	15.49	0.602	3.73	192.9
MW-116S	8/12/2013	5.56	19.56	0.330	7.33	175.1
MW-201D	8/12/2013	6.55	15.69	0.971	2.33	145.1
MW-202D	8/12/2013	5.93	15.45	0.318	2.21	86.4
MW-202S	8/12/2013	6.00	15.20	0.364	1.00	51.1
MW-207D	8/12/2013	6.16	15.69	0.534	1.49	40.3
MW-207S	8/12/2013	6.06	15.89	0.751	1.35	65.3
MW-209D	8/13/2013	6.86	14.56	0.076	4.38	116.9
MW-216D	8/12/2013	6.41	15.10	0.466	0.54	-51.9
MW-216S	8/12/2013	6.44	16.35	0.675	1.29	-104.9
MW-217D	8/13/2013	6.69	15.38	0.565	0.81	-96.9
MW-217S	8/13/2013	6.48	14.74	0.721	1.92	-94.7
MW-218D	8/12/2013	6.11	15.31	0.132	0.87	152.3
MW-218S	8/12/2013	6.85	14.88	0.874	2.15	-164.1
Notes:						
C° = degrees Celsius						
mS/cm = millisiemens per centimeter						
mg/L = milligrams per liter						
mV = milli volts						

**Table 2  
Groundwater Elevations  
August 2013**

**Former Gorham Manufacturing Facility  
Providence, Rhode Island**

<b>Well ID</b>	<b>Date</b>	<b>Reference Elevation (Feet)</b>	<b>Depth to Water (Feet)</b>	<b>LNAPL Thickness (Feet)</b>	<b>Groundwater Elevation (Feet)</b>
CW-01	8/13/2013	99.52	25.44	---	74.08
CW-02	8/13/2013	98.86	24.65	---	74.21
CW-06	8/13/2013	99.52	24.97	---	74.55
GZA-3	8/13/2013	NA	17.54	---	NA
MW-101D	8/12/2013	98.91	24.65	---	74.26
MW-101S	8/12/2013	98.90	24.66	---	74.24
MW-109D	8/13/2013	NA	19.15	---	NA
MW-112	8/12/2013	100.63	26.40	---	74.23
MW-116D	8/12/2013	98.92	24.71	---	74.21
MW-116S	8/12/2013	99.40	25.15	---	74.25
MW-201D	8/12/2013	98.80	24.59	---	74.21
MW-202D	8/12/2013	98.17	23.90	---	74.27
MW-202S	8/12/2013	98.06	23.79	---	74.27
MW-207D	8/12/2013	98.18	23.96	---	74.22
MW-207S	8/12/2013	98.28	24.05	---	74.23
MW-209D	8/13/2013	99.90	26.17	---	73.73
MW-216D	8/12/2013	98.69	25.41	---	73.28
MW-216S	8/12/2013	99.58	25.41	---	74.17
MW-217D	8/13/2013	98.65	24.90	---	73.75
MW-217S	8/13/2013	98.71	24.94	---	73.77
MW-218D	8/12/2013	99.67	25.41	---	74.26
MW-218S	8/12/2013	99.61	25.36	---	74.25
MW-220S	8/13/2013	99.41	25.23	---	74.18
MW-221S	8/13/2013	98.92	25.46	0.03	73.49

Notes:  
NA = Not Available  
Groundwater elevations are based on an arbitrary reference datum established for the site.

**Table 3**  
**Groundwater Analytical Results**  
**June and August 2013**

Former Gorham Manufacturing Facility  
Providence, Rhode Island

CONSTITUENT	CW-01	CW-02	CW-06	CW-06	GZA-3	GZA-3	MW-101D	MW-101S	MW-101S	MW-109D	MW-112	MW-112	MW-116D	MW-116D	MW-116S
	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/13/2013	8/12/2013	8/12/2013	8/12/2013	8/13/2013	6/21/2013	8/12/2013	6/21/2013	8/12/2013	6/21/2013
	Primary	Primary	Primary	Duplicate 1	Primary	Duplicate 1	Primary	Primary	Duplicate 1	Primary	Primary	Primary	Primary	Primary	Primary
<b>VOC (ug/L)</b>															
1,1,1-Trichloroethane	1.2	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	1.1	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,1-Dichloroethane	17	<1.0	---	---	1.1	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,1-Dichloroethene	110	<1.0	---	---	<1.0J	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,2-Dichloroethane	3.7	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
1,4-Dioxane	84	<50	---	---	<50	---	<250D	<50	<50	<50	<500D	<1000D	<50	<50	<50
Bromodichloromethane	<1.0	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<5.0D	<20D	<0.50	<1.0	<0.50
Chloroform	<2.0J	<2.0	---	---	<2.0	---	<10JD	<2.0J	<2.0J	<2.0	<20D	<40JD	<2.0J	<2.0J	<2.0
cis-1,2-Dichloroethene	360D	<1.0	---	---	34	---	<5.0JD	10	10	<1.0	<10JD	<20D	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
Methyltert-butylether	3.8	<1.0	---	---	4	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
Naphthalene	<5.0	<5.0	---	---	<5.0	---	<25D	<5.0	<5.0	<5.0	<20D	<100D	<2.0	<5.0	<2.0
Tetrachloroethene	290D	<1.0	---	---	<1.0	---	260D	25	24	<1.0	510D	3200D	<1.0	<1.0J	<1.0
trans-1,2-Dichloroethene	34	<1.0	---	---	<1.0J	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
Trichloroethene	4700D	<1.0J	---	---	2.8	---	5.6D	1.1	<1.0J	<1.0J	75D	<20D	<1.0J	<1.0J	<1.0
Vinyl chloride	<2.0J	<2.0	---	---	33	---	<10D	<2.0J	<2.0J	<2.0	<20D	<40D	<2.0	<2.0	<2.0
m/p-xylene	<2.0	<2.0	---	---	<2.0	---	<10D	<2.0	<2.0	<2.0	<20D	<40D	<2.0	<2.0	<2.0
o-Xylene	<1.0	<1.0	---	---	<1.0	---	<5.0D	<1.0	<1.0	<1.0	<10D	<20D	<1.0	<1.0	<1.0
Xylene (total)	<2.0	<2.0	---	---	<2.0	---	<10D	<2.0	<2.0	<2.0	<20D	<40D	<2.0	<2.0	<2.0
<b>TPH (mg/L)</b>															
Fuel oil no. 2	---	---	7.3	7.4	---	---	---	---	---	---	---	---	---	---	---
<b>Dissolved Metals (ug/L)</b>															
Lead	---	---	---	---	<10J	<10J	---	---	---	<10J	---	---	---	---	---

**Notes:**

- < = Less than the laboratory reporting limit
- ug/L = Micro grams per liter, parts per billion
- mg/L = Milligrams per liter, parts per million
- TPH = Total Petroleum Hydrocarbons
- = Not analyzed for
- D = Result reported from a diluted sample.
- J = Estimated value

**Table 3**  
**Groundwater Analytical Results**  
**June and August 2013**

Former Gorham Manufacturing Facility  
Providence, Rhode Island

CONSTITUENT	MW-116S 8/12/2013 Primary	MW-201D 8/12/2013 Primary	MW-202D 8/12/2013 Primary	MW-202S 8/12/2013 Primary	MW-207D 8/12/2013 Primary	MW-207S 8/12/2013 Primary	MW-209D 8/13/2013 Primary	MW-216D 8/12/2013 Primary	MW-216S 8/12/2013 Primary	MW-217D 8/13/2013 Primary	MW-217S 8/13/2013 Primary	MW-218D 8/12/2013 Primary	MW-218S 8/12/2013 Primary
<b>VOC (ug/L)</b>													
1,1,1-Trichloroethane	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	<2.0D	<1.0	<1.0	<2.0D	<1.0
1,1,2-Trichloroethane	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	<2.0D	<1.0	<1.0	<2.0D	<1.0
1,1-Dichloroethane	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	<2.0D	<1.0	<1.0	<2.0D	<1.0
1,1-Dichloroethene	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	<2.0D	<1.0	<1.0	<2.0D	<1.0
1,2,4-Trimethylbenzene	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	10D	<1.0	<1.0	<2.0D	<1.0
1,2-Dichloroethane	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	<2.0D	<1.0	<1.0	<2.0D	<1.0
1,3,5-Trimethylbenzene	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	6.9D	<1.0	<1.0	<2.0D	<1.0
1,4-Dioxane	<50	<5000D	<500D	<50	<50	<250D	<250D	<50	<100D	<50	<50	<100D	<50
Bromodichloromethane	<1.0	<100D	<10D	<1.0	<0.50	<2.5D	<5.0D	<0.50	<1.0D	<0.50	<1.0	3.8D	<0.50
Chloroform	<2.0J	<200D	<20D	7.4	<2.0	11D	<10D	<2.0	<4.0D	<2.0	<2.0	34D	<2.0
cis-1,2-Dichloroethene	<1.0	<100D	<10D	4.9	2.1	6.4D	<5.0D	<1.0J	33D	7	63	<2.0D	2.5
Ethylbenzene	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	2.4D	<1.0	2.6	<2.0D	<1.0
Methyltert-butylether	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0J	<2.0D	<1.0	<1.0	<2.0D	<1.0
Naphthalene	<5.0	<500D	<50D	<5.0	<2.0	<10D	<25D	<2.0	26D	<2.0	13	<4.0D	<2.0
Tetrachloroethene	<1.0	6600D	990D	43	74	240D	320D	<1.0	<2.0D	<1.0	<1.0J	140D	<1.0J
trans-1,2-Dichloroethene	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	<2.0D	<1.0	<1.0	<2.0D	<1.0
Trichloroethene	<1.0	130D	<10D	2.4	1.3	<5.0D	25D	1.2	<2.0D	3.7	<1.0J	6.5D	<1.0J
Vinyl chloride	<2.0	<200D	<20D	<2.0	<2.0	<10D	<10D	<2.0J	<4.0D	<2.0	6.7	<4.0D	<2.0J
m/p-xylene	<2.0	<200D	<20D	<2.0	<2.0	<10D	<10D	<2.0	5.7D	<2.0	2.4	<4.0D	<2.0
o-Xylene	<1.0	<100D	<10D	<1.0	<1.0	<5.0D	<5.0D	<1.0	8.3D	<1.0	1.1	<2.0D	<1.0
Xylene (total)	<2.0	<200D	<20D	<2.0	<2.0	<10D	<10D	<2.0	14D	<2.0	3.5	<4.0D	<2.0
<b>TPH (mg/L)</b>													
Fuel oil no. 2	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Dissolved Metals (ug/L)</b>													
Lead	---	---	---	---	---	---	---	---	---	---	---	---	---

**Notes:**

- < = Less than the laboratory reporting limit
- ug/L = Micro grams per liter, parts per billion
- mg/L = Milligrams per liter, parts per million
- TPH = Total Petroleum Hydrocarbons
- = Not analyzed for.
- D = Result reported from a diluted sample.
- J = Estimated value.

**Table 4  
Compliance Wells Analytical Results  
June and August 2013**

**Former Gorham Manufacturing Facility  
Providence, Rhode Island**

<b>Mashapaug Pond Compliance Wells</b>				
<b>Sample ID Date Collected CONSTITUENT</b>	<b>GZA-3 8/13/2013</b>	<b>GZA-3 8/14/2013 Duplicate</b>	<b>MW-109D 8/13/2013</b>	<b>Compliance Standard<sup>1</sup></b>
<b>Metals (mg/L)</b>				
Lead	<10J	<10J	<10J	0.03
<b>VOCs (ug/L)</b>				
1,1-Dichloroethane	1.1	NA	<1.0	50,000
1,1-Dichloroethene	<1.0J	NA	<1.0	50,000
cis-1,2-Dichloroethene	34	NA	<1.0	50,000
Methyl tert-butyl ether	4	NA	<1.0	50,000
Tetrachloroethene	<1.0	NA	<1.0	5,000
Trichloroethene	2.8	NA	<1.0J	20,000
Vinyl chloride	33	NA	<2.0	1,200

<b>TPH Remediation Area Well</b>			
<b>Sample ID Date Collected CONSTITUENT</b>	<b>CW-6 8/13/2013</b>	<b>CW-6 8/13/2013 Duplicate</b>	<b>Compliance Standard<sup>1</sup></b>
TPH (mg/L)	7.3	7.4	20

<b>Sewer Interceptor Area Wells</b>			
<b>Sample ID Date Collected CONSTITUENT</b>	<b>CW-1 8/13/2013</b>	<b>CW-2 8/13/2013</b>	<b>Compliance Standard<sup>2</sup></b>
<b>VOCs (ug/L)</b>			
1,1,1-Trichloroethane	1.2	<1.0	68,000
1,1,2-Trichloroethane	1.1	<1.0	944,000
1,4-Dioxane	84	<50	51,478,000
1,1-Dichloroethane	17	<1.0	120,000
1,1-Dichloroethene	110	<1.0	23,000
1,2-Dichloroethane	3.7	<1.0	670,000
cis-1,2-Dichloroethene	360D	<1.0	69,000
trans-1,2-Dichloroethene	34	<1.0	79,000
Tetrachloroethene	290D	<1.0	NS
Trichloroethene	4700D	<1.0J	87,000
Methyltert-butylether	3.8	<1.0	204,000

<b>Adelaide Avenue Wells</b>						
<b>Sample ID Date Collected CONSTITUENT</b>	<b>MW-112 6/21/2013</b>	<b>MW-112 8/12/2013</b>	<b>MW-209D 8/13/2013</b>	<b>MW-218D 8/12/2013</b>	<b>MW-218S 8/12/2013</b>	<b>Compliance Standard<sup>3</sup></b>
<b>VOCs (ug/L)</b>						
cis-1,2-Dichloroethene	<10JD	<20D	<5.0JD	<2.0D	2.5	2,400
1,1-Dichloroethene	<10D	<20D	<5.0D	<2.0D	<1.0J	7
Chloroform	<20D	<40JD	<10D	34D	<2.0	1,900
Tetrachloroethene	510D	3200D	320D	140D	<1.0J	150
Trichloroethene	75D	<20D	25D	6.5D	<1.0J	540
Vinyl chloride	<20D	<40D	<10D	<4.0D	<2.0J	2

**Notes:**

- These Site specific compliance standards were taken from the approved RAWP dated April 1, 2001 and/or the RIDEM Remediation Regulations.  
Note: the standard for Methyl tert-butyl ether is the Massachusetts Department of Environmental Protection (MassDEP) Method 1 GW-3 standard (310 CMR 40.0974 (2), 12/14/07). The use of the MassDEP Method 1 GW-3 standard is consistent with the approach used in the April 1, 2001 RAWP.
- These compliance standards taken from Table 5 - Upper Concentration Limits for GB Groundwater, RIDEM Remediation Regulations.  
For 1,1,2-Trichloroethane, 1,4-Dioxane, and Methyltert-butylether the compliance standard was calculated from the algorithm in Appendix F of the Remediation Regulations (see attached calculations).
- These compliance standards taken from Table 4 -GB Groundwater Objectives of the RIDEM Remediation Regulations or in the case of vinyl chloride the compliance standard was taken from Table 3 of the Remediation Regulations and for chloroform the compliance standard was calculated from the algorithm in Appendix F of the Remediation Regulations (calculations attached as Appendix C of Status Report dated September 18, 2007).

mg/L - milligrams per liter

ug/L - micrograms per liter

< - Compound was not detected below the laboratory reporting limit, concentration shown is the reporting limit.

VOCs - volatile organic compounds

TPH - total petroleum hydrocarbons

D = Result reported from a diluted sample.

J = Estimated value

NA - Indicates that the analysis was not performed.

NS - Indicates that no applicable standard exists. Compound does not have a lower explosive limit (LEL).

## **FIGURES**



**LEGEND**  
 ● MW-101S MONITORING WELL



1" 1/2" 0" 1"  
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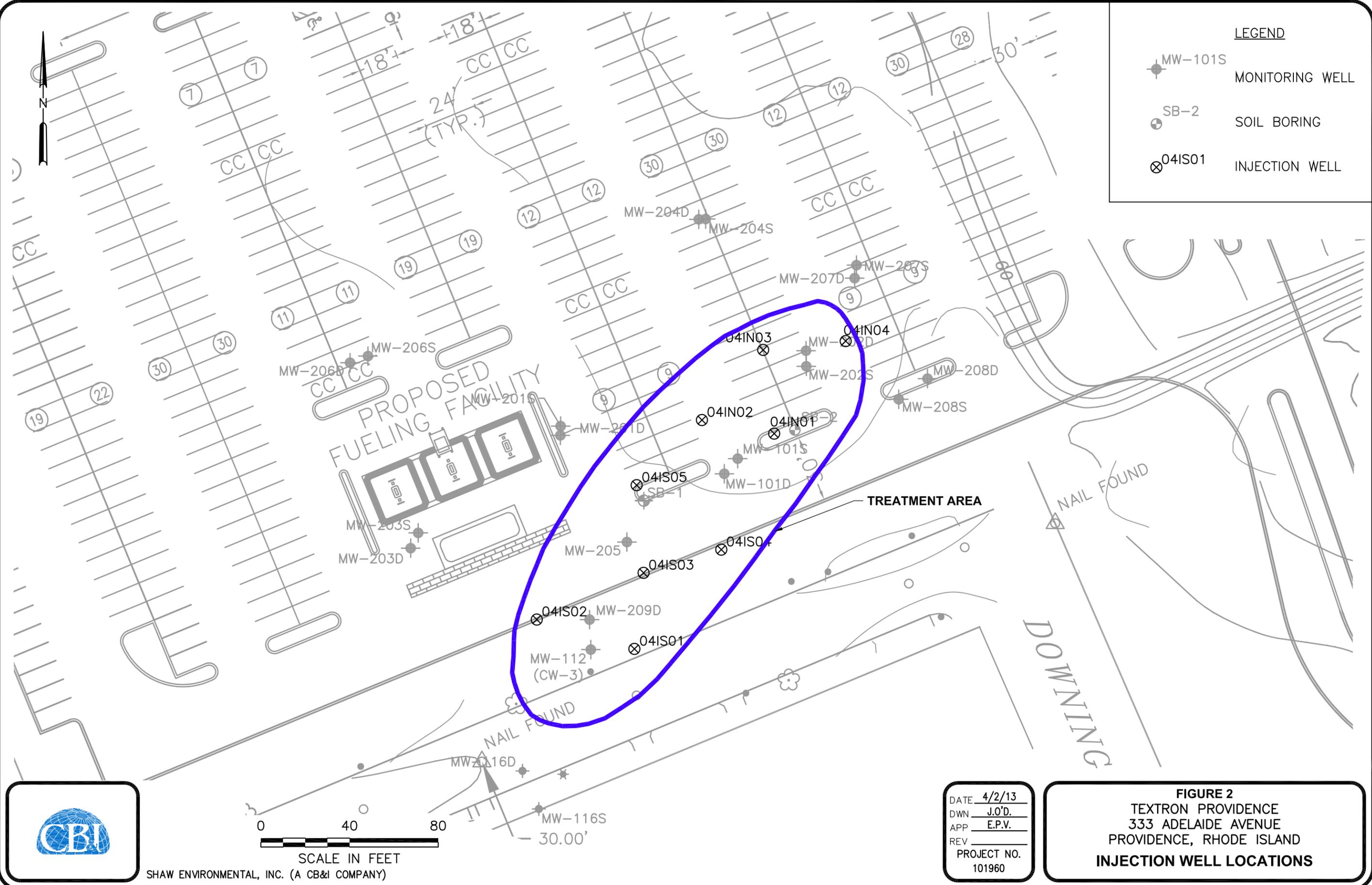
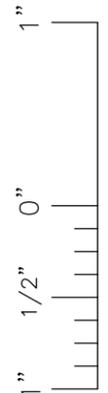
0 80 160  
 SCALE IN FEET

