



CB&I Environmental & Infrastructure, Inc.  
(A CB&I Company)  
150 Royall Street  
Canton, MA 02021  
Tel: +1 617 589 5111  
Fax: +1 617 589 5495  
[www.CBI.com](http://www.CBI.com)

December 8, 2015

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: September through November 2015 Activities  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, RI  
Site Remediation Case No. 97-030**

Dear Mr. Martella:

CB&I Environmental & Infrastructure, Inc. (CB&I), 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 several years ago. **Figure 2** shows the most recent treatment area. Since 2013, a groundwater extraction and treatment system has operated at the site to mitigate the flow of impacted groundwater and improve overall site groundwater quality.

This status report describes groundwater monitoring activities conducted at the site by CB&I. This report includes results of groundwater sampling and analysis conducted in September, October and November of 2015.

## **FIELD ACTIVITIES**

### **Limited VOC Sampling Activities June and July 2015**

Limited groundwater gauging and sampling was conducted on September 10 and October 1, 2015. Monitoring wells MW-112, MW-116D, and MW-116S were sampled for volatile organic compound (VOC) analysis. Groundwater elevation results for the gauging of these wells are included in **Table 2**.

### Groundwater Sampling

Groundwater samples were collected for VOC analysis (EPA Method 8260C) from the three monitoring wells (MW-112, MW-116D, and MW-116S) on September 10 and October 1, 2015. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

### **Groundwater Sampling Activities November 2015**

The monitoring wells that comprise the groundwater monitoring program were monitored for field parameters and sampled for analysis on November 5, 2015.

### Monitoring Activities

Field parameters were measured in treatment area wells and compliance wells on November 5, 2015. Field measurements included oxidation/reduction potential (ORP), dissolved oxygen (DO), pH, temperature, and specific conductance (SC). Groundwater elevation and LNAPL thickness measurements were also collected. Elevation and field parameter results are presented in **Tables 1** and **2**.

### Groundwater Sampling

On November 5, 2015 groundwater samples were collected for analysis for VOCs (EPA Method 8260C) from 22 monitoring wells within and around the treatment area, including the compliance wells. One duplicate sample was 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. Samples were also collected for lead analysis (EPA Method 6010C) from monitoring wells MW-109D and GZA-3. One duplicate sample was also 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 on September 5, October 1, November 5, 2015 is contained in **Table 3**. A copy of each laboratory analytical report is also attached to this report. All measured PCE concentrations were below the treatment goal of 7,700 ug/L in all wells sampled during these sampling events except for wells MW-112 and MW-201D which had PCE detections of 10,000 ug/L and 12,000 ug/L respectively on November 5, 2015. The reported PCE concentrations in well MW-112 were: 2,100 ug/L on September 10, 2015, 2,500 ug/L on October 1, 2015, and 10,000 ug/L on November 5, 2015.

A summary of the compliance well results is contained in **Table 4**. The results for the compliance well sampling indicate that exceedances of the compliance standard occurred for the Adelaide Avenue well MW-112 for PCE on September 5, October 1, and November 5, 2015 and MW-209D on November 5, 2015. (Note that due to sample dilution by the laboratory, the analytical reporting limits for vinyl chloride for

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wells MW-112 and MW-209D were above the compound specific compliance standard for all sampling results collected.)

## **FUTURE ACTIVITIES**

Future limited sampling will be conducted in December 2015 and January 2016 and the full sampling event will be conducted in February 2016.

If you have any questions regarding this report, please contact Brian Cote at (617) 589-6175.  
Sincerely,



Brian J. Cote, PG, LSP  
Senior Project Manager  
CB&I Environmental & Infrastructure, Inc.

### Enclosures:

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

Figure 1 – Site Plan  
Figure 2 – Injection Well Locations

Attachment A - Laboratory Analytical Reports

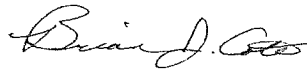
cc: Craig Roy, RIDEM OWR  
Greg Simpson, Textron  
Dave Heislein, AMEC  
Robert Azar, Providence Redevelopment Agency  
Jeff Morgan, Stop & Shop  
Ronald Ruth, Sherin and Lodgen

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**CERTIFICATIONS**

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

I, Brian J. Cote, as an authorized representative of CB&I Environmental & Infrastructure, Inc., and the person responsible for the preparation of this Status Report dated December 8, 2015 certify that the information contained in this report is complete and accurate to the best of my knowledge.

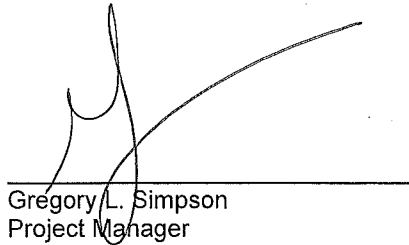


\_\_\_\_\_  
Brian J. Cote  
Senior Project Manager

12/7/15  
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

12/9/15  
Date:

## **TABLES**

**Table 1**  
**Summary Field Parameters**  
**September 2015 - November 2015**

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

Well ID	DATE	pH	Temperature (deg. C°)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
MW-101D	11/5/2015	5.99	14.71	0.040	1.11	41.2
MW-101S	11/5/2015	6.15	15.20	0.905	1.68	26.5
MW-112	11/5/2015	5.56	13.95	1.750	7.94	209.5
MW-116D	11/5/2015	4.90	14.36	0.432	3.30	195.2
MW-116S	11/5/2015	5.34	15.58	0.151	8.87	182.3
MW-201D	11/5/2015	6.19	14.81	0.819	1.43	94.4
MW-202D	11/5/2015	5.21	15.88	0.041	0.18	64.4
MW-202S	11/5/2015	5.76	15.77	0.650	0.59	93.7
MW-207D	11/5/2015	5.11	15.70	0.039	0.36	116.3
MW-207S	11/5/2015	6.24	15.37	0.635	1.03	143.6
MW-209D	11/5/2015	6.41	14.19	0.605	1.54	149.9
MW-216D	11/5/2015	6.28	15.03	0.512	1.04	-27.9
MW-216S	11/5/2015	6.28	15.37	1.562	1.10	-72.5
MW-217D	11/5/2015	6.05	15.10	0.546	0.56	91.3
MW-217S	11/5/2015	6.26	15.30	0.853	0.30	-6.3
MW-218D	11/5/2015	5.25	14.35	0.597	0.19	149.8
MW-218S	11/5/2015	5.55	15.02	0.989	1.12	151.8

Notes:

C° = degrees Celsius

mS/cm = millisiemens per centimeter

mg/L = milligrams per liter

mV = milli volts

**TABLE 2  
GROUNDWATER ELEVATION DATA  
(09/10/15 - 11/05/15)**

12/03/15

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

Location	Date	Reference Elevation (Feet)	Depth to Water (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Groundwater Elevation (Feet)	Notes
CW-01	11/05/15	99.52	26.47	--	--	73.05	DTB = 54.43'
CW-02	11/05/15	98.86	25.60	--	--	73.26	DTB = 54.40'
CW-06	11/05/15	99.52	24.45	--	--	75.07	DTB = 33.25'
GZA-3	11/05/15	NA	17.55	--	--	NA	DTB = 22.02'
MW-101D	11/05/15	98.91	25.90	--	--	73.01	DTB = 46.00'
MW-101S	11/05/15	98.90	25.85	--	--	73.05	DTB = 28.30'
MW-109D	11/05/15	NA	19.60	--	--	NA	DTB = 74.70'
MW-112	09/10/15	100.63	27.52	--	--	73.11	DTB = 34.58'
MW-112	10/01/15	100.63	27.78	--	--	72.85	DTB = 34.60'
MW-112	11/05/15	100.63	27.70	--	--	72.93	DTB = 34.65'
MW-116D	09/10/15	98.92	25.86	--	--	73.06	DTB = 44.37'
MW-116D	10/01/15	98.92	26.05	--	--	72.87	DTB = 44.30'
MW-116D	11/05/15	98.92	25.96	--	--	72.96	DTB = 44.30'
MW-116S	09/10/15	99.40	26.33	--	--	73.07	DTB = 28.65'
MW-116S	10/01/15	99.40	26.57	--	--	72.83	DTB = 28.60'
MW-116S	11/05/15	99.40	26.49	--	--	72.91	DTB = 27.60'
MW-201D	11/05/15	98.80	25.75	--	--	73.05	DTB = 47.35'
MW-202D	11/05/15	98.17	25.09	--	--	73.08	DTB = 47.41'
MW-202S	11/05/15	98.06	25.00	--	--	73.06	DTB = 38.11'
MW-207D	11/05/15	98.18	25.11	--	--	73.07	DTB = 51.08'
MW-207S	11/05/15	98.28	25.20	--	--	73.08	DTB = 37.75'
MW-209D	11/05/15	99.90	27.40	--	--	72.50	DTB = 62.20'
MW-216D	11/05/15	98.69	26.60	--	--	72.09	DTB = 39.35'
MW-216S	11/05/15	99.58	26.60	--	--	72.98	DTB = 29.65'
MW-217D	11/05/15	98.65	25.86	--	--	72.79	DTB = 46.90'
MW-217S	11/05/15	98.71	25.90	--	--	72.81	DTB = 29.55'
MW-218D	11/05/15	99.67	26.65	--	--	73.02	DTB = 46.70'
MW-218S	11/05/15	99.61	26.58	--	--	73.03	DTB = 29.55'
MW-220S	11/05/15	99.41	26.16	--	--	73.25	DTB = 31.95'
MW-221S	11/05/15	98.92	26.62	26.25	0.37	72.64	