SHAW ENVIRONMENTAL, INC. (A CB&I COMPANY)

DATE	4/2/13
DWN	J.O'D.
APP	
REV	
PROJECT NO.	101960

**FIGURE 1**  
**TEXTRON PROVIDENCE**  
**333 ADELAIDE AVENUE**  
**PROVIDENCE, RHODE ISLAND**  
**SITE PLAN**

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**LEGEND**

	MW-101S	MONITORING WELL
	SB-2	SOIL BORING
	04IS01	INJECTION WELL



SCALE IN FEET  
SHAW ENVIRONMENTAL, INC. (A CB&I COMPANY)



DATE	4/2/13
DWN	J.O'D.
APP	E.P.V.
REV	
PROJECT NO.	101960

**FIGURE 2**  
TEXTRON PROVIDENCE  
333 ADELAIDE AVENUE  
PROVIDENCE, RHODE ISLAND  
**INJECTION WELL LOCATIONS**

## **GB UPPER CONCENTRATON LIMIT CALCULATIONS**

**Method 2 GB Groundwater Objective Algorithm  
Former Gorham Manufacturing Facility  
Providence, Rhode Island**

**GB Groundwater Objective for 1,4-Dioxane**

			<b>Notes</b>
Water Concentration	$C_w$	2,574 mg/l	Calculated from formula
Air Concentration	$C_a$	100.00 ppm	2010 NIOSH Pocket Guide to Chemical Hazards
		0.36 mg/l	
Temperature of Water	T	293 K	Constant
Solubility	WS	1000000 mg/l-water	2010 NIOSH Pocket Guide to Chemical Hazards (miscible)
Vapor Pressure	VP	29 mm Hg	2010 NIOSH Pocket Guide to Chemical Hazards
Molecular Weight	MW	88.1 g/mole	2010 NIOSH Pocket Guide to Chemical Hazards

**Upper Concentration Limit for 1,4-Dioxane**

Water Concentration	$C_w$	51,478 mg/l	Calculated from formula
Air Concentration	$C_a$	7.2 mg/l	Chemical Specific 10%LEL (see below)
Temperature of Water	T	293 K	Constant
Solubility	WS	1000000 mg/l-water	2010 NIOSH Pocket Guide to Chemical Hazards (miscible)
Vapor Pressure	VP	29 mm Hg	2010 NIOSH Pocket Guide to Chemical Hazards
Molecular Weight	MW	88.1 g/mole	2010 NIOSH Pocket Guide to Chemical Hazards

LEL		2 %	2010 NIOSH Pocket Guide to Chemical Hazards
		20000 ppm	(1% = 10,000 ppm)
10% LEL		2000 ppm	
Conversion Factor		3.6 mg/m3 per ppm	2010 NIOSH Pocket Guide to Chemical Hazards
10% LEL		7200 mg/m3	
		7.2 mg/l	

$$C_w = \frac{(C_a)(T)(WS)}{(VP)(MW)(16.04)}$$

**Method 2 GB Groundwater Objective Algorithm  
Former Gorham Manufacturing Facility  
Providence, Rhode Island**

**GB Groundwater Objective for 1,1,2-Trichloroethane**

			<b>Notes</b>
Water Concentration	$C_w$	1.5740 mg/l	Calculated from formula
Air Concentration	$C_a$	10.00 ppm 0.0546 mg/l	2010 NIOSH Pocket Guide to Chemical Hazards
Temperature of Water	T	293 K	Constant
Solubility	WS	4000 mg/l-water	2010 NIOSH Pocket Guide to Chemical Hazards
Vapor Pressure	VP	19 mm Hg	2010 NIOSH Pocket Guide to Chemical Hazards
Molecular Weight	MW	133.4 g/mole	2010 NIOSH Pocket Guide to Chemical Hazards

**Upper Concentration Limit for 1,1,2-Trichloroethane**

Water Concentration	$C_w$	944 mg/l	Calculated from formula
Air Concentration	$C_a$	32.8 mg/l	Chemical Specific 10%LEL (see below)
Temperature of Water	T	293 K	Constant
Solubility	WS	4000 mg/l-water	2010 NIOSH Pocket Guide to Chemical Hazards
Vapor Pressure	VP	19 mm Hg	2010 NIOSH Pocket Guide to Chemical Hazards
Molecular Weight	MW	133.4 g/mole	2010 NIOSH Pocket Guide to Chemical Hazards

LEL		6 % 60000 ppm	2010 NIOSH Pocket Guide to Chemical Hazards (1% = 10,000 ppm)
10% LEL		6000 ppm	
Conversion Factor		5.46 mg/m3 per ppm	2010 NIOSH Pocket Guide to Chemical Hazards
10% LEL		32760 mg/m3 32.8 mg/l	

$$C_w = \frac{(C_a)(T)(WS)}{(VP)(MW)(16.04)}$$

**Method 2 GB Groundwater Objective Algorithm  
Former Gorham Manufacturing Facility  
Providence, Rhode Island**

**GB Groundwater Objective for MTBE**

			<b>Notes</b>
Water Concentration	C <sub>w</sub>	6.3883 mg/l	Calculated from formula
Air Concentration	C <sub>a</sub>	50.00 ppm 0.1835 mg/l	Chemical Specific PEL (OSHA PEL not established), ACGIH-TLV-TWA
Temperature of Water	T	293 K	Constant
Solubility	WS	42000 mg/l-water	Chemical Specific (Mackay, Shui & Ma, Vol. 3, pg. 756)
Vapor Pressure	VP	250 mm Hg	Chemical Specific (Mackay, Shui & Ma, Vo. 3, pg. 757, ~33000 Pa)
Molecular Weight	MW	88.15 g/mole	Chemical Specific (Mackay, Shui & Ma, Vol. 3, pg. 756)

**Upper Concentration Limit for MTBE**

Water Concentration	C <sub>w</sub>	204 mg/l	Calculated from formula
Air Concentration	C <sub>a</sub>	5.9 mg/l	Chemical Specific 10%LEL (see below)
Temperature of Water	T	293 K	Constant
Solubility	WS	42000 mg/l-water	Chemical Specific (Mackay, Shui & Ma, Vol. 3, pg. 756)
Vapor Pressure	VP	250 mm Hg	Chemical Specific (Mackay, Shui & Ma, Vo. 3, pg. 757, ~33000 Pa)
Molecular Weight	MW	88.15 g/mole	Chemical Specific (Mackay, Shui & Ma, Vol. 3, pg. 756)

LEL		1.6 % 16000 ppm	EPA Acute Exposuer Guideline Levels for MTBE (1% = 10,000 ppm)
10% LEL		1600 ppm	
Conversion Factor		3.67 mg/m3 per ppm	Calculated from MW
10% LEL		5872 mg/m3 5.9 mg/l	

$$C_w = \frac{(C_a)(T)(WS)}{(VP)(MW)(16.04)}$$

## **LABORATORY REPORTS**

July 1, 2013

Edward Van Doren  
Shaw Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Providence, RI  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 13F0820

Enclosed are results of analyses for samples received by the laboratory on June 24, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



James M. Georgantas  
Project Manager

Shaw Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Edward Van Doren

REPORT DATE: 7/1/2013

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 13F0820

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	13F0820-01	Ground Water		SW-846 8260C	
MW-116D	13F0820-02	Ground Water		SW-846 8260C	
MW-116S	13F0820-03	Ground Water		SW-846 8260C	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SW-846 8260C**

**Qualifications:**

---

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

**Analyte & Samples(s) Qualified:**

**1,2-Dibromo-3-chloropropane (DBCP), Naphthalene**  
B075574-BS1, B075574-BSD1

---

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

**Analyte & Samples(s) Qualified:**

**1,2,3-Trichlorobenzene, Acrylonitrile**  
B075574-BS1, B075574-BSD1

---

Elevated reporting limit due to high concentration of target compounds.

**Analyte & Samples(s) Qualified:**

13F0820-01[MW-112]

---

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

**Analyte & Samples(s) Qualified:**

**Chloromethane**  
13F0820-01[MW-112], 13F0820-02[MW-116D], 13F0820-03[MW-116S], B075574-BLK1, B075574-BS1, B075574-BSD1

---

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

**Analyte & Samples(s) Qualified:**

**1,4-Dioxane**  
13F0820-01[MW-112], 13F0820-02[MW-116D], 13F0820-03[MW-116S], B075574-BLK1, B075574-BS1, B075574-BSD1

---

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:**

**1,2-Dibromo-3-chloropropane (DBCP), 2-Butanone (MEK), 2-Hexanone (MBK), 4-Methyl-2-pentanone (MIBK), Acrylonitrile, tert-Butyl Alcohol (TBA)**  
B075574-BS1, B075574-BSD1

---

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

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.

A handwritten signature in black ink, appearing to read "Daren J. Damboragian", is written over a light gray rectangular background.

Daren J. Damboragian  
Laboratory Manager

Project Location: Providence, RI

Sample Description:

Work Order: 13F0820

Date Received: 6/24/2013

Field Sample #: MW-112

Sampled: 6/21/2013 06:00

Sample ID: 13F0820-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Benzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Bromoform	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Bromomethane	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Carbon Disulfide	ND	40	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Chloroethane	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Chloroform	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Chloromethane	ND	20	µg/L	10	V-05	SW-846 8260C	6/26/13	6/28/13 7:29	EEH
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
cis-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13F0820

Date Received: 6/24/2013

Field Sample #: MW-112

Sampled: 6/21/2013 06:00

Sample ID: 13F0820-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,4-Dioxane	ND	500	µg/L	10	V-16	SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Hexachlorobutadiene	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Naphthalene	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Styrene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Tetrachloroethylene	510	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Toluene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Trichloroethylene	75	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH
o-Xylene	ND	10	µg/L	10		SW-846 8260C	6/26/13	6/28/13 7:29	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.3	70-130	6/28/13 7:29
Toluene-d8	103	70-130	6/28/13 7:29
4-Bromofluorobenzene	98.0	70-130	6/28/13 7:29



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

Project Location: Providence, RI

Sample Description:

Work Order: 13F0820

Date Received: 6/24/2013

Sampled: 6/21/2013 06:30

Field Sample #: MW-116D

Sample ID: 13F0820-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	6/26/13	6/28/13 5:44	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13F0820

Date Received: 6/24/2013

Field Sample #: MW-116D

Sampled: 6/21/2013 06:30

Sample ID: 13F0820-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 5:44	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.8	70-130	6/28/13 5:44
Toluene-d8	100	70-130	6/28/13 5:44
4-Bromofluorobenzene	102	70-130	6/28/13 5:44



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

Project Location: Providence, RI

Sample Description:

Work Order: 13F0820

Date Received: 6/24/2013

Field Sample #: MW-116S

Sampled: 6/21/2013 07:00

Sample ID: 13F0820-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	6/26/13	6/28/13 6:10	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13F0820

Date Received: 6/24/2013

Field Sample #: MW-116S

Sampled: 6/21/2013 07:00

Sample ID: 13F0820-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	6/26/13	6/28/13 6:10	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	98.2	70-130	6/28/13 6:10
Toluene-d8	100	70-130	6/28/13 6:10
4-Bromofluorobenzene	100	70-130	6/28/13 6:10

**Sample Extraction Data**

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13F0820-01 [MW-112]	B075574	0.5	5.00	06/26/13
13F0820-02 [MW-116D]	B075574	5	5.00	06/26/13
13F0820-03 [MW-116S]	B075574	5	5.00	06/26/13

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B075574 - SW-846 5035

Blank (B075574-BLK1)

Prepared: 06/26/13 Analyzed: 06/28/13

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	2.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							V-05
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B075574 - SW-846 5035

Blank (B075574-BLK1)

Prepared: 06/26/13 Analyzed: 06/28/13

Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	0.50	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0		98.8	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.9	70-130			

LCS (B075574-BS1)

Prepared: 06/26/13 Analyzed: 06/27/13

Acetone	108	50	µg/L	100		108	70-160			†
Acrylonitrile	12.8	5.0	µg/L	10.0		128	70-130		V-20	
tert-Amyl Methyl Ether (TAME)	11.5	0.50	µg/L	10.0		115	70-130			
Benzene	9.66	1.0	µg/L	10.0		96.6	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	10.5	1.0	µg/L	10.0		105	70-130			
Bromodichloromethane	10.1	0.50	µg/L	10.0		101	70-130			
Bromoform	10.7	1.0	µg/L	10.0		107	70-130			
Bromomethane	4.12	2.0	µg/L	10.0		41.2	40-160			†
2-Butanone (MEK)	129	20	µg/L	100		129	40-160		V-20	†
tert-Butyl Alcohol (TBA)	128	20	µg/L	100		128	40-160		V-20	†
n-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
tert-Butylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
tert-Butyl Ethyl Ether (TBEE)	11.6	0.50	µg/L	10.0		116	70-130			
Carbon Disulfide	9.29	2.0	µg/L	10.0		92.9	70-130			
Carbon Tetrachloride	9.61	5.0	µg/L	10.0		96.1	70-130			
Chlorobenzene	11.2	1.0	µg/L	10.0		112	70-130			
Chlorodibromomethane	10.5	0.50	µg/L	10.0		105	70-130			
Chloroethane	8.33	2.0	µg/L	10.0		83.3	70-130			
Chloroform	10.2	2.0	µg/L	10.0		102	70-130			
Chloromethane	5.11	2.0	µg/L	10.0		51.1	40-160		V-05	†
2-Chlorotoluene	11.3	1.0	µg/L	10.0		113	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B075574 - SW-846 5035</b>										
<b>LCS (B075574-BS1)</b>										
					Prepared: 06/26/13 Analyzed: 06/27/13					
4-Chlorotoluene	11.5	1.0	µg/L	10.0		115	70-130			
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	14.0	5.0	µg/L	10.0		<b>140</b> *	70-130			L-02, V-20
1,2-Dibromoethane (EDB)	11.5	0.50	µg/L	10.0		115	70-130			
Dibromomethane	11.0	1.0	µg/L	10.0		110	70-130			
1,2-Dichlorobenzene	11.1	1.0	µg/L	10.0		111	70-130			
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
trans-1,4-Dichloro-2-butene	11.5	2.0	µg/L	10.0		115	70-130			
Dichlorodifluoromethane (Freon 12)	4.45	2.0	µg/L	10.0		44.5	40-160			†
1,1-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichloroethane	9.46	1.0	µg/L	10.0		94.6	70-130			
1,1-Dichloroethylene	9.24	1.0	µg/L	10.0		92.4	70-130			
cis-1,2-Dichloroethylene	9.30	1.0	µg/L	10.0		93.0	70-130			
trans-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
1,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	70-130			
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130			
2,2-Dichloropropane	8.65	1.0	µg/L	10.0		86.5	40-130			†
1,1-Dichloropropene	9.89	2.0	µg/L	10.0		98.9	70-130			
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130			
trans-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130			
Diethyl Ether	8.45	2.0	µg/L	10.0		84.5	70-130			
Diisopropyl Ether (DIPE)	11.7	0.50	µg/L	10.0		117	70-130			
1,4-Dioxane	122	50	µg/L	100		122	40-130			V-16 †
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Hexachlorobutadiene	10.7	0.50	µg/L	10.0		107	70-130			
2-Hexanone (MBK)	133	10	µg/L	100		133	70-160			V-20 †
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0		108	70-130			
p-Isopropyltoluene (p-Cymene)	11.1	1.0	µg/L	10.0		111	70-130			
Methyl tert-Butyl Ether (MTBE)	12.3	1.0	µg/L	10.0		123	70-130			
Methylene Chloride	10.9	5.0	µg/L	10.0		109	70-130			
4-Methyl-2-pentanone (MIBK)	125	10	µg/L	100		125	70-160			V-20 †
<b>Naphthalene</b>	13.8	0.50	µg/L	10.0		<b>138</b> *	40-130			L-02 †
n-Propylbenzene	11.6	1.0	µg/L	10.0		116	70-130			
Styrene	10.7	1.0	µg/L	10.0		107	70-130			
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1,2,2-Tetrachloroethane	12.1	0.50	µg/L	10.0		121	70-130			
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
Tetrahydrofuran	11.7	10	µg/L	10.0		117	70-130			
Toluene	10.4	1.0	µg/L	10.0		104	70-130			
<b>1,2,3-Trichlorobenzene</b>	14.1	5.0	µg/L	10.0		<b>141</b> *	70-130			L-07
1,2,4-Trichlorobenzene	11.6	1.0	µg/L	10.0		116	70-130			
1,3,5-Trichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,1,1-Trichloroethane	9.72	1.0	µg/L	10.0		97.2	70-130			
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0		106	70-130			
Trichloroethylene	9.85	1.0	µg/L	10.0		98.5	70-130			
Trichlorofluoromethane (Freon 11)	8.02	2.0	µg/L	10.0		80.2	70-130			
1,2,3-Trichloropropane	12.7	2.0	µg/L	10.0		127	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0		103	70-130			
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Vinyl Chloride	6.28	2.0	µg/L	10.0		62.8	40-160			†

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B075574 - SW-846 5035

LCS (B075574-BS1)

Prepared: 06/26/13 Analyzed: 06/27/13

m+p Xylene	21.3	2.0	µg/L	20.0		107	70-130			
o-Xylene	11.2	1.0	µg/L	10.0		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.9		µg/L	25.0		99.5	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.4	70-130			

LCS Dup (B075574-BS1)

Prepared: 06/26/13 Analyzed: 06/27/13

Acetone	108	50	µg/L	100		108	70-160	0.102	25	†
Acrylonitrile	13.2	5.0	µg/L	10.0		132	* 70-130	2.99	25	L-07, V-20
tert-Amyl Methyl Ether (TAME)	11.5	0.50	µg/L	10.0		115	70-130	0.348	25	
Benzene	9.70	1.0	µg/L	10.0		97.0	70-130	0.413	25	
Bromobenzene	10.9	1.0	µg/L	10.0		109	70-130	3.53	25	
Bromochloromethane	10.6	1.0	µg/L	10.0		106	70-130	1.05	25	
Bromodichloromethane	10.2	0.50	µg/L	10.0		102	70-130	1.08	25	
Bromoform	10.7	1.0	µg/L	10.0		107	70-130	0.0938	25	
Bromomethane	4.29	2.0	µg/L	10.0		42.9	40-160	4.04	25	†
2-Butanone (MEK)	127	20	µg/L	100		127	40-160	1.43	25	V-20 †
tert-Butyl Alcohol (TBA)	133	20	µg/L	100		133	40-160	3.94	25	V-20 †
n-Butylbenzene	9.99	1.0	µg/L	10.0		99.9	70-130	1.59	25	
sec-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	0.735	25	
tert-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	0.861	25	
tert-Butyl Ethyl Ether (TBEE)	11.2	0.50	µg/L	10.0		112	70-130	4.21	25	
Carbon Disulfide	8.93	2.0	µg/L	10.0		89.3	70-130	3.95	25	
Carbon Tetrachloride	9.57	5.0	µg/L	10.0		95.7	70-130	0.417	25	
Chlorobenzene	11.1	1.0	µg/L	10.0		111	70-130	0.359	25	
Chlorodibromomethane	10.7	0.50	µg/L	10.0		107	70-130	1.42	25	
Chloroethane	7.84	2.0	µg/L	10.0		78.4	70-130	6.06	25	
Chloroform	9.79	2.0	µg/L	10.0		97.9	70-130	3.91	25	
Chloromethane	4.67	2.0	µg/L	10.0		46.7	40-160	9.00	25	V-05 †
2-Chlorotoluene	10.8	1.0	µg/L	10.0		108	70-130	3.98	25	
4-Chlorotoluene	11.6	1.0	µg/L	10.0		116	70-130	1.12	25	
1,2-Dibromo-3-chloropropane (DBCP)	13.4	5.0	µg/L	10.0		134	* 70-130	4.51	25	L-02, V-20
1,2-Dibromoethane (EDB)	11.8	0.50	µg/L	10.0		118	70-130	2.32	25	
Dibromomethane	10.8	1.0	µg/L	10.0		108	70-130	1.92	25	
1,2-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130	1.61	25	
1,3-Dichlorobenzene	11.1	1.0	µg/L	10.0		111	70-130	2.76	25	
1,4-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	1.18	25	
trans-1,4-Dichloro-2-butene	10.9	2.0	µg/L	10.0		109	70-130	4.73	25	
Dichlorodifluoromethane (Freon 12)	4.21	2.0	µg/L	10.0		42.1	40-160	5.54	25	†
1,1-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130	1.39	25	
1,2-Dichloroethane	9.20	1.0	µg/L	10.0		92.0	70-130	2.79	25	
1,1-Dichloroethylene	9.19	1.0	µg/L	10.0		91.9	70-130	0.543	25	
cis-1,2-Dichloroethylene	9.50	1.0	µg/L	10.0		95.0	70-130	2.13	25	
trans-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0		100	70-130	2.76	25	
1,2-Dichloropropane	10.0	1.0	µg/L	10.0		100	70-130	4.97	25	
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130	0.270	25	
2,2-Dichloropropane	8.19	1.0	µg/L	10.0		81.9	40-130	5.46	25	†
1,1-Dichloropropene	9.94	2.0	µg/L	10.0		99.4	70-130	0.504	25	
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	0.885	25	
trans-1,3-Dichloropropene	11.3	0.50	µg/L	10.0		113	70-130	0.888	25	
Diethyl Ether	8.69	2.0	µg/L	10.0		86.9	70-130	2.80	25	
Diisopropyl Ether (DIPE)	11.4	0.50	µg/L	10.0		114	70-130	2.78	25	

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B075574 - SW-846 5035</b>										
<b>LCS Dup (B075574-BSD1)</b>										
					Prepared: 06/26/13 Analyzed: 06/27/13					
1,4-Dioxane	127	50	µg/L	100	127	127	40-130	4.24	50	V-16 † ‡
Ethylbenzene	10.4	1.0	µg/L	10.0	104	104	70-130	0.862	25	
Hexachlorobutadiene	9.68	0.50	µg/L	10.0	96.8	96.8	70-130	9.73	25	
2-Hexanone (MBK)	135	10	µg/L	100	135	135	70-160	1.09	25	V-20 †
Isopropylbenzene (Cumene)	11.0	1.0	µg/L	10.0	110	110	70-130	2.39	25	
p-Isopropyltoluene (p-Cymene)	11.0	1.0	µg/L	10.0	110	110	70-130	0.995	25	
Methyl tert-Butyl Ether (MTBE)	12.7	1.0	µg/L	10.0	127	127	70-130	3.19	25	
Methylene Chloride	10.8	5.0	µg/L	10.0	108	108	70-130	1.10	25	
4-Methyl-2-pentanone (MIBK)	130	10	µg/L	100	130	130	70-160	3.99	25	V-20 †
<b>Naphthalene</b>	13.6	0.50	µg/L	10.0	<b>136</b>	<b>136</b> *	40-130	1.68	25	L-02 †
n-Propylbenzene	11.9	1.0	µg/L	10.0	119	119	70-130	2.82	25	
Styrene	11.0	1.0	µg/L	10.0	110	110	70-130	3.22	25	
1,1,1,2-Tetrachloroethane	10.1	1.0	µg/L	10.0	101	101	70-130	2.06	25	
1,1,2,2-Tetrachloroethane	12.6	0.50	µg/L	10.0	126	126	70-130	3.64	25	
Tetrachloroethylene	10.3	1.0	µg/L	10.0	103	103	70-130	0.291	25	
Tetrahydrofuran	12.3	10	µg/L	10.0	123	123	70-130	5.00	25	
Toluene	10.4	1.0	µg/L	10.0	104	104	70-130	0.0958	25	
1,2,3-Trichlorobenzene	12.8	5.0	µg/L	10.0	128	128	70-130	9.74	25	
1,2,4-Trichlorobenzene	10.8	1.0	µg/L	10.0	108	108	70-130	6.98	25	
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0	101	101	70-130	5.94	25	
1,1,1-Trichloroethane	9.76	1.0	µg/L	10.0	97.6	97.6	70-130	0.411	25	
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0	105	105	70-130	0.851	25	
Trichloroethylene	9.62	1.0	µg/L	10.0	96.2	96.2	70-130	2.36	25	
Trichlorofluoromethane (Freon 11)	7.81	2.0	µg/L	10.0	78.1	78.1	70-130	2.65	25	
1,2,3-Trichloropropane	12.9	2.0	µg/L	10.0	129	129	70-130	1.80	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.94	1.0	µg/L	10.0	99.4	99.4	70-130	3.46	25	
1,2,4-Trimethylbenzene	10.3	1.0	µg/L	10.0	103	103	70-130	0.966	25	
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0	105	105	70-130	1.44	25	
Vinyl Chloride	6.25	2.0	µg/L	10.0	62.5	62.5	40-160	0.479	25	†
m+p Xylene	21.5	2.0	µg/L	20.0	107	107	70-130	0.654	25	
o-Xylene	11.2	1.0	µg/L	10.0	112	112	70-130	0.446	25	
Surrogate: 1,2-Dichloroethane-d4	25.3		µg/L	25.0		101	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	25.3		µg/L	25.0		101	70-130			

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
  - † Wide recovery limits established for difficult compound.
  - ‡ Wide RPD limits established for difficult compound.
  - # Data exceeded client recommended or regulatory level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- L-02 Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
  - L-07 Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
  - RL-11 Elevated reporting limit due to high concentration of target compounds.
  - V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
  - V-16 Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
  - V-20 Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Acetone	CT,NY,ME,NH,VA
Acrylonitrile	CT,NY,ME,NH,VA
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA
Benzene	CT,NY,ME,NH,VA
Bromochloromethane	NY,ME,NH,VA
Bromodichloromethane	CT,NY,ME,NH,VA
Bromoform	CT,NY,ME,NH,VA
Bromomethane	CT,NY,ME,NH,VA
2-Butanone (MEK)	CT,NY,ME,NH,VA
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA
n-Butylbenzene	NY,ME,VA
sec-Butylbenzene	NY,ME,VA
tert-Butylbenzene	NY,ME,VA
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA
Carbon Disulfide	CT,NY,ME,NH,VA
Carbon Tetrachloride	CT,NY,ME,NH,VA
Chlorobenzene	CT,NY,ME,NH,VA
Chlorodibromomethane	CT,NY,ME,NH,VA
Chloroethane	CT,NY,ME,NH,VA
Chloroform	CT,NY,ME,NH,VA
Chloromethane	CT,NY,ME,NH,VA
2-Chlorotoluene	NY,ME,NH,VA
4-Chlorotoluene	NY,ME,NH,VA
Dibromomethane	NY,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,ME,NH,VA
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA
1,1-Dichloroethane	CT,NY,ME,NH,VA
1,2-Dichloroethane	CT,NY,ME,NH,VA
1,1-Dichloroethylene	CT,NY,ME,NH,VA
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA
1,2-Dichloropropane	CT,NY,ME,NH,VA
1,3-Dichloropropane	NY,ME,VA
2,2-Dichloropropane	NY,ME,NH,VA
1,1-Dichloropropene	NY,ME,NH,VA
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA
Diisopropyl Ether (DIPE)	NY,ME,NH,VA
Ethylbenzene	CT,NY,ME,NH,VA
Hexachlorobutadiene	CT,NY,ME,NH,VA
2-Hexanone (MBK)	CT,NY,ME,NH,VA
Isopropylbenzene (Cumene)	NY,ME,VA
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA

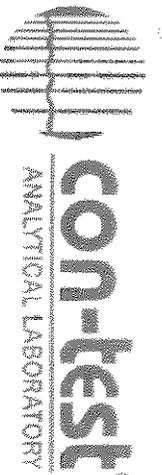
**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Methylene Chloride	CT,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA
Naphthalene	NY,ME,NH,VA
n-Propylbenzene	CT,NY,ME,NH,VA
Styrene	CT,NY,ME,NH,VA
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA
Tetrachloroethylene	CT,NY,ME,NH,VA
Toluene	CT,NY,ME,NH,VA
1,2,3-Trichlorobenzene	NY,ME,NH,VA
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA
1,1,2-Trichloroethane	CT,NY,ME,NH,VA
Trichloroethylene	CT,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA
1,2,3-Trichloropropane	NY,ME,NH,VA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA
1,2,4-Trimethylbenzene	NY,ME,VA
1,3,5-Trimethylbenzene	NY,ME,VA
Vinyl Chloride	CT,NY,ME,NH,VA
m+p Xylene	CT,NY,ME,NH,VA
o-Xylene	CT,NY,ME,NH,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012



Phone: 413-525-2332  
 Fax: 413-525-6405  
 Email: info@contestlabs.com  
 www.contestlabs.com

**CHAIN OF CUSTODY RECORD**

39 Spruce Street  
 East Longmeadow, MA 01028

Page 1 of 1

Company Name: Shaw Environmental, Inc.  
 Address: 150 Royal St. A CB&I Company  
 Canton, MA 02021

Telephone: 617-589-4030  
 Project # 130274  
 Client PO# 835493

Attention: Ed Van Doren

DATA DELIVERY (check all that apply)  
 FAX  EMAIL  WEBSITE

Project Location: Providence, RI

Sampled By: \_\_\_\_\_  
 Email: Edward.Vandoren@CBI.com

Project Proposal Provided? (for billing purposes)  
 Yes  No

Format:  
 PDF  EXCEL  OGIS  
 OTHER GISKEY FORMAT  
 "Enhanced Data Package"

Con-Test Lab ID <small>(Laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	Matrix Code	Date	Time	Notes	Concentration	Units	VOC (EPA 8260B)
		Beginning Date/Time	Ending Date/Time									
-01	MM-112	6/21/13 0600	6/21/13 0600									
-02	MM-116D	6/21/13 0630	6/21/13 0630									
-03	MM-116S	6/21/13 0700	6/21/13 0700									

5 DAY TAP  
 SMC/G/L/S

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix Conc. Code Box:  
 H - High, M - Medium, L - Low, C - Clean, U - Unknown

Requested by: (signature) \_\_\_\_\_  
 Date: 6/21/13

Turnaround:  
 7-Day  
 10-Day  
 Other \_\_\_\_\_

Detection Limit Requirements  
 Mass such as: \_\_\_\_\_

Is your project MCP or RCP?  
 MCP Form Required  
 RCP Form Required  
 MA State DW Form Required  
 PWSID # \_\_\_\_\_

NEIAC & AIHA-LAP, LLC  
 Accredited  
 WBE/DBE Certified

Requested by: (signature) \_\_\_\_\_  
 Date: 6/21/13

Turnaround:  
 7-Day  
 10-Day  
 Other \_\_\_\_\_

Detection Limit Requirements  
 Mass such as: \_\_\_\_\_

Is your project MCP or RCP?  
 MCP Form Required  
 RCP Form Required  
 MA State DW Form Required  
 PWSID # \_\_\_\_\_

NEIAC & AIHA-LAP, LLC  
 Accredited  
 WBE/DBE Certified

Requested by: (signature) \_\_\_\_\_  
 Date: 6/21/13

Turnaround:  
 7-Day  
 10-Day  
 Other \_\_\_\_\_

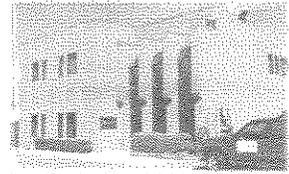
Detection Limit Requirements  
 Mass such as: \_\_\_\_\_

Is your project MCP or RCP?  
 MCP Form Required  
 RCP Form Required  
 MA State DW Form Required  
 PWSID # \_\_\_\_\_

NEIAC & AIHA-LAP, LLC  
 Accredited  
 WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT. PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.  
 East Longmeadow, MA. 01028  
 P: 413-525-2332  
 F: 413-525-6405  
 www.contestlabs.com



### Sample Receipt Checklist

CLIENT NAME: Shaw Environmental, Inc RECEIVED BY: SMU DATE: 6/24/13

- 1) Was the chain(s) of custody relinquished and signed?  Yes  No No CoC Included  
 2) Does the chain agree with the samples?  Yes  No  
 If not, explain:  
 3) Are all the samples in good condition?  Yes  No  
 If not, explain:

4) How were the samples received:  
 On Ice  Direct from Sampling  Ambient  In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)?  Yes  No N/A  
 Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun 2-9°

5) Are there Dissolved samples for the lab to filter? Yes  No   
 Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes  No   
 Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

7) Location where samples are stored: 19  
 Permission to subcontract samples? Yes  No   
 (Walk-in clients only) if not already approved  
 Client Signature: \_\_\_\_\_

8) Do all samples have the proper Acid pH: Yes  No  N/A \_\_\_\_\_

9) Do all samples have the proper Base pH: Yes  No  N/A \_\_\_\_\_

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes  No  N/A

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic		Plastic Bag / Ziploc	
40 mL Vial - type listed below	9	PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments:

40 mL vials: # HCl 9 # Methanol \_\_\_\_\_  
 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen:

August 23, 2013

Edward Van Doren  
Shaw Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Providence, RI  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 13H0515

Enclosed are results of analyses for samples received by the laboratory on August 14, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



James M. Georgantas  
Project Manager



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

Shaw Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Edward Van Doren

REPORT DATE: 8/23/2013

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 13H0515

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-101D	13H0515-01	Ground Water		SW-846 8260C	
MW-101S	13H0515-02	Ground Water		SW-846 8260C	
MW-101S Dup	13H0515-03	Ground Water		SW-846 8260C	
MW-112	13H0515-04	Ground Water		SW-846 8260C	
MW-116D	13H0515-05	Ground Water		SW-846 8260C	
MW-116S	13H0515-06	Ground Water		SW-846 8260C	
MW-201D	13H0515-07	Ground Water		SW-846 8260C	
MW-202D	13H0515-08	Ground Water		SW-846 8260C	
MW-202S	13H0515-09	Ground Water		SW-846 8260C	
MW-207D	13H0515-10	Ground Water		SW-846 8260C	
MW-207S	13H0515-11	Ground Water		SW-846 8260C	
MW-218S	13H0515-12	Ground Water		SW-846 8260C	
MW-218D	13H0515-13	Ground Water		SW-846 8260C	
MW-216D	13H0515-14	Ground Water		SW-846 8260C	
MW-216S	13H0515-15	Ground Water		SW-846 8260C	
MW-217D	13H0515-16	Ground Water		SW-846 8260C	
MW-217S	13H0515-17	Ground Water		SW-846 8260C	
CW-1	13H0515-18	Ground Water		SW-846 8260C	
CW-2	13H0515-19	Ground Water		SW-846 8260C	
MW-209D	13H0515-20	Ground Water		SW-846 8260C	
GZA-3	13H0515-21	Ground Water		SW-846 6010C	
				SW-846 8260C	
MW-109D	13H0515-22	Ground Water		SW-846 6010C	
				SW-846 8260C	
CW-6	13H0515-23	Ground Water		SW-846 8015C	
CW-6 Dup	13H0515-24	Ground Water		SW-846 8015C	
GZA-3 Dup	13H0515-25	Ground Water		SW-846 6010C	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

**SW-846 8015C****Qualifications:**

---

Sample contamination matches the range for #2 fuel oil, but it does not match the pattern.

**Analyte & Samples(s) Qualified:****Fuel Oil #2**

13H0515-23[CW-6], 13H0515-24[CW-6 Dup]

**SW-846 8260C****Qualifications:**

---

Elevated reporting limits for all volatile compounds due to foaming sample matrix.

**Analyte & Samples(s) Qualified:**

13H0515-15[MW-216S]

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

**Analyte & Samples(s) Qualified:****Bromomethane**

B078840-BS1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

**Analyte & Samples(s) Qualified:****Bromomethane, Tetrahydrofuran**

13H0515-02[MW-101S], 13H0515-03[MW-101S Dup], 13H0515-04[MW-112], 13H0515-05[MW-116D], 13H0515-06[MW-116S], 13H0515-07[MW-201D], 13H0515-08[MW-202D], 13H0515-09[MW-202S], B078840-BLK1, B078840-BS1, B078840-BSD1, 13H0515-10[MW-207D], 13H0515-11[MW-207S], 13H0515-12[MW-218S], 13H0515-13[MW-218D], 13H0515-14[MW-216D], 13H0515-15[MW-216S], 13H0515-16[MW-217D], B078843-BLK1, B078843-BS1, B078843-BSD1

Elevated reporting limit due to high concentration of target compounds. Requested reporting limit not met.

**Analyte & Samples(s) Qualified:**

13H0515-01[MW-101D], 13H0515-04[MW-112], 13H0515-07[MW-201D], 13H0515-08[MW-202D], 13H0515-20[MW-209D]

Elevated reporting limit due to high concentration of target compounds.

**Analyte & Samples(s) Qualified:**

13H0515-11[MW-207S], 13H0515-13[MW-218D]

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

**Analyte & Samples(s) Qualified:****1,3,5-Trichlorobenzene, 1,4-Dioxane, Chloromethane, tert-Butyl Alcohol (TBA)**

13H0515-01[MW-101D], 13H0515-17[MW-217S], 13H0515-19[CW-2], 13H0515-20[MW-209D], B079149-BLK1, B079149-BS1, B079149-BSD1, 13H0515-10[MW-207D], 13H0515-11[MW-207S], 13H0515-12[MW-218S], 13H0515-13[MW-218D], 13H0515-14[MW-216D], 13H0515-15[MW-216S], 13H0515-16[MW-217D], 13H0515-18[CW-1], 13H0515-21[GZA-3], 13H0515-22[MW-109D], B078843-BLK1, B078843-BS1, B078843-BSD1, B078938-BLK1, B078938-BS1, B078938-BSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

**Analyte & Samples(s) Qualified:**

**1,4-Dioxane, tert-Butyl Alcohol (TBA)**

13H0515-01[MW-101D], 13H0515-02[MW-101S], 13H0515-03[MW-101S Dup], 13H0515-04[MW-112], 13H0515-05[MW-116D], 13H0515-06[MW-116S], 13H0515-07[MW-201D], 13H0515-08[MW-202D], 13H0515-09[MW-202S], 13H0515-10[MW-207D], 13H0515-11[MW-207S], 13H0515-12[MW-218S], 13H0515-13[MW-218D], 13H0515-14[MW-216D], 13H0515-15[MW-216S], 13H0515-16[MW-217D], 13H0515-17[MW-217S], 13H0515-18[CW-1], 13H0515-19[CW-2], 13H0515-20[MW-209D], 13H0515-21[GZA-3], 13H0515-22[MW-109D], B078840-BLK1, B078840-BS1, B078840-BSD1, B078843-BLK1, B078843-BS1, B078843-BSD1, B078938-BLK1, B078938-BS1, B078938-BSD1, B079149-BLK1, B079149-BS1, B079149-BSD1

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:**

**Bromomethane**

B078840-BS1, B078840-BSD1, B078938-BS1, B078938-BSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

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.