Notes:

feet = feet measured below ground surface

NA = Not Available

NM = Not Measured

**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**September 2015 - November 2015**

Former Gorham Manufacturing Facility  
Providence, Rhode Island

CONSTITUENT	CW-01 11/5/2015 Primary	CW-02 11/5/2015 Primary	CW-06 11/5/2015 Primary	GZA-3 11/5/2015 Primary	GZA-3 11/5/2015 Duplicate	MW-101D 11/5/2015 Primary	MW-101S 11/5/2015 Primary	MW-101S 11/5/2015 Duplicate	MW-109D 11/5/2015 Primary	MW-112 9/10/2015 Primary
<b>(VOC (ug/L))</b>										
1,1-Dichloroethane	<50	<1.0	---	1.2	---	<2.0	<5.0	<5.0	<1.0	<5.0
1,1-Dichloroethene	<50JD	<1.0	---	<1.0	---	<2.0	<5.0	<5.0	<1.0	<5.0
1,2,4-Trimethylbenzene	<50	<1.0	---	<1.0	---	<2.0	<5.0	<5.0	<1.0	<5.0
1,3,5-Trimethylbenzene	<50	<1.0	---	<1.0	---	<2.0	<5.0	<5.0	<1.0	<5.0
4-Isopropyltoluene	<50	<1.0	---	<1.0	---	<2.0	<5.0	<5.0	<1.0	<5.0
Chloroform	<100	<2.0	---	<2.0	---	5.7	<10	<10	<2.0	<10
cis-1,2-Dichloroethene	700	<1.0	---	3.5	---	2.3	11	10	<1.0	<5.0
Ethylbenzene	<50	<1.0	---	<1.0J	---	<2.0	<5.0	<5.0	<1.0	<5.0
Naphthalene	<100	<2.0	---	<2.0J	---	<4.0	<10	<10	<2.0	<25
n-Propylbenzene	<50	<1.0	---	<1.0J	---	<2.0	<5.0	<5.0	<1.0	<5.0
Tetrachloroethene	<50JD	<1.0	---	<1.0	---	2500D	620	580	<1.0	2100D
Toluene	<50	<1.0	---	<1.0J	---	<2.0	<5.0	<5.0	<1.0	<5.0
Trichloroethene	2000	<1.0	---	<1.0J	---	15	10	9.4	<1.0	9.4
Vinyl chloride	<100	<2.0	---	18	---	<4.0	<10	<10	<2.0	<10
m/p-xylene	<100	<2.0	---	<2.0	---	<4.0	<10	<10	<2.0	<10
o-Xylene	<50	<1.0	---	<1.0	---	<2.0	<5.0	<5.0	<1.0	<5.0
Xylenes (Total)	<100	<2.0	---	<2.0	---	<4.0	<10	<10	<2.0	<10
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	5.0	---	---	---	---	---	---	---
<b>Lead (mg/L)</b>										
Dissolved Lead	---	---	---	<0.010	<0.010	---	---	---	<0.010	---

Notes: < = Less than the laboratory reporting limit  
ug/L = Micrograms 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 = Result is an estimated value



**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**September 2015 - November 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-112 10/1/2015 Primary	MW-112 11/5/2015 Primary	MW-116D 9/10/2015 Primary	MW-116D 10/1/2015 Primary	MW-116D 11/5/2015 Primary	MW-116S 9/10/2015 Primary	MW-116S 10/1/2015 Primary	MW-116S 11/5/2015 Primary	MW-201D 11/5/2015 Primary	MW-202D 11/5/2015 Primary
<b>(VOC (ug/L))</b>										
1,1-Dichloroethane	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
1,1-Dichloroethene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
1,2,4-Trimethylbenzene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
1,3,5-Trimethylbenzene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
4-Isopropyltoluene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
Chloroform	<100	<20	<2.0	<2.0J	<2.0J	<2.0	<2.0	<2.0	<200	<4.0
cis-1,2-Dichloroethene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	24
Ethylbenzene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
Naphthalene	<100	<20	<5.0	<2.0	<2.0	<5.0	<2.0	<2.0	<200	<4.0
n-Propylbenzene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
Tetrachloroethene	2500	10000D	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12000D	270
Toluene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
Trichloroethene	<50JD	12	<1.0	<1.0J	<1.0J	<1.0	<1.0	<1.0	260	8.9
Vinyl chloride	<100	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<4.0
m/p-xylene	<100	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<4.0
o-Xylene	<50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<2.0
Xylenes (Total)	<100	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<4.0
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	---	---	---	---	---	---	---	---
<b>Lead (mg/L)</b>										
Dissolved Lead	---	---	---	---	---	---	---	---	---	---