Daren J. Damboragian  
Laboratory Manager

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-101D

Sampled: 8/12/2013 10:00

Sample ID: 13H0515-01

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Benzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Bromodichloromethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Bromoform	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Bromomethane	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5	V-16	SW-846 8260C	8/16/13	8/21/13 16:20	LBD
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Chloroethane	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Chloroform	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Chloromethane	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
cis-1,3-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
trans-1,3-Dichloropropene	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-101D

Sampled: 8/12/2013 10:00

Sample ID: 13H0515-01

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,4-Dioxane	ND	250	µg/L	5	V-05, V-16	SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Hexachlorobutadiene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Naphthalene	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Styrene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1,1,2-Tetrachloroethane	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Tetrachloroethylene	260	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Toluene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2,4-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5	V-05	SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Trichloroethylene	5.6	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	8/16/13	8/21/13 16:20	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	112	70-130	8/21/13 16:20
Toluene-d8	98.2	70-130	8/21/13 16:20
4-Bromofluorobenzene	96.4	70-130	8/21/13 16:20

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-101S

Sampled: 8/12/2013 09:15

Sample ID: 13H0515-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	8/15/13	8/19/13 14:56	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 14:56	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
cis-1,2-Dichloroethylene	10	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-101S

Sampled: 8/12/2013 09:15

Sample ID: 13H0515-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Tetrachloroethylene	25	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Trichloroethylene	1.1	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 14:56	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	104	70-130	8/19/13 14:56
Toluene-d8	98.7	70-130	8/19/13 14:56
4-Bromofluorobenzene	95.9	70-130	8/19/13 14:56

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-101S Dup

Sampled: 8/12/2013 09:30

Sample ID: 13H0515-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	8/15/13	8/19/13 15:27	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 15:27	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
cis-1,2-Dichloroethylene	10	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-101S Dup

Sampled: 8/12/2013 09:30

Sample ID: 13H0515-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Tetrachloroethylene	24	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:27	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	105	70-130	8/19/13 15:27
Toluene-d8	97.8	70-130	8/19/13 15:27
4-Bromofluorobenzene	96.1	70-130	8/19/13 15:27

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-112

Sampled: 8/12/2013 12:45

Sample ID: 13H0515-04

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Acrylonitrile	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
tert-Amyl Methyl Ether (TAME)	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Benzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Bromobenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Bromochloromethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Bromodichloromethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Bromoform	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Bromomethane	ND	40	µg/L	20	R-05	SW-846 8260C	8/15/13	8/19/13 21:36	LBD
2-Butanone (MEK)	ND	400	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
tert-Butyl Alcohol (TBA)	ND	400	µg/L	20	V-16	SW-846 8260C	8/15/13	8/19/13 21:36	LBD
n-Butylbenzene	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
sec-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
tert-Butylbenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Carbon Disulfide	ND	80	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Carbon Tetrachloride	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Chlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Chlorodibromomethane	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Chloroethane	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Chloroform	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Chloromethane	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
2-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
4-Chlorotoluene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2-Dibromoethane (EDB)	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Dibromomethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,3-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,4-Dichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
trans-1,4-Dichloro-2-butene	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Dichlorodifluoromethane (Freon 12)	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1-Dichloroethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2-Dichloroethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
cis-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
trans-1,2-Dichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,3-Dichloropropane	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
2,2-Dichloropropane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1-Dichloropropene	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
cis-1,3-Dichloropropene	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
trans-1,3-Dichloropropene	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Diethyl Ether	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-112

Sampled: 8/12/2013 12:45

Sample ID: 13H0515-04

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,4-Dioxane	ND	1000	µg/L	20	V-16	SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Ethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Hexachlorobutadiene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
2-Hexanone (MBK)	ND	200	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Isopropylbenzene (Cumene)	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
p-Isopropyltoluene (p-Cymene)	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Methyl tert-Butyl Ether (MTBE)	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Methylene Chloride	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
4-Methyl-2-pentanone (MIBK)	ND	200	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Naphthalene	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
n-Propylbenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Styrene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1,1,2-Tetrachloroethane	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1,2,2-Tetrachloroethane	ND	10	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Tetrachloroethylene	3200	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Tetrahydrofuran	ND	200	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Toluene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2,3-Trichlorobenzene	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2,4-Trichlorobenzene	ND	100	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,3,5-Trichlorobenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1,1-Trichloroethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1,2-Trichloroethane	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Trichloroethylene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Trichlorofluoromethane (Freon 11)	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2,3-Trichloropropane	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,2,4-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
1,3,5-Trimethylbenzene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
Vinyl Chloride	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
m+p Xylene	ND	40	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD
o-Xylene	ND	20	µg/L	20		SW-846 8260C	8/15/13	8/19/13 21:36	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	104	70-130	8/19/13 21:36
Toluene-d8	99.4	70-130	8/19/13 21:36
4-Bromofluorobenzene	92.3	70-130	8/19/13 21:36

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-116D

Sampled: 8/12/2013 13:30

Sample ID: 13H0515-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	8/15/13	8/19/13 15:58	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 15:58	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-116D

Sampled: 8/12/2013 13:30

Sample ID: 13H0515-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 15:58	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	105	70-130	8/19/13 15:58
Toluene-d8	99.2	70-130	8/19/13 15:58
4-Bromofluorobenzene	94.9	70-130	8/19/13 15:58

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-116S

Sampled: 8/12/2013 14:00

Sample ID: 13H0515-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	8/15/13	8/19/13 16:28	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 16:28	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-116S

Sampled: 8/12/2013 14:00

Sample ID: 13H0515-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:28	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	106	70-130	8/19/13 16:28
Toluene-d8	99.8	70-130	8/19/13 16:28
4-Bromofluorobenzene	94.3	70-130	8/19/13 16:28

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-201D

Sampled: 8/12/2013 10:45

Sample ID: 13H0515-07

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5000	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Acrylonitrile	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
tert-Amyl Methyl Ether (TAME)	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Benzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Bromobenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Bromochloromethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Bromodichloromethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Bromoform	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Bromomethane	ND	200	µg/L	100	R-05	SW-846 8260C	8/15/13	8/19/13 20:35	LBD
2-Butanone (MEK)	ND	2000	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
tert-Butyl Alcohol (TBA)	ND	2000	µg/L	100	V-16	SW-846 8260C	8/15/13	8/19/13 20:35	LBD
n-Butylbenzene	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
sec-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
tert-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Carbon Disulfide	ND	400	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Carbon Tetrachloride	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Chlorobenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Chlorodibromomethane	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Chloroethane	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Chloroform	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Chloromethane	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
2-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
4-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2-Dibromoethane (EDB)	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Dibromomethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,3-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,4-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
trans-1,4-Dichloro-2-butene	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Dichlorodifluoromethane (Freon 12)	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
cis-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
trans-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2-Dichloropropane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,3-Dichloropropane	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
2,2-Dichloropropane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1-Dichloropropene	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
cis-1,3-Dichloropropene	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
trans-1,3-Dichloropropene	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Diethyl Ether	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-201D

Sampled: 8/12/2013 10:45

Sample ID: 13H0515-07

Sample Matrix: Ground Water

Sample Flags: RL-01

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,4-Dioxane	ND	5000	µg/L	100	V-16	SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Ethylbenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Hexachlorobutadiene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
2-Hexanone (MBK)	ND	1000	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Isopropylbenzene (Cumene)	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
p-Isopropyltoluene (p-Cymene)	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Methyl tert-Butyl Ether (MTBE)	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Methylene Chloride	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
4-Methyl-2-pentanone (MIBK)	ND	1000	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Naphthalene	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
n-Propylbenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Styrene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1,1,2-Tetrachloroethane	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1,2,2-Tetrachloroethane	ND	50	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Tetrachloroethylene	6600	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Tetrahydrofuran	ND	1000	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Toluene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2,3-Trichlorobenzene	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2,4-Trichlorobenzene	ND	500	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,3,5-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1,1-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1,2-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Trichloroethylene	130	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Trichlorofluoromethane (Freon 11)	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2,3-Trichloropropane	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,2,4-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
1,3,5-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
Vinyl Chloride	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
m+p Xylene	ND	200	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD
o-Xylene	ND	100	µg/L	100		SW-846 8260C	8/15/13	8/19/13 20:35	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	107	70-130	8/19/13 20:35
Toluene-d8	99.4	70-130	8/19/13 20:35
4-Bromofluorobenzene	93.6	70-130	8/19/13 20:35

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-202D

Sampled: 8/12/2013 08:15

Sample ID: 13H0515-08

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Benzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Bromodichloromethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Bromoform	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Bromomethane	ND	20	µg/L	10	R-05	SW-846 8260C	8/15/13	8/19/13 21:05	LBD
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10	V-16	SW-846 8260C	8/15/13	8/19/13 21:05	LBD
n-Butylbenzene	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Carbon Disulfide	ND	40	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Chloroethane	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Chloroform	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Chloromethane	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
cis-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
2,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
cis-1,3-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
trans-1,3-Dichloropropene	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-202D

Sampled: 8/12/2013 08:15

Sample ID: 13H0515-08

Sample Matrix: Ground Water

Sample Flags: RL-01

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,4-Dioxane	ND	500	µg/L	10	V-16	SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Hexachlorobutadiene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Naphthalene	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Styrene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1,1,2-Tetrachloroethane	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Tetrachloroethylene	990	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Toluene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2,4-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Trichloroethylene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD
o-Xylene	ND	10	µg/L	10		SW-846 8260C	8/15/13	8/19/13 21:05	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	104	70-130	8/19/13 21:05
Toluene-d8	98.7	70-130	8/19/13 21:05
4-Bromofluorobenzene	93.5	70-130	8/19/13 21:05

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-202S

Sampled: 8/12/2013 07:45

Sample ID: 13H0515-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	8/15/13	8/19/13 16:59	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 16:59	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Chloroform	7.4	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
cis-1,2-Dichloroethylene	4.9	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-202S

Sampled: 8/12/2013 07:45

Sample ID: 13H0515-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Tetrachloroethylene	43	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Trichloroethylene	2.4	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/19/13 16:59	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	104	70-130	8/19/13 16:59
Toluene-d8	99.3	70-130	8/19/13 16:59
4-Bromofluorobenzene	97.0	70-130	8/19/13 16:59

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-207D

Sampled: 8/12/2013 06:30

Sample ID: 13H0515-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/16/13 2:49	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	8/15/13	8/16/13 2:49	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
cis-1,2-Dichloroethylene	2.1	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-207D

Sampled: 8/12/2013 06:30

Sample ID: 13H0515-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Tetrachloroethylene	74	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Trichloroethylene	1.3	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 2:49	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.0	70-130	8/16/13 2:49
Toluene-d8	96.5	70-130	8/16/13 2:49
4-Bromofluorobenzene	102	70-130	8/16/13 2:49

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-207S

Sampled: 8/12/2013 07:00

Sample ID: 13H0515-11

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Benzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Bromoform	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Bromomethane	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5	V-16	SW-846 8260C	8/15/13	8/16/13 4:34	EEH
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Chloroethane	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Chloroform	11	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Chloromethane	ND	10	µg/L	5	V-05	SW-846 8260C	8/15/13	8/16/13 4:34	EEH
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
cis-1,2-Dichloroethylene	6.4	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-207S

Sampled: 8/12/2013 07:00

Sample ID: 13H0515-11

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,4-Dioxane	ND	250	µg/L	5	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Hexachlorobutadiene	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Naphthalene	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Styrene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Tetrachloroethylene	240	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Tetrahydrofuran	ND	50	µg/L	5	R-05	SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Toluene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Trichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	8/15/13	8/16/13 4:34	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	97.1	70-130	
Toluene-d8	102	70-130	
4-Bromofluorobenzene	105	70-130	

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-218S

Sampled: 8/12/2013 11:30

Sample ID: 13H0515-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/16/13 3:16	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	8/15/13	8/16/13 3:16	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
cis-1,2-Dichloroethylene	2.5	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-218S

Sampled: 8/12/2013 11:30

Sample ID: 13H0515-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:16	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	99.0	70-130	8/16/13 3:16
Toluene-d8	104	70-130	8/16/13 3:16
4-Bromofluorobenzene	103	70-130	8/16/13 3:16

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-218D

Sampled: 8/12/2013 12:00

Sample ID: 13H0515-13

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Benzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Bromodichloromethane	3.8	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2	V-16	SW-846 8260C	8/15/13	8/16/13 5:01	EEH
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Chloroform	34	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Chloromethane	ND	4.0	µg/L	2	V-05	SW-846 8260C	8/15/13	8/16/13 5:01	EEH
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
cis-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-218D

Sampled: 8/12/2013 12:00

Sample ID: 13H0515-13

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,4-Dioxane	ND	100	µg/L	2	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Naphthalene	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Styrene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Tetrachloroethylene	140	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Tetrahydrofuran	ND	20	µg/L	2	R-05	SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Trichloroethylene	6.5	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH
o-Xylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 5:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	101	70-130	8/16/13 5:01
Toluene-d8	99.1	70-130	8/16/13 5:01
4-Bromofluorobenzene	101	70-130	8/16/13 5:01

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-216D

Sampled: 8/12/2013 15:30

Sample ID: 13H0515-14

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/16/13 3:42	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	8/15/13	8/16/13 3:42	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-216D

Sampled: 8/12/2013 15:30

Sample ID: 13H0515-14

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Trichloroethylene	1.2	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 3:42	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	98.7	70-130	8/16/13 3:42
Toluene-d8	105	70-130	8/16/13 3:42
4-Bromofluorobenzene	104	70-130	8/16/13 3:42



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

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-216S

Sampled: 8/12/2013 14:45

Sample ID: 13H0515-15

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Benzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2	V-16	SW-846 8260C	8/15/13	8/16/13 8:06	EEH
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Chloromethane	ND	4.0	µg/L	2	V-05	SW-846 8260C	8/15/13	8/16/13 8:06	EEH
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
cis-1,2-Dichloroethylene	33	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-216S

Sampled: 8/12/2013 14:45

Sample ID: 13H0515-15

Sample Matrix: Ground Water

Sample Flags: DL-01

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,4-Dioxane	ND	100	µg/L	2	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Ethylbenzene	2.4	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Naphthalene	26	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Styrene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Tetrachloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Tetrahydrofuran	ND	20	µg/L	2	R-05	SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,2,4-Trimethylbenzene	10	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
1,3,5-Trimethylbenzene	6.9	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
m+p Xylene	5.7	4.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH
o-Xylene	8.3	2.0	µg/L	2		SW-846 8260C	8/15/13	8/16/13 8:06	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	98.0	70-130	8/16/13 8:06
Toluene-d8	95.4	70-130	8/16/13 8:06
4-Bromofluorobenzene	101	70-130	8/16/13 8:06

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-217D

Sampled: 8/13/2013 13:00

Sample ID: 13H0515-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/15/13	8/16/13 4:08	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	8/15/13	8/16/13 4:08	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
cis-1,2-Dichloroethylene	7.0	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-217D

Sampled: 8/13/2013 13:00

Sample ID: 13H0515-16

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Trichloroethylene	3.7	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/15/13	8/16/13 4:08	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	100	70-130	8/16/13 4:08
Toluene-d8	102	70-130	8/16/13 4:08
4-Bromofluorobenzene	103	70-130	8/16/13 4:08



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

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Sampled: 8/13/2013 12:00

Field Sample #: MW-217S

Sample ID: 13H0515-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/20/13	8/21/13 12:42	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
cis-1,2-Dichloroethylene	63	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-217S

Sampled: 8/13/2013 12:00

Sample ID: 13H0515-17

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Ethylbenzene	2.6	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Naphthalene	13	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
Vinyl Chloride	6.7	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
m+p Xylene	2.4	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD
o-Xylene	1.1	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 12:42	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	104	70-130	8/21/13 12:42
Toluene-d8	97.8	70-130	8/21/13 12:42
4-Bromofluorobenzene	96.0	70-130	8/21/13 12:42



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

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: CW-1

Sampled: 8/13/2013 06:00

Sample ID: 13H0515-18

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05, V-16	SW-846 8260C	8/16/13	8/20/13 4:13	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1-Dichloroethane	17	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2-Dichloroethane	3.7	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1-Dichloroethylene	110	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
cis-1,2-Dichloroethylene	360	50	µg/L	50		SW-846 8260C	8/20/13	8/21/13 11:40	LBD
trans-1,2-Dichloroethylene	34	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Sampled: 8/13/2013 06:00

Field Sample #: CW-1

Sample ID: 13H0515-18

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,4-Dioxane	84	50	µg/L	1	V-05, V-16	SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Methyl tert-Butyl Ether (MTBE)	3.8	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Tetrachloroethylene	290	50	µg/L	50		SW-846 8260C	8/20/13	8/21/13 11:40	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1,1-Trichloroethane	1.2	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1,2-Trichloroethane	1.1	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Trichloroethylene	4700	50	µg/L	50		SW-846 8260C	8/20/13	8/21/13 11:40	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 4:13	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	104	70-130	8/20/13 4:13
1,2-Dichloroethane-d4	100	70-130	8/21/13 11:40
Toluene-d8	99.6	70-130	8/21/13 11:40
Toluene-d8	101	70-130	8/20/13 4:13
4-Bromofluorobenzene	91.8	70-130	8/20/13 4:13
4-Bromofluorobenzene	95.6	70-130	8/21/13 11:40

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: CW-2

Sampled: 8/13/2013 07:00

Sample ID: 13H0515-19

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-16	SW-846 8260C	8/20/13	8/21/13 13:13	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: CW-2

Sampled: 8/13/2013 07:00

Sample ID: 13H0515-19

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/20/13	8/21/13 13:13	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	105	70-130	8/21/13 13:13
Toluene-d8	98.2	70-130	8/21/13 13:13
4-Bromofluorobenzene	95.3	70-130	8/21/13 13:13

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-209D

Sampled: 8/13/2013 11:30

Sample ID: 13H0515-20

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatil Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Benzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Bromodichloromethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Bromoform	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Bromomethane	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5	V-16	SW-846 8260C	8/20/13	8/21/13 16:51	LBD
n-Butylbenzene	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Chloroethane	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Chloroform	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Chloromethane	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
cis-1,3-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
trans-1,3-Dichloropropene	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-209D

Sampled: 8/13/2013 11:30

Sample ID: 13H0515-20

Sample Matrix: Ground Water

Sample Flags: RL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,4-Dioxane	ND	250	µg/L	5	V-05, V-16	SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Hexachlorobutadiene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Naphthalene	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Styrene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1,1,2-Tetrachloroethane	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Tetrachloroethylene	320	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Toluene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2,4-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5	V-05	SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Trichloroethylene	25	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	8/20/13	8/21/13 16:51	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	111	70-130	8/21/13 16:51
Toluene-d8	99.8	70-130	8/21/13 16:51
4-Bromofluorobenzene	94.4	70-130	8/21/13 16:51

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: GZA-3

Sampled: 8/13/2013 10:30

Sample ID: 13H0515-21

Sample Matrix: Ground Water

## Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05, V-16	SW-846 8260C	8/16/13	8/20/13 5:45	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1-Dichloroethane	1.1	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
cis-1,2-Dichloroethylene	34	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: GZA-3

Sampled: 8/13/2013 10:30

Sample ID: 13H0515-21

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Methyl tert-Butyl Ether (MTBE)	4.0	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Trichloroethylene	2.8	1.0	µg/L	1		SW-846 8260C	8/22/13	8/22/13 23:31	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
Vinyl Chloride	33	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 5:45	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	106	70-130	8/20/13 5:45
1,2-Dichloroethane-d4	113	70-130	8/22/13 23:31
Toluene-d8	99.4	70-130	8/20/13 5:45
Toluene-d8	98.2	70-130	8/22/13 23:31
4-Bromofluorobenzene	95.1	70-130	8/20/13 5:45
4-Bromofluorobenzene	97.1	70-130	8/22/13 23:31

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Sampled: 8/13/2013 10:30

Field Sample #: GZA-3

Sample ID: 13H0515-21

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.010	mg/L	1		SW-846 6010C	8/15/13	8/17/13 16:05	OP

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-109D

Sampled: 8/13/2013 09:30

Sample ID: 13H0515-22

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1	V-05, V-16	SW-846 8260C	8/16/13	8/20/13 6:15	LBD
n-Butylbenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: MW-109D

Sampled: 8/13/2013 09:30

Sample ID: 13H0515-22

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,4-Dioxane	ND	50	µg/L	1	V-05, V-16	SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Hexachlorobutadiene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	8/22/13	8/23/13 0:02	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/16/13	8/20/13 6:15	LBD

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	105	70-130	8/20/13 6:15
1,2-Dichloroethane-d4	113	70-130	8/23/13 0:02
Toluene-d8	96.8	70-130	8/23/13 0:02
Toluene-d8	99.2	70-130	8/20/13 6:15
4-Bromofluorobenzene	93.9	70-130	8/20/13 6:15
4-Bromofluorobenzene	93.2	70-130	8/23/13 0:02

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Sampled: 8/13/2013 09:30

Field Sample #: MW-109D

Sample ID: 13H0515-22

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.010	mg/L	1		SW-846 6010C	8/15/13	8/17/13 16:39	OP

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Sampled: 8/13/2013 08:00

Field Sample #: CW-6

Sample ID: 13H0515-23

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Fuel Oil #2	7.3	0.20	mg/L	1	Z-01	SW-846 8015C	8/19/13	8/22/13 1:36	SCS
Surrogates	% Recovery		Recovery Limits		Flag				
o-Terphenyl	91.0		40-140					8/22/13 1:36	

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Sampled: 8/13/2013 08:30

Field Sample #: CW-6 Dup

Sample ID: 13H0515-24

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Fuel Oil #2	7.4	0.20	mg/L	1	Z-01	SW-846 8015C	8/19/13	8/22/13 1:54	SCS
Surrogates	% Recovery		Recovery Limits		Flag				
o-Terphenyl	83.3		40-140					8/22/13 1:54	

Project Location: Providence, RI

Sample Description:

Work Order: 13H0515

Date Received: 8/14/2013

Field Sample #: GZA-3 Dup

Sampled: 8/13/2013 10:30

Sample ID: 13H0515-25

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.010	mg/L	1		SW-846 6010C	8/15/13	8/17/13 16:43	OP

**Sample Extraction Data**

**Prep Method: SW-846 3005A Dissolved-SW-846 6010C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-21 [GZA-3]	B078874	50.0	50.0	08/15/13
13H0515-22 [MW-109D]	B078874	50.0	50.0	08/15/13
13H0515-25 [GZA-3 Dup]	B078874	50.0	50.0	08/15/13

**Prep Method: SW-846 3510C-SW-846 8015C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-23 [CW-6]	B079086	1000	1.00	08/19/13
13H0515-24 [CW-6 Dup]	B079086	1000	1.00	08/19/13

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-02 [MW-101S]	B078840	5	5.00	08/15/13
13H0515-03 [MW-101S Dup]	B078840	5	5.00	08/15/13
13H0515-04 [MW-112]	B078840	0.25	5.00	08/15/13
13H0515-05 [MW-116D]	B078840	5	5.00	08/15/13
13H0515-06 [MW-116S]	B078840	5	5.00	08/15/13
13H0515-07 [MW-201D]	B078840	0.05	5.00	08/15/13
13H0515-08 [MW-202D]	B078840	0.5	5.00	08/15/13
13H0515-09 [MW-202S]	B078840	5	5.00	08/15/13

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-10 [MW-207D]	B078843	5	5.00	08/15/13
13H0515-11 [MW-207S]	B078843	1	5.00	08/15/13
13H0515-12 [MW-218S]	B078843	5	5.00	08/15/13
13H0515-13 [MW-218D]	B078843	2.5	5.00	08/15/13
13H0515-14 [MW-216D]	B078843	5	5.00	08/15/13
13H0515-15 [MW-216S]	B078843	2.5	5.00	08/15/13
13H0515-16 [MW-217D]	B078843	5	5.00	08/15/13

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-18 [CW-1]	B078938	5	5.00	08/16/13
13H0515-21 [GZA-3]	B078938	5	5.00	08/16/13
13H0515-22 [MW-109D]	B078938	5	5.00	08/16/13

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-01 [MW-101D]	B079149	1	5.00	08/16/13
13H0515-17 [MW-217S]	B079149	5	5.00	08/20/13
13H0515-18RE1 [CW-1]	B079149	0.1	5.00	08/20/13
13H0515-19 [CW-2]	B079149	5	5.00	08/20/13
13H0515-20 [MW-209D]	B079149	1	5.00	08/20/13

**Sample Extraction Data**

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13H0515-21RE1 [GZA-3]	B079351	5	5.00	08/22/13
13H0515-22RE1 [MW-109D]	B079351	5	5.00	08/22/13

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B078840 - SW-846 5030B

Blank (B078840-BLK1)

Prepared: 08/15/13 Analyzed: 08/19/13

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							R-05
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-16
n-Butylbenzene	ND	5.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	2.0	µg/L							
trans-1,3-Dichloropropene	ND	5.0	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B078840 - SW-846 5030B</b>										
<b>Blank (B078840-BLK1)</b>										
					Prepared: 08/15/13 Analyzed: 08/19/13					
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.8		µg/L	25.0		103	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	23.8		µg/L	25.0		95.2	70-130			
<b>LCS (B078840-BS1)</b>										
					Prepared: 08/15/13 Analyzed: 08/19/13					
Acetone	102	50	µg/L	100		102	70-160			†
Acrylonitrile	8.96	5.0	µg/L	10.0		89.6	70-130			
tert-Amyl Methyl Ether (TAME)	11.4	0.50	µg/L	10.0		114	70-130			
Benzene	9.81	1.0	µg/L	10.0		98.1	70-130			
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130			
Bromochloromethane	10.6	1.0	µg/L	10.0		106	70-130			
Bromodichloromethane	10.7	1.0	µg/L	10.0		107	70-130			
Bromoform	10.3	1.0	µg/L	10.0		103	70-130			
<b>Bromomethane</b>	3.31	2.0	µg/L	10.0		<b>33.1</b> *	40-160			L-07A, R-05, V-20 †
2-Butanone (MEK)	101	20	µg/L	100		101	40-160			†
tert-Butyl Alcohol (TBA)	90.9	20	µg/L	100		90.9	40-160			V-16 †
n-Butylbenzene	9.46	5.0	µg/L	10.0		94.6	70-130			
sec-Butylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
tert-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
tert-Butyl Ethyl Ether (TBEE)	11.7	0.50	µg/L	10.0		117	70-130			
Carbon Disulfide	9.76	4.0	µg/L	10.0		97.6	70-130			
Carbon Tetrachloride	10.3	5.0	µg/L	10.0		103	70-130			
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Chlorodibromomethane	9.80	0.50	µg/L	10.0		98.0	70-130			
Chloroethane	10.8	2.0	µg/L	10.0		108	70-130			
Chloroform	10.9	2.0	µg/L	10.0		109	70-130			
Chloromethane	7.33	2.0	µg/L	10.0		73.3	40-160			†
2-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130			

## QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B078840 - SW-846 5030B</b>									
<b>LCS (B078840-BS1)</b>	Prepared: 08/15/13 Analyzed: 08/19/13								
4-Chlorotoluene	10.8	1.0	µg/L	10.0		108 70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.6	5.0	µg/L	10.0		106 70-130			
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108 70-130			
Dibromomethane	10.9	1.0	µg/L	10.0		109 70-130			
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106 70-130			
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103 70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104 70-130			
trans-1,4-Dichloro-2-butene	10.0	2.0	µg/L	10.0		100 70-130			
Dichlorodifluoromethane (Freon 12)	7.62	2.0	µg/L	10.0		76.2 40-160			†
1,1-Dichloroethane	10.9	1.0	µg/L	10.0		109 70-130			
1,2-Dichloroethane	11.1	1.0	µg/L	10.0		111 70-130			
1,1-Dichloroethylene	11.1	1.0	µg/L	10.0		111 70-130			
cis-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109 70-130			
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102 70-130			
1,2-Dichloropropane	11.0	1.0	µg/L	10.0		110 70-130			
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110 70-130			
2,2-Dichloropropane	12.5	1.0	µg/L	10.0		125 40-130			†
1,1-Dichloropropene	10.7	2.0	µg/L	10.0		107 70-130			
cis-1,3-Dichloropropene	9.92	2.0	µg/L	10.0		99.2 70-130			
trans-1,3-Dichloropropene	10.4	5.0	µg/L	10.0		104 70-130			
Diethyl Ether	10.3	2.0	µg/L	10.0		103 70-130			
Diisopropyl Ether (DIPE)	11.7	0.50	µg/L	10.0		117 70-130			
1,4-Dioxane	83.6	50	µg/L	100		83.6 40-130			V-16 †
Ethylbenzene	10.4	1.0	µg/L	10.0		104 70-130			
Hexachlorobutadiene	10.8	1.0	µg/L	10.0		108 70-130			
2-Hexanone (MBK)	105	10	µg/L	100		105 70-160			†
Isopropylbenzene (Cumene)	10.6	1.0	µg/L	10.0		106 70-130			
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114 70-130			
Methyl tert-Butyl Ether (MTBE)	11.5	1.0	µg/L	10.0		115 70-130			
Methylene Chloride	11.4	5.0	µg/L	10.0		114 70-130			
4-Methyl-2-pentanone (MIBK)	105	10	µg/L	100		105 70-160			†
Naphthalene	11.2	5.0	µg/L	10.0		112 40-130			†
n-Propylbenzene	10.9	1.0	µg/L	10.0		109 70-130			
Styrene	10.9	1.0	µg/L	10.0		109 70-130			
1,1,1,2-Tetrachloroethane	10.3	2.0	µg/L	10.0		103 70-130			
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104 70-130			
Tetrachloroethylene	10.9	1.0	µg/L	10.0		109 70-130			
Tetrahydrofuran	10.7	10	µg/L	10.0		107 70-130			
Toluene	10.2	1.0	µg/L	10.0		102 70-130			
1,2,3-Trichlorobenzene	10.6	5.0	µg/L	10.0		106 70-130			
1,2,4-Trichlorobenzene	10.4	5.0	µg/L	10.0		104 70-130			
1,3,5-Trichlorobenzene	9.12	1.0	µg/L	10.0		91.2 70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0		110 70-130			
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0		106 70-130			
Trichloroethylene	10.5	1.0	µg/L	10.0		105 70-130			
Trichlorofluoromethane (Freon 11)	11.4	2.0	µg/L	10.0		114 70-130			
1,2,3-Trichloropropane	10.4	2.0	µg/L	10.0		104 70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.2	1.0	µg/L	10.0		122 70-130			
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110 70-130			
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.0		107 70-130			
Vinyl Chloride	8.58	2.0	µg/L	10.0		85.8 40-160			†

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B078840 - SW-846 5030B

LCS (B078840-BS1)

Prepared: 08/15/13 Analyzed: 08/19/13

m+p Xylene	21.3	2.0	µg/L	20.0		106	70-130			
o-Xylene	10.6	1.0	µg/L	10.0		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.5		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0		98.4	70-130			

LCS Dup (B078840-BS1)

Prepared: 08/15/13 Analyzed: 08/19/13

Acetone	103	50	µg/L	100		103	70-160	1.26	25	†
Acrylonitrile	9.04	5.0	µg/L	10.0		90.4	70-130	0.889	25	
tert-Amyl Methyl Ether (TAME)	11.6	0.50	µg/L	10.0		116	70-130	1.48	25	
Benzene	9.86	1.0	µg/L	10.0		98.6	70-130	0.508	25	
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.43	25	
Bromochloromethane	11.1	1.0	µg/L	10.0		111	70-130	3.96	25	
Bromodichloromethane	10.8	1.0	µg/L	10.0		108	70-130	0.650	25	
Bromoform	10.4	1.0	µg/L	10.0		104	70-130	1.35	25	
Bromomethane	5.67	2.0	µg/L	10.0		56.7	40-160	52.6 *	25	R-05, V-20 †
2-Butanone (MEK)	99.2	20	µg/L	100		99.2	40-160	1.51	25	†
tert-Butyl Alcohol (TBA)	91.5	20	µg/L	100		91.5	40-160	0.713	25	V-16 †
n-Butylbenzene	9.57	5.0	µg/L	10.0		95.7	70-130	1.16	25	
sec-Butylbenzene	11.2	1.0	µg/L	10.0		112	70-130	0.540	25	
tert-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	2.04	25	
tert-Butyl Ethyl Ether (TBEE)	11.7	0.50	µg/L	10.0		117	70-130	0.684	25	
Carbon Disulfide	9.50	4.0	µg/L	10.0		95.0	70-130	2.70	25	
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102	70-130	0.195	25	
Chlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.18	25	
Chlorodibromomethane	9.78	0.50	µg/L	10.0		97.8	70-130	0.204	25	
Chloroethane	10.9	2.0	µg/L	10.0		109	70-130	0.735	25	
Chloroform	10.9	2.0	µg/L	10.0		109	70-130	0.00	25	
Chloromethane	7.45	2.0	µg/L	10.0		74.5	40-160	1.62	25	†
2-Chlorotoluene	10.8	1.0	µg/L	10.0		108	70-130	5.34	25	
4-Chlorotoluene	11.1	1.0	µg/L	10.0		111	70-130	2.92	25	
1,2-Dibromo-3-chloropropane (DBCP)	11.1	5.0	µg/L	10.0		111	70-130	4.05	25	
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130	0.649	25	
Dibromomethane	11.0	1.0	µg/L	10.0		110	70-130	0.365	25	
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.665	25	
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	1.92	25	
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	2.28	25	
trans-1,4-Dichloro-2-butene	10.5	2.0	µg/L	10.0		105	70-130	5.26	25	
Dichlorodifluoromethane (Freon 12)	7.42	2.0	µg/L	10.0		74.2	40-160	2.66	25	†
1,1-Dichloroethane	11.0	1.0	µg/L	10.0		110	70-130	0.731	25	
1,2-Dichloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.18	25	
1,1-Dichloroethylene	11.2	1.0	µg/L	10.0		112	70-130	1.26	25	
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	1.11	25	
trans-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	1.56	25	
1,2-Dichloropropane	10.8	1.0	µg/L	10.0		108	70-130	1.47	25	
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110	70-130	0.0911	25	
2,2-Dichloropropane	12.4	1.0	µg/L	10.0		124	40-130	1.12	25	†
1,1-Dichloropropene	10.7	2.0	µg/L	10.0		107	70-130	0.0937	25	
cis-1,3-Dichloropropene	9.87	2.0	µg/L	10.0		98.7	70-130	0.505	25	
trans-1,3-Dichloropropene	10.1	5.0	µg/L	10.0		101	70-130	2.64	25	
Diethyl Ether	10.5	2.0	µg/L	10.0		105	70-130	1.63	25	
Diisopropyl Ether (DIPE)	11.9	0.50	µg/L	10.0		119	70-130	1.27	25	

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B078840 - SW-846 5030B

LCS Dup (B078840-BSD1)

Prepared: 08/15/13 Analyzed: 08/19/13

1,4-Dioxane	84.0	50	µg/L	100		84.0	40-130	0.501	50	V-16 † ‡
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130	1.24	25	
Hexachlorobutadiene	11.3	1.0	µg/L	10.0		113	70-130	4.08	25	
2-Hexanone (MBK)	106	10	µg/L	100		106	70-160	1.00	25	†
Isopropylbenzene (Cumene)	11.0	1.0	µg/L	10.0		110	70-130	3.25	25	
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130	0.526	25	
Methyl tert-Butyl Ether (MTBE)	11.7	1.0	µg/L	10.0		117	70-130	1.56	25	
Methylene Chloride	11.7	5.0	µg/L	10.0		117	70-130	2.86	25	
4-Methyl-2-pentanone (MIBK)	106	10	µg/L	100		106	70-160	1.45	25	†
Naphthalene	11.4	5.0	µg/L	10.0		114	40-130	1.15	25	†
n-Propylbenzene	11.2	1.0	µg/L	10.0		112	70-130	3.35	25	
Styrene	11.1	1.0	µg/L	10.0		111	70-130	2.37	25	
1,1,1,2-Tetrachloroethane	10.4	2.0	µg/L	10.0		104	70-130	1.54	25	
1,1,2,2-Tetrachloroethane	10.8	0.50	µg/L	10.0		108	70-130	3.40	25	
Tetrachloroethylene	11.0	1.0	µg/L	10.0		110	70-130	1.01	25	
Tetrahydrofuran	10.5	10	µg/L	10.0		105	70-130	1.88	25	
Toluene	10.2	1.0	µg/L	10.0		102	70-130	0.00	25	
1,2,3-Trichlorobenzene	10.8	5.0	µg/L	10.0		108	70-130	2.43	25	
1,2,4-Trichlorobenzene	10.8	5.0	µg/L	10.0		108	70-130	3.77	25	
1,3,5-Trichlorobenzene	9.38	1.0	µg/L	10.0		93.8	70-130	2.81	25	
1,1,1-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.01	25	
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	1.03	25	
Trichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	2.51	25	
Trichlorofluoromethane (Freon 11)	11.1	2.0	µg/L	10.0		111	70-130	2.39	25	
1,2,3-Trichloropropane	10.7	2.0	µg/L	10.0		107	70-130	3.70	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.2	1.0	µg/L	10.0		122	70-130	0.328	25	
1,2,4-Trimethylbenzene	11.2	1.0	µg/L	10.0		112	70-130	1.81	25	
1,3,5-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130	2.21	25	
Vinyl Chloride	8.18	2.0	µg/L	10.0		81.8	40-160	4.77	25	†
m+p Xylene	21.4	2.0	µg/L	20.0		107	70-130	0.702	25	
o-Xylene	10.9	1.0	µg/L	10.0		109	70-130	2.14	25	
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		100	70-130			

Batch B078843 - SW-846 5030B

Blank (B078843-BLK1)

Prepared & Analyzed: 08/15/13

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-16
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B078843 - SW-846 5030B**

**Blank (B078843-BLK1)**

Prepared & Analyzed: 08/15/13

tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							V-05
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-05, V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							R-05
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B078843 - SW-846 5030B**

**Blank (B078843-BLK1)**

Prepared & Analyzed: 08/15/13

1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	24.3		µg/L	25.0		97.3	70-130			
Surrogate: Toluene-d8	25.4		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0		102	70-130			

**LCS (B078843-BS1)**

Prepared & Analyzed: 08/15/13

Acetone	78.7	50	µg/L	100		78.7	70-160			†
Acrylonitrile	9.06	5.0	µg/L	10.0		90.6	70-130			
tert-Amyl Methyl Ether (TAME)	9.50	0.50	µg/L	10.0		95.0	70-130			
Benzene	9.16	1.0	µg/L	10.0		91.6	70-130			
Bromobenzene	9.50	1.0	µg/L	10.0		95.0	70-130			
Bromochloromethane	10.5	1.0	µg/L	10.0		105	70-130			
Bromodichloromethane	9.51	0.50	µg/L	10.0		95.1	70-130			
Bromoform	7.89	1.0	µg/L	10.0		78.9	70-130			
Bromomethane	4.02	2.0	µg/L	10.0		40.2	40-160			†
2-Butanone (MEK)	78.8	20	µg/L	100		78.8	40-160			†
tert-Butyl Alcohol (TBA)	93.8	20	µg/L	100		93.8	40-160		V-16	†
n-Butylbenzene	9.27	1.0	µg/L	10.0		92.7	70-130			
sec-Butylbenzene	9.95	1.0	µg/L	10.0		99.5	70-130			
tert-Butylbenzene	9.00	1.0	µg/L	10.0		90.0	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.4	0.50	µg/L	10.0		104	70-130			
Carbon Disulfide	9.41	4.0	µg/L	10.0		94.1	70-130			
Carbon Tetrachloride	9.02	5.0	µg/L	10.0		90.2	70-130			
Chlorobenzene	9.97	1.0	µg/L	10.0		99.7	70-130			
Chlorodibromomethane	9.23	0.50	µg/L	10.0		92.3	70-130			
Chloroethane	8.99	2.0	µg/L	10.0		89.9	70-130			
Chloroform	9.79	2.0	µg/L	10.0		97.9	70-130			
Chloromethane	4.26	2.0	µg/L	10.0		42.6	40-160		V-05	†
2-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130			
4-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.45	5.0	µg/L	10.0		94.5	70-130			
1,2-Dibromoethane (EDB)	9.91	0.50	µg/L	10.0		99.1	70-130			
Dibromomethane	9.91	1.0	µg/L	10.0		99.1	70-130			
1,2-Dichlorobenzene	9.55	1.0	µg/L	10.0		95.5	70-130			
1,3-Dichlorobenzene	9.91	1.0	µg/L	10.0		99.1	70-130			
1,4-Dichlorobenzene	8.78	1.0	µg/L	10.0		87.8	70-130			
trans-1,4-Dichloro-2-butene	8.15	2.0	µg/L	10.0		81.5	70-130			
Dichlorodifluoromethane (Freon 12)	6.77	2.0	µg/L	10.0		67.7	40-160			†
1,1-Dichloroethane	9.88	1.0	µg/L	10.0		98.8	70-130			
1,2-Dichloroethane	8.65	1.0	µg/L	10.0		86.5	70-130			
1,1-Dichloroethylene	9.88	1.0	µg/L	10.0		98.8	70-130			
cis-1,2-Dichloroethylene	9.02	1.0	µg/L	10.0		90.2	70-130			
trans-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130			

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B078843 - SW-846 5030B</b>										
<b>LCS (B078843-BS1)</b>										
Prepared & Analyzed: 08/15/13										
1,2-Dichloropropane	9.92	1.0	µg/L	10.0		99.2	70-130			
1,3-Dichloropropane	10.0	0.50	µg/L	10.0		100	70-130			
2,2-Dichloropropane	9.15	1.0	µg/L	10.0		91.5	40-130			†
1,1-Dichloropropene	9.54	2.0	µg/L	10.0		95.4	70-130			
cis-1,3-Dichloropropene	9.68	0.50	µg/L	10.0		96.8	70-130			
trans-1,3-Dichloropropene	10.4	0.50	µg/L	10.0		104	70-130			
Diethyl Ether	9.05	2.0	µg/L	10.0		90.5	70-130			
Diisopropyl Ether (DIPE)	10.9	0.50	µg/L	10.0		109	70-130			
1,4-Dioxane	64.4	50	µg/L	100		64.4	40-130			V-05, V-16 †
Ethylbenzene	9.46	1.0	µg/L	10.0		94.6	70-130			
Hexachlorobutadiene	9.00	0.50	µg/L	10.0		90.0	70-130			
2-Hexanone (MBK)	85.8	10	µg/L	100		85.8	70-160			†
Isopropylbenzene (Cumene)	9.76	1.0	µg/L	10.0		97.6	70-130			
p-Isopropyltoluene (p-Cymene)	9.93	1.0	µg/L	10.0		99.3	70-130			
Methyl tert-Butyl Ether (MTBE)	10.3	1.0	µg/L	10.0		103	70-130			
Methylene Chloride	10.9	5.0	µg/L	10.0		109	70-130			
4-Methyl-2-pentanone (MIBK)	85.1	10	µg/L	100		85.1	70-160			†
Naphthalene	10.2	2.0	µg/L	10.0		102	40-130			†
n-Propylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Styrene	9.71	1.0	µg/L	10.0		97.1	70-130			
1,1,1,2-Tetrachloroethane	9.14	1.0	µg/L	10.0		91.4	70-130			
1,1,2,2-Tetrachloroethane	9.07	0.50	µg/L	10.0		90.7	70-130			
Tetrachloroethylene	9.51	1.0	µg/L	10.0		95.1	70-130			
Tetrahydrofuran	8.76	10	µg/L	10.0		87.6	70-130			R-05
Toluene	9.94	1.0	µg/L	10.0		99.4	70-130			
1,2,3-Trichlorobenzene	11.2	5.0	µg/L	10.0		112	70-130			
1,2,4-Trichlorobenzene	9.35	1.0	µg/L	10.0		93.5	70-130			
1,3,5-Trichlorobenzene	9.19	1.0	µg/L	10.0		91.9	70-130			
1,1,1-Trichloroethane	9.27	1.0	µg/L	10.0		92.7	70-130			
1,1,2-Trichloroethane	9.17	1.0	µg/L	10.0		91.7	70-130			
Trichloroethylene	9.18	1.0	µg/L	10.0		91.8	70-130			
Trichlorofluoromethane (Freon 11)	9.48	2.0	µg/L	10.0		94.8	70-130			
1,2,3-Trichloropropane	8.96	2.0	µg/L	10.0		89.6	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.5	1.0	µg/L	10.0		105	70-130			
1,2,4-Trimethylbenzene	8.99	1.0	µg/L	10.0		89.9	70-130			
1,3,5-Trimethylbenzene	9.16	1.0	µg/L	10.0		91.6	70-130			
Vinyl Chloride	8.46	2.0	µg/L	10.0		84.6	40-160			†
m+p Xylene	19.1	2.0	µg/L	20.0		95.4	70-130			
o-Xylene	9.84	1.0	µg/L	10.0		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0		97.7	70-130			
Surrogate: Toluene-d8	25.6		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	25.6		µg/L	25.0		102	70-130			

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B078843 - SW-846 5030B**

**LCS Dup (B078843-BSD1)**

Prepared & Analyzed: 08/15/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acetone	91.7	50	µg/L	100		91.7	70-160	15.3	25	†
Acrylonitrile	10.3	5.0	µg/L	10.0		103	70-130	12.4	25	
tert-Amyl Methyl Ether (TAME)	10.7	0.50	µg/L	10.0		107	70-130	12.1	25	
Benzene	9.64	1.0	µg/L	10.0		96.4	70-130	5.11	25	
Bromobenzene	9.85	1.0	µg/L	10.0		98.5	70-130	3.62	25	
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130	5.21	25	
Bromodichloromethane	10.1	0.50	µg/L	10.0		101	70-130	5.72	25	
Bromoform	8.39	1.0	µg/L	10.0		83.9	70-130	6.14	25	
Bromomethane	4.37	2.0	µg/L	10.0		43.7	40-160	8.34	25	†
2-Butanone (MEK)	94.4	20	µg/L	100		94.4	40-160	18.0	25	†
tert-Butyl Alcohol (TBA)	111	20	µg/L	100		111	40-160	16.6	25	V-16 †
n-Butylbenzene	9.79	1.0	µg/L	10.0		97.9	70-130	5.46	25	
sec-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	2.29	25	
tert-Butylbenzene	9.50	1.0	µg/L	10.0		95.0	70-130	5.41	25	
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130	2.75	25	
Carbon Disulfide	9.49	4.0	µg/L	10.0		94.9	70-130	0.847	25	
Carbon Tetrachloride	9.45	5.0	µg/L	10.0		94.5	70-130	4.66	25	
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	1.20	25	
Chlorodibromomethane	9.36	0.50	µg/L	10.0		93.6	70-130	1.40	25	
Chloroethane	9.47	2.0	µg/L	10.0		94.7	70-130	5.20	25	
Chloroform	10.2	2.0	µg/L	10.0		102	70-130	3.71	25	
Chloromethane	4.23	2.0	µg/L	10.0		42.3	40-160	0.707	25	V-05 †
2-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130	0.200	25	
4-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130	0.387	25	
1,2-Dibromo-3-chloropropane (DBCP)	10.4	5.0	µg/L	10.0		104	70-130	10.1	25	
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130	1.60	25	
Dibromomethane	10.3	1.0	µg/L	10.0		103	70-130	4.05	25	
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	6.78	25	
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	3.47	25	
1,4-Dichlorobenzene	9.29	1.0	µg/L	10.0		92.9	70-130	5.64	25	
trans-1,4-Dichloro-2-butene	8.41	2.0	µg/L	10.0		84.1	70-130	3.14	25	
Dichlorodifluoromethane (Freon 12)	7.02	2.0	µg/L	10.0		70.2	40-160	3.63	25	†
1,1-Dichloroethane	10.6	1.0	µg/L	10.0		106	70-130	6.56	25	
1,2-Dichloroethane	9.02	1.0	µg/L	10.0		90.2	70-130	4.19	25	
1,1-Dichloroethylene	9.94	1.0	µg/L	10.0		99.4	70-130	0.605	25	
cis-1,2-Dichloroethylene	9.41	1.0	µg/L	10.0		94.1	70-130	4.23	25	
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	7.43	25	
1,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	70-130	6.16	25	
1,3-Dichloropropane	10.1	0.50	µg/L	10.0		101	70-130	1.29	25	
2,2-Dichloropropane	9.11	1.0	µg/L	10.0		91.1	40-130	0.438	25	†
1,1-Dichloropropene	9.62	2.0	µg/L	10.0		96.2	70-130	0.835	25	
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130	4.25	25	
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130	2.10	25	
Diethyl Ether	10.1	2.0	µg/L	10.0		101	70-130	10.7	25	
Diisopropyl Ether (DIPE)	11.8	0.50	µg/L	10.0		118	70-130	7.40	25	
1,4-Dioxane	80.2	50	µg/L	100		80.2	40-130	21.9	50	V-05, V-16 † ‡
Ethylbenzene	9.24	1.0	µg/L	10.0		92.4	70-130	2.35	25	
Hexachlorobutadiene	9.55	0.50	µg/L	10.0		95.5	70-130	5.93	25	
2-Hexanone (MBK)	97.7	10	µg/L	100		97.7	70-160	13.0	25	†
Isopropylbenzene (Cumene)	9.73	1.0	µg/L	10.0		97.3	70-130	0.308	25	
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.0		101	70-130	2.09	25	
Methyl tert-Butyl Ether (MTBE)	11.4	1.0	µg/L	10.0		114	70-130	9.70	25	

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B078843 - SW-846 5030B**

**LCS Dup (B078843-BSD1)**

Prepared & Analyzed: 08/15/13

Methylene Chloride	11.4	5.0	µg/L	10.0		114	70-130	4.84	25	
4-Methyl-2-pentanone (MIBK)	97.8	10	µg/L	100		97.8	70-160	13.9	25	†
Naphthalene	11.5	2.0	µg/L	10.0		115	40-130	12.0	25	†
n-Propylbenzene	10.6	1.0	µg/L	10.0		106	70-130	0.569	25	
Styrene	9.60	1.0	µg/L	10.0		96.0	70-130	1.14	25	
1,1,1,2-Tetrachloroethane	9.29	1.0	µg/L	10.0		92.9	70-130	1.63	25	
1,1,2,2-Tetrachloroethane	10.1	0.50	µg/L	10.0		101	70-130	10.5	25	
Tetrachloroethylene	9.17	1.0	µg/L	10.0		91.7	70-130	3.64	25	
Tetrahydrofuran	11.6	10	µg/L	10.0		116	70-130	27.7 *	25	R-05
Toluene	9.61	1.0	µg/L	10.0		96.1	70-130	3.38	25	
1,2,3-Trichlorobenzene	12.2	5.0	µg/L	10.0		122	70-130	8.75	25	
1,2,4-Trichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	14.9	25	
1,3,5-Trichlorobenzene	9.78	1.0	µg/L	10.0		97.8	70-130	6.22	25	
1,1,1-Trichloroethane	9.33	1.0	µg/L	10.0		93.3	70-130	0.645	25	
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130	9.75	25	
Trichloroethylene	9.26	1.0	µg/L	10.0		92.6	70-130	0.868	25	
Trichlorofluoromethane (Freon 11)	9.45	2.0	µg/L	10.0		94.5	70-130	0.317	25	
1,2,3-Trichloropropane	9.75	2.0	µg/L	10.0		97.5	70-130	8.44	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7	1.0	µg/L	10.0		107	70-130	1.70	25	
1,2,4-Trimethylbenzene	9.38	1.0	µg/L	10.0		93.8	70-130	4.25	25	
1,3,5-Trimethylbenzene	9.31	1.0	µg/L	10.0		93.1	70-130	1.62	25	
Vinyl Chloride	8.51	2.0	µg/L	10.0		85.1	40-160	0.589	25	†
m+p Xylene	19.0	2.0	µg/L	20.0		95.2	70-130	0.210	25	
o-Xylene	10.2	1.0	µg/L	10.0		102	70-130	3.79	25	
Surrogate: 1,2-Dichloroethane-d4	25.6		µg/L	25.0		103	70-130			
Surrogate: Toluene-d8	25.9		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		100	70-130			

**Batch B078938 - SW-846 5030B**

**Blank (B078938-BLK1)**

Prepared: 08/16/13 Analyzed: 08/20/13

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-05, V-16
n-Butylbenzene	ND	5.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B078938 - SW-846 5030B**

**Blank (B078938-BLK1)**

Prepared: 08/16/13 Analyzed: 08/20/13

Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	2.0	µg/L							
trans-1,3-Dichloropropene	ND	5.0	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-05, V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B078938 - SW-846 5030B

Blank (B078938-BLK1)

Prepared: 08/16/13 Analyzed: 08/20/13

1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	26.6		µg/L	25.0		106	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	23.1		µg/L	25.0		92.5	70-130			

LCS (B078938-BS1)

Prepared: 08/16/13 Analyzed: 08/20/13

Acetone	82.1	50	µg/L	100		82.1	70-160			†
Acrylonitrile	8.22	5.0	µg/L	10.0		82.2	70-130			
tert-Amyl Methyl Ether (TAME)	10.1	0.50	µg/L	10.0		101	70-130			
Benzene	9.36	1.0	µg/L	10.0		93.6	70-130			
Bromobenzene	9.70	1.0	µg/L	10.0		97.0	70-130			
Bromochloromethane	10.1	1.0	µg/L	10.0		101	70-130			
Bromodichloromethane	10.2	1.0	µg/L	10.0		102	70-130			
Bromoform	9.34	1.0	µg/L	10.0		93.4	70-130			
Bromomethane	4.78	2.0	µg/L	10.0		47.8	40-160			V-20 †
2-Butanone (MEK)	85.4	20	µg/L	100		85.4	40-160			†
tert-Butyl Alcohol (TBA)	68.4	20	µg/L	100		68.4	40-160			V-05, V-16 †
n-Butylbenzene	8.61	5.0	µg/L	10.0		86.1	70-130			
sec-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
tert-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130			
Carbon Disulfide	8.29	4.0	µg/L	10.0		82.9	70-130			
Carbon Tetrachloride	9.35	5.0	µg/L	10.0		93.5	70-130			
Chlorobenzene	9.65	1.0	µg/L	10.0		96.5	70-130			
Chlorodibromomethane	9.12	0.50	µg/L	10.0		91.2	70-130			
Chloroethane	10.3	2.0	µg/L	10.0		103	70-130			
Chloroform	10.9	2.0	µg/L	10.0		109	70-130			
Chloromethane	7.08	2.0	µg/L	10.0		70.8	40-160			†
2-Chlorotoluene	9.95	1.0	µg/L	10.0		99.5	70-130			
4-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.57	5.0	µg/L	10.0		95.7	70-130			
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130			
Dibromomethane	10.3	1.0	µg/L	10.0		103	70-130			
1,2-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
1,3-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
trans-1,4-Dichloro-2-butene	8.56	2.0	µg/L	10.0		85.6	70-130			
Dichlorodifluoromethane (Freon 12)	6.57	2.0	µg/L	10.0		65.7	40-160			†
1,1-Dichloroethane	10.5	1.0	µg/L	10.0		105	70-130			
1,2-Dichloroethane	10.9	1.0	µg/L	10.0		109	70-130			
1,1-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
cis-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0		100	70-130			
trans-1,2-Dichloroethylene	9.67	1.0	µg/L	10.0		96.7	70-130			
1,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130			
1,3-Dichloropropane	10.3	0.50	µg/L	10.0		103	70-130			
2,2-Dichloropropane	8.47	1.0	µg/L	10.0		84.7	40-130			†
1,1-Dichloropropene	9.90	2.0	µg/L	10.0		99.0	70-130			
cis-1,3-Dichloropropene	8.46	2.0	µg/L	10.0		84.6	70-130			
trans-1,3-Dichloropropene	8.61	5.0	µg/L	10.0		86.1	70-130			

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B078938 - SW-846 5030B**

**LCS (B078938-BS1)**

Prepared: 08/16/13 Analyzed: 08/20/13

Diethyl Ether	9.50	2.0	µg/L	10.0		95.0	70-130			
Diisopropyl Ether (DIPE)	11.1	0.50	µg/L	10.0		111	70-130			
1,4-Dioxane	70.4	50	µg/L	100		70.4	40-130			V-05, V-16 †
Ethylbenzene	9.71	1.0	µg/L	10.0		97.1	70-130			
Hexachlorobutadiene	9.99	1.0	µg/L	10.0		99.9	70-130			
2-Hexanone (MBK)	91.5	10	µg/L	100		91.5	70-160			†
Isopropylbenzene (Cumene)	9.99	1.0	µg/L	10.0		99.9	70-130			
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130			
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.0		106	70-130			
Methylene Chloride	10.9	5.0	µg/L	10.0		109	70-130			
4-Methyl-2-pentanone (MIBK)	95.8	10	µg/L	100		95.8	70-160			†
Naphthalene	10.8	5.0	µg/L	10.0		108	40-130			†
n-Propylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
Styrene	9.87	1.0	µg/L	10.0		98.7	70-130			
1,1,1,2-Tetrachloroethane	9.47	2.0	µg/L	10.0		94.7	70-130			
1,1,2,2-Tetrachloroethane	9.54	0.50	µg/L	10.0		95.4	70-130			
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
Tetrahydrofuran	8.84	10	µg/L	10.0		88.4	70-130			
Toluene	9.67	1.0	µg/L	10.0		96.7	70-130			
1,2,3-Trichlorobenzene	10.1	5.0	µg/L	10.0		101	70-130			
1,2,4-Trichlorobenzene	9.91	5.0	µg/L	10.0		99.1	70-130			
1,3,5-Trichlorobenzene	8.29	1.0	µg/L	10.0		82.9	70-130			
1,1,1-Trichloroethane	9.98	1.0	µg/L	10.0		99.8	70-130			
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130			
Trichloroethylene	9.92	1.0	µg/L	10.0		99.2	70-130			
Trichlorofluoromethane (Freon 11)	10.5	2.0	µg/L	10.0		105	70-130			
1,2,3-Trichloropropane	9.49	2.0	µg/L	10.0		94.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7	1.0	µg/L	10.0		107	70-130			
1,2,4-Trimethylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
1,3,5-Trimethylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
Vinyl Chloride	7.64	2.0	µg/L	10.0		76.4	40-160			†
m+p Xylene	20.0	2.0	µg/L	20.0		100	70-130			
o-Xylene	10.0	1.0	µg/L	10.0		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.2		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0		101	70-130			

**LCS Dup (B078938-BS1)**

Prepared: 08/16/13 Analyzed: 08/20/13

Acetone	81.3	50	µg/L	100		81.3	70-160	0.955	25	†
Acrylonitrile	8.03	5.0	µg/L	10.0		80.3	70-130	2.34	25	
tert-Amyl Methyl Ether (TAME)	10.3	0.50	µg/L	10.0		103	70-130	2.36	25	
Benzene	9.42	1.0	µg/L	10.0		94.2	70-130	0.639	25	
Bromobenzene	9.94	1.0	µg/L	10.0		99.4	70-130	2.44	25	
Bromochloromethane	10.3	1.0	µg/L	10.0		103	70-130	1.97	25	
Bromodichloromethane	10.2	1.0	µg/L	10.0		102	70-130	0.0983	25	
Bromoform	9.31	1.0	µg/L	10.0		93.1	70-130	0.322	25	
Bromomethane	5.88	2.0	µg/L	10.0		58.8	40-160	20.6	25	V-20 †
2-Butanone (MEK)	81.7	20	µg/L	100		81.7	40-160	4.47	25	†
tert-Butyl Alcohol (TBA)	63.2	20	µg/L	100		63.2	40-160	7.88	25	V-16, V-05 †
n-Butylbenzene	8.40	5.0	µg/L	10.0		84.0	70-130	2.47	25	
sec-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.470	25	
tert-Butylbenzene	10.5	1.0	µg/L	10.0		105	70-130	3.40	25	

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B078938 - SW-846 5030B

LCS Dup (B078938-BSD1)

Prepared: 08/16/13 Analyzed: 08/20/13

tert-Butyl Ethyl Ether (TBEE)	10.6	0.50	µg/L	10.0		106	70-130	0.468	25	
Carbon Disulfide	8.26	4.0	µg/L	10.0		82.6	70-130	0.363	25	
Carbon Tetrachloride	9.51	5.0	µg/L	10.0		95.1	70-130	1.70	25	
Chlorobenzene	9.86	1.0	µg/L	10.0		98.6	70-130	2.15	25	
Chlorodibromomethane	9.23	0.50	µg/L	10.0		92.3	70-130	1.20	25	
Chloroethane	10.5	2.0	µg/L	10.0		105	70-130	2.02	25	
Chloroform	10.9	2.0	µg/L	10.0		109	70-130	0.0920	25	
Chloromethane	7.14	2.0	µg/L	10.0		71.4	40-160	0.844	25	†
2-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	2.38	25	
4-Chlorotoluene	10.5	1.0	µg/L	10.0		105	70-130	1.15	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.46	5.0	µg/L	10.0		94.6	70-130	1.16	25	
1,2-Dibromoethane (EDB)	9.89	0.50	µg/L	10.0		98.9	70-130	3.38	25	
Dibromomethane	10.4	1.0	µg/L	10.0		104	70-130	1.64	25	
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.59	25	
1,3-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.18	25	
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.495	25	
trans-1,4-Dichloro-2-butene	8.39	2.0	µg/L	10.0		83.9	70-130	2.01	25	
Dichlorodifluoromethane (Freon 12)	6.80	2.0	µg/L	10.0		68.0	40-160	3.44	25	†
1,1-Dichloroethane	10.5	1.0	µg/L	10.0		105	70-130	0.476	25	
1,2-Dichloroethane	11.0	1.0	µg/L	10.0		110	70-130	0.733	25	
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130	2.59	25	
cis-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	1.68	25	
trans-1,2-Dichloroethylene	9.65	1.0	µg/L	10.0		96.5	70-130	0.207	25	
1,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	70-130	0.863	25	
1,3-Dichloropropane	10.4	0.50	µg/L	10.0		104	70-130	1.06	25	
2,2-Dichloropropane	8.58	1.0	µg/L	10.0		85.8	40-130	1.29	25	†
1,1-Dichloropropene	10.1	2.0	µg/L	10.0		101	70-130	1.60	25	
cis-1,3-Dichloropropene	8.58	2.0	µg/L	10.0		85.8	70-130	1.41	25	
trans-1,3-Dichloropropene	8.56	5.0	µg/L	10.0		85.6	70-130	0.582	25	
Diethyl Ether	9.90	2.0	µg/L	10.0		99.0	70-130	4.12	25	
Diisopropyl Ether (DIPE)	11.1	0.50	µg/L	10.0		111	70-130	0.360	25	
1,4-Dioxane	75.2	50	µg/L	100		75.2	40-130	6.54	50	V-05, V-16 † ‡
Ethylbenzene	9.98	1.0	µg/L	10.0		99.8	70-130	2.74	25	
Hexachlorobutadiene	9.79	1.0	µg/L	10.0		97.9	70-130	2.02	25	
2-Hexanone (MBK)	85.6	10	µg/L	100		85.6	70-160	6.65	25	†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130	2.28	25	
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130	0.0926	25	
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130	3.17	25	
Methylene Chloride	11.0	5.0	µg/L	10.0		110	70-130	0.917	25	
4-Methyl-2-pentanone (MIBK)	91.0	10	µg/L	100		91.0	70-160	5.18	25	†
Naphthalene	10.7	5.0	µg/L	10.0		107	40-130	0.838	25	†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130	1.67	25	
Styrene	10.0	1.0	µg/L	10.0		100	70-130	1.71	25	
1,1,1,2-Tetrachloroethane	9.91	2.0	µg/L	10.0		99.1	70-130	4.54	25	
1,1,2,2-Tetrachloroethane	9.34	0.50	µg/L	10.0		93.4	70-130	2.12	25	
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130	0.869	25	
Tetrahydrofuran	8.27	10	µg/L	10.0		82.7	70-130	6.66	25	
Toluene	9.84	1.0	µg/L	10.0		98.4	70-130	1.74	25	
1,2,3-Trichlorobenzene	10.0	5.0	µg/L	10.0		100	70-130	1.09	25	
1,2,4-Trichlorobenzene	9.76	5.0	µg/L	10.0		97.6	70-130	1.53	25	
1,3,5-Trichlorobenzene	8.10	1.0	µg/L	10.0		81.0	70-130	2.32	25	
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130	1.49	25	

## QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B078938 - SW-846 5030B</b>										
<b>LCS Dup (B078938-BSD1)</b>										
					Prepared: 08/16/13 Analyzed: 08/20/13					
1,1,2-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	0.780	25	
Trichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	1.40	25	
Trichlorofluoromethane (Freon 11)	10.8	2.0	µg/L	10.0		108	70-130	3.29	25	
1,2,3-Trichloropropane	9.52	2.0	µg/L	10.0		95.2	70-130	0.316	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	µg/L	10.0		112	70-130	3.84	25	
1,2,4-Trimethylbenzene	10.9	1.0	µg/L	10.0		109	70-130	1.39	25	
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130	1.55	25	
Vinyl Chloride	7.99	2.0	µg/L	10.0		79.9	40-160	4.48	25	†
m+p Xylene	20.4	2.0	µg/L	20.0		102	70-130	1.93	25	
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130	3.33	25	
Surrogate: 1,2-Dichloroethane-d4	25.9		µg/L	25.0		104	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.9	70-130			

## Batch B079149 - SW-846 5030B

<b>Blank (B079149-BLK1)</b>										
					Prepared: 08/20/13 Analyzed: 08/21/13					
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-16
n-Butylbenzene	ND	5.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B079149 - SW-846 5030B</b>										
<b>Blank (B079149-BLK1)</b>										
Prepared: 08/20/13 Analyzed: 08/21/13										
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	2.0	µg/L							
trans-1,3-Dichloropropene	ND	5.0	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-05, V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	5.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							V-05
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	27.0		µg/L	25.0		108	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	23.3		µg/L	25.0		93.3	70-130			

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B079149 - SW-846 5030B</b>										
<b>LCS (B079149-BS1)</b>										
					Prepared: 08/20/13 Analyzed: 08/21/13					
Acetone	78.5	50	µg/L	100		78.5	70-160			†
Acrylonitrile	9.50	5.0	µg/L	10.0		95.0	70-130			
tert-Amyl Methyl Ether (TAME)	9.75	0.50	µg/L	10.0		97.5	70-130			
Benzene	9.69	1.0	µg/L	10.0		96.9	70-130			
Bromobenzene	9.81	1.0	µg/L	10.0		98.1	70-130			
Bromochloromethane	10.6	1.0	µg/L	10.0		106	70-130			
Bromodichloromethane	10.7	1.0	µg/L	10.0		107	70-130			
Bromoform	9.40	1.0	µg/L	10.0		94.0	70-130			
Bromomethane	5.77	2.0	µg/L	10.0		57.7	40-160			†
2-Butanone (MEK)	81.7	20	µg/L	100		81.7	40-160			†
tert-Butyl Alcohol (TBA)	76.7	20	µg/L	100		76.7	40-160			V-16 †
n-Butylbenzene	8.60	5.0	µg/L	10.0		86.0	70-130			
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
tert-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.3	0.50	µg/L	10.0		103	70-130			
Carbon Disulfide	10.2	4.0	µg/L	10.0		102	70-130			
Carbon Tetrachloride	10.3	5.0	µg/L	10.0		103	70-130			
Chlorobenzene	9.70	1.0	µg/L	10.0		97.0	70-130			
Chlorodibromomethane	9.47	0.50	µg/L	10.0		94.7	70-130			
Chloroethane	11.3	2.0	µg/L	10.0		113	70-130			
Chloroform	11.0	2.0	µg/L	10.0		110	70-130			
Chloromethane	7.89	2.0	µg/L	10.0		78.9	40-160			†
2-Chlorotoluene	9.93	1.0	µg/L	10.0		99.3	70-130			
4-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.79	5.0	µg/L	10.0		87.9	70-130			
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0		103	70-130			
Dibromomethane	11.0	1.0	µg/L	10.0		110	70-130			
1,2-Dichlorobenzene	9.71	1.0	µg/L	10.0		97.1	70-130			
1,3-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
1,4-Dichlorobenzene	9.87	1.0	µg/L	10.0		98.7	70-130			
trans-1,4-Dichloro-2-butene	8.45	2.0	µg/L	10.0		84.5	70-130			
Dichlorodifluoromethane (Freon 12)	7.57	2.0	µg/L	10.0		75.7	40-160			†
1,1-Dichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,2-Dichloroethane	11.3	1.0	µg/L	10.0		113	70-130			
1,1-Dichloroethylene	11.3	1.0	µg/L	10.0		113	70-130			
cis-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130			
trans-1,2-Dichloroethylene	12.1	1.0	µg/L	10.0		121	70-130			
1,2-Dichloropropane	10.4	1.0	µg/L	10.0		104	70-130			
1,3-Dichloropropane	10.3	0.50	µg/L	10.0		103	70-130			
2,2-Dichloropropane	11.6	1.0	µg/L	10.0		116	40-130			†
1,1-Dichloropropene	11.0	2.0	µg/L	10.0		110	70-130			
cis-1,3-Dichloropropene	9.07	2.0	µg/L	10.0		90.7	70-130			
trans-1,3-Dichloropropene	9.03	5.0	µg/L	10.0		90.3	70-130			
Diethyl Ether	9.50	2.0	µg/L	10.0		95.0	70-130			
Diisopropyl Ether (DIPE)	11.2	0.50	µg/L	10.0		112	70-130			
1,4-Dioxane	75.3	50	µg/L	100		75.3	40-130			V-05, V-16 †
Ethylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
Hexachlorobutadiene	9.46	1.0	µg/L	10.0		94.6	70-130			
2-Hexanone (MBK)	84.0	10	µg/L	100		84.0	70-160			†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130			
p-Isopropyltoluene (p-Cymene)	11.0	1.0	µg/L	10.0		110	70-130			
Methyl tert-Butyl Ether (MTBE)	11.0	1.0	µg/L	10.0		110	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B079149 - SW-846 5030B</b>										
<b>LCS (B079149-BS1)</b>										
					Prepared: 08/20/13 Analyzed: 08/21/13					
Methylene Chloride	11.5	5.0	µg/L	10.0		115	70-130			
4-Methyl-2-pentanone (MIBK)	88.4	10	µg/L	100		88.4	70-160			†
Naphthalene	10.4	5.0	µg/L	10.0		104	40-130			†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Styrene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1,2-Tetrachloroethane	9.82	2.0	µg/L	10.0		98.2	70-130			
1,1,2,2-Tetrachloroethane	8.74	0.50	µg/L	10.0		87.4	70-130			
Tetrachloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
Tetrahydrofuran	8.21	10	µg/L	10.0		82.1	70-130			
Toluene	10.1	1.0	µg/L	10.0		101	70-130			
1,2,3-Trichlorobenzene	9.59	5.0	µg/L	10.0		95.9	70-130			
1,2,4-Trichlorobenzene	9.22	5.0	µg/L	10.0		92.2	70-130			
1,3,5-Trichlorobenzene	7.29	1.0	µg/L	10.0		72.9	70-130			V-05
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,1,2-Trichloroethane	9.98	1.0	µg/L	10.0		99.8	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Trichlorofluoromethane (Freon 11)	11.6	2.0	µg/L	10.0		116	70-130			
1,2,3-Trichloropropane	9.13	2.0	µg/L	10.0		91.3	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	µg/L	10.0		112	70-130			
1,2,4-Trimethylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Vinyl Chloride	8.53	2.0	µg/L	10.0		85.3	40-160			†
m+p Xylene	20.7	2.0	µg/L	20.0		103	70-130			
o-Xylene	10.3	1.0	µg/L	10.0		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.6		µg/L	25.0		106	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.4	70-130			
<b>LCS Dup (B079149-BSD1)</b>										
					Prepared: 08/20/13 Analyzed: 08/21/13					
Acetone	82.4	50	µg/L	100		82.4	70-160	4.77	25	†
Acrylonitrile	9.93	5.0	µg/L	10.0		99.3	70-130	4.43	25	
tert-Amyl Methyl Ether (TAME)	9.67	0.50	µg/L	10.0		96.7	70-130	0.824	25	
Benzene	9.48	1.0	µg/L	10.0		94.8	70-130	2.19	25	
Bromobenzene	9.50	1.0	µg/L	10.0		95.0	70-130	3.21	25	
Bromochloromethane	10.3	1.0	µg/L	10.0		103	70-130	3.26	25	
Bromodichloromethane	10.2	1.0	µg/L	10.0		102	70-130	4.89	25	
Bromoform	9.19	1.0	µg/L	10.0		91.9	70-130	2.26	25	
Bromomethane	6.64	2.0	µg/L	10.0		66.4	40-160	14.0	25	†
2-Butanone (MEK)	85.4	20	µg/L	100		85.4	40-160	4.42	25	†
tert-Butyl Alcohol (TBA)	77.9	20	µg/L	100		77.9	40-160	1.60	25	V-16 †
n-Butylbenzene	8.46	5.0	µg/L	10.0		84.6	70-130	1.64	25	
sec-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	4.80	25	
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	3.66	25	
tert-Butyl Ethyl Ether (TBEE)	10.2	0.50	µg/L	10.0		102	70-130	0.293	25	
Carbon Disulfide	9.54	4.0	µg/L	10.0		95.4	70-130	7.08	25	
Carbon Tetrachloride	9.91	5.0	µg/L	10.0		99.1	70-130	3.67	25	
Chlorobenzene	9.44	1.0	µg/L	10.0		94.4	70-130	2.72	25	
Chlorodibromomethane	9.21	0.50	µg/L	10.0		92.1	70-130	2.78	25	
Chloroethane	10.2	2.0	µg/L	10.0		102	70-130	10.3	25	
Chloroform	10.4	2.0	µg/L	10.0		104	70-130	5.14	25	
Chloromethane	7.67	2.0	µg/L	10.0		76.7	40-160	2.83	25	†
2-Chlorotoluene	9.62	1.0	µg/L	10.0		96.2	70-130	3.17	25	

## QUALITY CONTROL

## Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B079149 - SW-846 5030B</b>										
<b>LCS Dup (B079149-BSD1)</b>										
					Prepared: 08/20/13 Analyzed: 08/21/13					
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	3.12	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.99	5.0	µg/L	10.0		89.9	70-130	2.25	25	
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.0		100	70-130	2.85	25	
Dibromomethane	10.6	1.0	µg/L	10.0		106	70-130	4.08	25	
1,2-Dichlorobenzene	9.71	1.0	µg/L	10.0		97.1	70-130	0.00	25	
1,3-Dichlorobenzene	9.98	1.0	µg/L	10.0		99.8	70-130	0.400	25	
1,4-Dichlorobenzene	9.87	1.0	µg/L	10.0		98.7	70-130	0.00	25	
trans-1,4-Dichloro-2-butene	8.44	2.0	µg/L	10.0		84.4	70-130	0.118	25	
Dichlorodifluoromethane (Freon 12)	7.03	2.0	µg/L	10.0		70.3	40-160	7.40	25	†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0		104	70-130	3.21	25	
1,2-Dichloroethane	11.3	1.0	µg/L	10.0		113	70-130	0.443	25	
1,1-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	4.97	25	
cis-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	4.12	25	
trans-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0		116	70-130	3.71	25	
1,2-Dichloropropane	10.0	1.0	µg/L	10.0		100	70-130	3.44	25	
1,3-Dichloropropane	10.2	0.50	µg/L	10.0		102	70-130	0.586	25	
2,2-Dichloropropane	10.8	1.0	µg/L	10.0		108	40-130	7.57	25	†
1,1-Dichloropropene	10.4	2.0	µg/L	10.0		104	70-130	5.71	25	
cis-1,3-Dichloropropene	8.81	2.0	µg/L	10.0		88.1	70-130	2.91	25	
trans-1,3-Dichloropropene	8.88	5.0	µg/L	10.0		88.8	70-130	1.68	25	
Diethyl Ether	9.30	2.0	µg/L	10.0		93.0	70-130	2.13	25	
Diisopropyl Ether (DIPE)	10.9	0.50	µg/L	10.0		109	70-130	2.99	25	
1,4-Dioxane	64.4	50	µg/L	100		64.4	40-130	15.6	50	V-05, V-16 † ‡
Ethylbenzene	9.66	1.0	µg/L	10.0		96.6	70-130	4.35	25	
Hexachlorobutadiene	9.49	1.0	µg/L	10.0		94.9	70-130	0.317	25	
2-Hexanone (MBK)	87.4	10	µg/L	100		87.4	70-160	3.98	25	†
Isopropylbenzene (Cumene)	9.81	1.0	µg/L	10.0		98.1	70-130	4.29	25	
p-Isopropyltoluene (p-Cymene)	10.7	1.0	µg/L	10.0		107	70-130	2.67	25	
Methyl tert-Butyl Ether (MTBE)	11.1	1.0	µg/L	10.0		111	70-130	0.633	25	
Methylene Chloride	10.8	5.0	µg/L	10.0		108	70-130	5.64	25	
4-Methyl-2-pentanone (MIBK)	91.4	10	µg/L	100		91.4	70-160	3.32	25	†
Naphthalene	10.5	5.0	µg/L	10.0		105	40-130	0.953	25	†
n-Propylbenzene	10.1	1.0	µg/L	10.0		101	70-130	1.67	25	
Styrene	10.1	1.0	µg/L	10.0		101	70-130	1.38	25	
1,1,1,2-Tetrachloroethane	9.44	2.0	µg/L	10.0		94.4	70-130	3.95	25	
1,1,2,2-Tetrachloroethane	8.94	0.50	µg/L	10.0		89.4	70-130	2.26	25	
Tetrachloroethylene	10.6	1.0	µg/L	10.0		106	70-130	5.25	25	
Tetrahydrofuran	8.96	10	µg/L	10.0		89.6	70-130	8.74	25	
Toluene	9.71	1.0	µg/L	10.0		97.1	70-130	4.14	25	
1,2,3-Trichlorobenzene	9.78	5.0	µg/L	10.0		97.8	70-130	1.96	25	
1,2,4-Trichlorobenzene	9.43	5.0	µg/L	10.0		94.3	70-130	2.25	25	
1,3,5-Trichlorobenzene	7.62	1.0	µg/L	10.0		76.2	70-130	4.43	25	V-05
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	5.43	25	
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130	0.997	25	
Trichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	2.93	25	
Trichlorofluoromethane (Freon 11)	10.4	2.0	µg/L	10.0		104	70-130	11.3	25	
1,2,3-Trichloropropane	9.39	2.0	µg/L	10.0		93.9	70-130	2.81	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.6	1.0	µg/L	10.0		106	70-130	5.79	25	
1,2,4-Trimethylbenzene	10.9	1.0	µg/L	10.0		109	70-130	2.00	25	
1,3,5-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	3.60	25	
Vinyl Chloride	8.17	2.0	µg/L	10.0		81.7	40-160	4.31	25	†

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B079149 - SW-846 5030B</b>										
<b>LCS Dup (B079149-BSD1)</b>										
Prepared: 08/20/13 Analyzed: 08/21/13										
m+p Xylene	19.9	2.0	µg/L	20.0		99.4	70-130	4.00	25	
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130	1.87	25	
Surrogate: 1,2-Dichloroethane-d4	26.7		µg/L	25.0		107	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.5	70-130			
<b>Batch B079351 - SW-846 5030B</b>										
<b>Blank (B079351-BLK1)</b>										
Prepared & Analyzed: 08/22/13										
Trichloroethylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	28.3		µg/L	25.0		113	70-130			
Surrogate: Toluene-d8	24.4		µg/L	25.0		97.7	70-130			
Surrogate: 4-Bromofluorobenzene	24.1		µg/L	25.0		96.6	70-130			
<b>LCS (B079351-BS1)</b>										
Prepared & Analyzed: 08/22/13										
Trichloroethylene	11.0	1.0	µg/L	10.0		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	27.4		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	25.6		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	25.3		µg/L	25.0		101	70-130			
<b>LCS Dup (B079351-BSD1)</b>										
Prepared & Analyzed: 08/22/13										
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	4.18	25	
Surrogate: 1,2-Dichloroethane-d4	27.6		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	25.3		µg/L	25.0		101	70-130			

**QUALITY CONTROL**

**Petroleum Hydrocarbons Analyses - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B079086 - SW-846 3510C</b>										
<b>Blank (B079086-BLK1)</b>										
					Prepared: 08/19/13 Analyzed: 08/20/13					
Fuel Oil #2	ND	0.20	mg/L							
TPH (C9-C36)	ND	0.20	mg/L							
Surrogate: o-Terphenyl	0.0812		mg/L	0.100		81.2	40-140			
<b>LCS (B079086-BS1)</b>										
					Prepared: 08/19/13 Analyzed: 08/20/13					
Fuel Oil #2	0.982	0.20	mg/L	1.00		98.2	40-140			
TPH (C9-C36)	0.982	0.20	mg/L	1.00		98.2	40-140			
Surrogate: o-Terphenyl	0.0894		mg/L	0.100		89.4	40-140			
<b>LCS Dup (B079086-BSD1)</b>										
					Prepared: 08/19/13 Analyzed: 08/20/13					
Fuel Oil #2	0.896	0.20	mg/L	1.00		89.6	40-140	9.09	25	
TPH (C9-C36)	0.896	0.20	mg/L	1.00		89.6	40-140	9.09	25	
Surrogate: o-Terphenyl	0.0825		mg/L	0.100		82.5	40-140			

**QUALITY CONTROL**

**Metals Analyses (Dissolved) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B078874 - SW-846 3005A Dissolved</b>										
<b>Blank (B078874-BLK1)</b>				Prepared: 08/15/13 Analyzed: 08/17/13						
Lead	ND	0.010	mg/L							
<b>LCS (B078874-BS1)</b>				Prepared: 08/15/13 Analyzed: 08/17/13						
Lead	0.495	0.010	mg/L	0.500		99.0	80-120			
<b>LCS Dup (B078874-BSD1)</b>				Prepared: 08/15/13 Analyzed: 08/17/13						
Lead	0.495	0.010	mg/L	0.500		99.0	80-120	0.0235	20	
<b>Duplicate (B078874-DUP1)</b>				<b>Source: 13H0515-21</b>			Prepared: 08/15/13 Analyzed: 08/17/13			
Lead	ND	0.010	mg/L		ND			NC	20	
<b>Matrix Spike (B078874-MS1)</b>				<b>Source: 13H0515-21</b> Prepared: 08/15/13 Analyzed: 08/17/13						
Lead	0.473	0.010	mg/L	0.500	0.00525	93.6	75-125			

**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-01	Elevated reporting limits for all volatile compounds due to foaming sample matrix.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-01	Elevated reporting limit due to high concentration of target compounds. Requested reporting limit not met.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
Z-01	Sample contamination matches the range for #2 fuel oil, but it does not match the pattern.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 6010C in Water</i>	
Lead	CT,NH,NY,NC,ME,VA
<i>SW-846 8260C in Water</i>	
Acetone	CT,NY,ME,NH,VA
Acrylonitrile	CT,NY,ME,NH,VA
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA
Benzene	CT,NY,ME,NH,VA
Bromochloromethane	NY,ME,NH,VA
Bromodichloromethane	CT,NY,ME,NH,VA
Bromoform	CT,NY,ME,NH,VA
Bromomethane	CT,NY,ME,NH,VA
2-Butanone (MEK)	CT,NY,ME,NH,VA
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA
n-Butylbenzene	NY,ME,VA
sec-Butylbenzene	NY,ME,VA
tert-Butylbenzene	NY,ME,VA
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA
Carbon Disulfide	CT,NY,ME,NH,VA
Carbon Tetrachloride	CT,NY,ME,NH,VA
Chlorobenzene	CT,NY,ME,NH,VA
Chlorodibromomethane	CT,NY,ME,NH,VA
Chloroethane	CT,NY,ME,NH,VA
Chloroform	CT,NY,ME,NH,VA
Chloromethane	CT,NY,ME,NH,VA
2-Chlorotoluene	NY,ME,NH,VA
4-Chlorotoluene	NY,ME,NH,VA
Dibromomethane	NY,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,ME,NH,VA
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA
1,1-Dichloroethane	CT,NY,ME,NH,VA
1,2-Dichloroethane	CT,NY,ME,NH,VA
1,1-Dichloroethylene	CT,NY,ME,NH,VA
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA
1,2-Dichloropropane	CT,NY,ME,NH,VA
1,3-Dichloropropane	NY,ME,VA
2,2-Dichloropropane	NY,ME,NH,VA
1,1-Dichloropropene	NY,ME,NH,VA
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA
Diisopropyl Ether (DIPE)	NY,ME,NH,VA
Ethylbenzene	CT,NY,ME,NH,VA
Hexachlorobutadiene	CT,NY,ME,NH,VA
2-Hexanone (MBK)	CT,NY,ME,NH,VA

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Isopropylbenzene (Cumene)	NY,ME,VA
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA
Methylene Chloride	CT,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA
Naphthalene	NY,ME,NH,VA
n-Propylbenzene	CT,NY,ME,NH,VA
Styrene	CT,NY,ME,NH,VA
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA
Tetrachloroethylene	CT,NY,ME,NH,VA
Toluene	CT,NY,ME,NH,VA
1,2,3-Trichlorobenzene	NY,ME,NH,VA
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA
1,1,2-Trichloroethane	CT,NY,ME,NH,VA
Trichloroethylene	CT,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA
1,2,3-Trichloropropane	NY,ME,NH,VA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA
1,2,4-Trimethylbenzene	NY,ME,VA
1,3,5-Trimethylbenzene	NY,ME,VA
Vinyl Chloride	CT,NY,ME,NH,VA
m+p Xylene	CT,NY,ME,NH,VA
o-Xylene	CT,NY,ME,NH,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012



# CON-test

ANALYTICAL LABORATORY

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

A C&I Company  
Shaw Environmental, Inc.

## CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Long Meadow, MA 01028

Page \_\_\_\_\_ of \_\_\_\_\_

1340515  
Rev 04.05.12

Company Name: Shaw Environmental, Inc.

Address: 150 Royall Street  
Canton, MA 02021

Attention: Ed Vandoren

Project Location: Providence, RI

Sampled By: Paul Ledoux

Project Proposal Provided? (for billing purposes)  
 Yes  No  
proposal date \_\_\_\_\_

Telephone: 617-589-4030

Project # 130274

Client PO# 835493

DATA DELIVERY (check all that apply)

FAX  EMAIL  WEBSITE

Fax # \_\_\_\_\_

Email: Edward.Vandoren@CBI.com

Format:  PDF  EXCEL  OGIS  OTHER GISKEY Format

"Enhanced Data Package"

Con-Test Lab ID <small>(Laboratory use only)</small>	Client Sample ID / Description	Beginning Date/Time	Collection		Composite	Grab	Matrix Code	Conc Code	EPA 8260B (VOC's)	ANALYSIS REQUESTED	
			Date/Time	Ending Date/Time						Matrix Code	Conc Code
01	MW-101D	8/18/13	8/18/13			GN					
02	MW-101S		0915								
03	MW-101S Dup		0930								
04	MW-112		1245								
05	MW-116D		1330								
06	MW-116S		1400								
07	MW-201D		1045								
08	MW-202D		0815								
09	MW-202S		0745								
10	MW-207D		6630								

Comments: Please email GISKEY formatted EDD & PDF to Catherine.Mainville@CBI.com.

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:  
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Turnaround  7-Day  10-Day  Other \_\_\_\_\_  
RUSH

Detection Limit Requirements  
Massachusetts: \_\_\_\_\_

Is your project MCP or RCP?  
 MCP Form Required  
 RCP Form Required  
 MA State DW Form Required PWSID # \_\_\_\_\_

Received by (signature) \_\_\_\_\_ Date/Time: 8/14/13  
Received by (signature) \_\_\_\_\_ Date/Time: 8/14/13  
Relinquished by (signature) \_\_\_\_\_ Date/Time: 8/14/13

Requied by (signature) \_\_\_\_\_ Date/Time: 8/14/13

Connecticut: \_\_\_\_\_  
Other: \_\_\_\_\_

MA State Required  
MA State DW Form Required PWSID # \_\_\_\_\_  
NELAC & AIHA-LAP, LLC  
Accredited  
WB/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT. PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT



**con-test**  
ANALYTICAL LABORATORY  
A CB&I Company

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

**CHAIN OF CUSTODY RECORD**

13H0515  
Rev 04.05.12

39 Spruce Street  
East Longmeadow, MA 01028

Company Name: Shaw Environmental, Inc. Telephone: 617-589-4030

Address: 150 Royall Street Project # 130274

Canton, MA 02021 Client PO# 835493

Attention: Ed Vandoren DATA DELIVERY (check all that apply)

Project Location: Providence, RI  FAX  EMAIL  WEBSITE

Sampled By: Paul Ledoux Email: Edward.Vandoren@CBI.com

Project Proposal Provided? (for billing purposes)  
 Yes  proposal date

Con-Test Lab ID <small>(Laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	*Matrix Code	*Cont. Code	# of Containers	** Preservation	*** Container Cod
		Beginning Date/Time	Ending Date/Time							
11	MW-207S	8/12/13	0700			GW		3		
12	MW-218S	8/12/13	1130					3		
13	MW-218D	8/12/13	1200					3		
14	MW-216D	8/12/13	1530					3		
15	MW-216S	8/12/13	1445					3		
16	MW-217D	8/13/13	1300					3		
17	MW-217S	8/13/13	1200					3		
18	CW-1	8/13/13	0600					3		
19	CW-2	8/13/13	0700					3		
20	MW-209D	8/13/13	1130					3		

Comments: Please email GISKey formatted EDD & PDF to: Catherine.Mainville@CBI.com.

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Cont. Code Box:  
H - High; M - Medium; L - Low; C - Clean; U - Unknown

ANALYSIS REQUESTED

EPA 8260B (VOC's)

Dissolved Metal  
 Field Filtered  
 Lab to Filter

\*\*\*Cont. Code:  
A=amber glass  
G=glass  
P=plastic  
ST=sterile  
V=vial  
S=summa can  
T=tedlar bag  
O=Other

\*\*Preservation  
I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
X = Na hydroxide  
T = Na thiosulfate  
O = Other

\*Matrix Code:  
GW= groundwater  
WW= wastewater  
DW= drinking water  
A = air  
S = soil/solid  
SL = sludge  
O = other

Turnaround  7-Day  
 10-Day  
Other \_\_\_\_\_  
RUSH  24-Hr  48-Hr  
 72-Hr  14-Day  
† Require lab approval

Detection Limit Requirements  
Massachusetts: \_\_\_\_\_  
Connecticut: \_\_\_\_\_

Is your project MCP or RCP?  
 MCP Form Required  
 RCP Form Required  
 MA State DW Form Required  
 PWSID # \_\_\_\_\_

Relinquished by (signature) \_\_\_\_\_ Date/Time: 8/13/13  
Received by (signature) \_\_\_\_\_ Date/Time: 8/14/13  
Relinquished by (signature) \_\_\_\_\_ Date/Time: 8/14/13  
Received by (signature) \_\_\_\_\_ Date/Time: 8/14/13

NEAAC Accredited  
NELAC & AIHA-LAP, LLC Accredited  
WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT. PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT



Company Name: A CB&I Company  
Shaw Environmental, Inc.

Address: 150 Royall Street  
Canton, MA 02021

Attention: Ed Vandoren  
Project Location: Providence, RI  
Sampled By: Paul Ledoux

Project Proposal Provided? (for billing purposes)  
 Yes  No

Phone: 413-525-2332  
Fax: 413-525-6405  
Email: info@contestlabs.com  
www.contestlabs.com

Rev 04.05.12  
13H0515

39 Spruce Street  
East longmeadow, MA 01028

Page \_\_\_\_\_ of \_\_\_\_\_

Telephone: 617-589-4030

Project # 130274

Client PO# 835493

DATA DELIVERY (check all that apply)  
 FAX  EMAIL  WEBSITE

Fax #

Email: Edward.Vandoren@CBI.com

Format:  PDF  EXCEL  OGIS  
 OTHER GISKEY FORMAT

"Enhanced Data Package"

Con-Test Lab ID <small>(laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	*Matrix Lands	Lands	EPA 8260B (VOC's)	Dissolved Lead	TPH	ANALYSIS REQUESTED	# of Containers
		Beginning Date/Time	Ending Date/Time									
21	GZA-3	8/13/13	1030			GW		3	1			
22	MW-109D		0930					3	1			
23	CW-6		0800						2			
24	CW-6 D4A		0830						2			
25	GZA-3		1030						1			

Comments: Please email GISKEY formatted EDD & PDF to:  
Catherine.Mainville@CBI.com.

Lead samples are field filtered.

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:  
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Retinquished by: (signature) *Ed Vandoren* Date/Time: 8/13/13

Received by: (signature) *Ed Vandoren* Date/Time: 8/13/13

Relinquished by: (signature) *Ed Vandoren* Date/Time: 8/13/13

Received by: (signature) *Ed Vandoren* Date/Time: 8/13/13

Turnaround <sup>†</sup>

7-Day  
 10-Day  
 Other

RUSH <sup>†</sup>

24-Hr  48-Hr  
 72-Hr  14-Day

Require lab approval

Detection Limit Requirements

Massachusetts:

Connecticut:

Other:

Is your project MCP or RCP?

MCP Form Required  
 RCP Form Required  
 MA State DW Form Required  
 PWSID #

NEIAC & AIHA-LAP, LLC  
Accredited  
WBE/DBE Certified

\*Matrix Code:  
GW = groundwater  
WW = wastewater  
DW = drinking water  
A = air  
S = soil/solid  
SL = sludge  
O = other

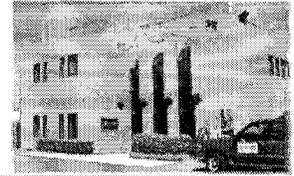
\*\*Preservation  
I = Iced  
H = HCL  
M = Methanol  
N = Nitric Acid  
S = Sulfuric Acid  
B = Sodium bisulfate  
X = Na hydroxide  
T = Na thiosulfate  
O = Other

\*\*\*Container Code  
Dissolved Metals  
 Field Filtered  
 Lab to Filter

\*\*\*Cont. Code:  
A = amber glass  
G = glass  
P = plastic  
ST = sterile  
V = vial

\$ = Summa can  
T = Tedlar bag  
O = Other

39 Spruce St.  
 East Longmeadow, MA. 01028  
 P: 413-525-2332  
 F: 413-525-6405  
 www.contestlabs.com



### Sample Receipt Checklist

CLIENT NAME: CB&I/Shaw RECEIVED BY: RF DATE: 8/14/13

- 1) Was the chain(s) of custody relinquished and signed?  Yes No No CoC Included  
 2) Does the chain agree with the samples?  Yes No  
 If not, explain:  
 3) Are all the samples in good condition?  Yes No  
 If not, explain:

4) How were the samples received:  
 On Ice  Direct from Sampling  Ambient  In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)?  Yes No N/A  
 Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun 48°C

5) Are there Dissolved samples for the lab to filter? Yes  No  
 Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes  No  
 Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

7) Location where samples are stored: 19  
 Permission to subcontract samples? Yes No  
 (Walk-in clients only) if not already approved  
 Client Signature: \_\_\_\_\_

8) Do all samples have the proper Acid pH:  Yes No N/A \_\_\_\_\_

9) Do all samples have the proper Base pH: Yes No  N/A \_\_\_\_\_

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No  N/A

### Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	4	8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic	3	Plastic Bag / Ziploc	
40 mL Vial - type listed below	(60)	PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments: \_\_\_\_\_

40 mL vials: # HCl (60) # Methanol \_\_\_\_\_  
 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_

Time and Date Frozen: \_\_\_\_\_