Notes: < = Less than the laboratory reporting limit  
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**TABLE 3**  
**Groundwater Analytical Results Detected Compounds**  
**September 2015 - November 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-202S 11/5/2015 Primary	MW-207D 11/5/2015 Primary	MW-207S 11/5/2015 Primary	MW-209D 11/5/2015 Primary	MW-216D 11/5/2015 Primary	MW-216S 11/5/2015 Primary	MW-217D 11/5/2015 Primary	MW-217S 11/5/2015 Primary	MW-218D 11/5/2015 Primary	MW-218S 11/5/2015 Primary
<b>(VOC (ug/L))</b>										
1,1-Dichloroethane	<4.0	<1.0	<1.0	<4.0	<1.0	<1.0J	<1.0	2	<5.0	<1.0
1,1-Dichloroethene	<4.0	<1.0	<1.0	4.1	<1.0J	<1.0J	<1.0	<2.0	<5.0	<1.0
1,2,4-Trimethylbenzene	<4.0	<1.0	<1.0	<4.0	<1.0	12	<1.0	5.9	<5.0	<1.0
1,3,5-Trimethylbenzene	<4.0	<1.0	<1.0	<4.0	<1.0	6.5	<1.0	<2.0JD	<5.0	<1.0
4-Isopropyltoluene	<4.0	<1.0	<1.0	<4.0	<1.0	1.2	<1.0	<2.0JD	<5.0	<1.0
Chloroform	<8.0	<2.0	<2.0	<8.0	<2.0	<2.0	<2.0	<4.0	13	<2.0
cis-1,2-Dichloroethene	<4.0JD	17	<1.0	17	<1.0J	51	14	56	<5.0	<1.0
Ethylbenzene	<4.0	<1.0	<1.0	<4.0	<1.0	3	<1.0J	7.3	<5.0	<1.0
Naphthalene	<8.0	<2.0	<2.0	<8.0	<2.0	23	<2.0	120	<10	<2.0
n-Propylbenzene	<4.0	<1.0	<1.0	<4.0	<1.0	<1.0J	<1.0	2.3	<5.0	<1.0
Tetrachloroethene	120	9	9.4	1800D	<1.0	1.1	<1.0	<2.0JD	200	7
Toluene	<4.0	<1.0	<1.0	<4.0	<1.0	1.6	<1.0J	<2.0JD	<5.0	<1.0
Trichloroethene	6	1.8	3.2	130	1.1	<1.0J	2.7	<2.0	5.6	<1.0
Vinyl chloride	<8.0	<2.0	<2.0	<8.0	<2.0	<2.0J	<2.0J	10	<10	<2.0
m/p-xylene	<8.0	<2.0	<2.0	<8.0	<2.0	4.7	<2.0	9.5	<10	<2.0
o-Xylene	<4.0	<1.0	<1.0	<4.0	<1.0	8.6	<1.0	7.1	<5.0	<1.0
Xylenes (Total)	<8.0	<2.0	<2.0	<8.0	<2.0	13.3	<2.0	16.6	<10	<2.0
<b>TPH (mg/L)</b>										
TPH (Fuel Oil)	---	---	---	---	---	---	---	---	---	---
<b>Lead (mg/L)</b>										
Dissolved Lead	---	---	---	---	---	---	---	---	---	---

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 ug/L = Micrograms per liter, parts per billion  
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 TPH = Total Petroleum Hydrocarbons

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**TABLE 4**  
**Groundwater Analytical Results**  
**September 2015 - November 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

<b>Mashapaug Pond Compliance Wells</b>			
Sample ID	GZA-3	GZA-3	Compliance
Date Collected	11/5/2015	11/5/2015	Standard <sup>1</sup>
CONSTITUENT	Primary	Duplicate	
<b>Metals (mg/L)</b>			
Lead	<0.010	<0.010	0.03
<b>VOCs (ug/L)</b>			
1,1-Dichloroethane	1.2	---	50,000
1,1-Dichloroethene	<1.0	---	50,000
cis-1,2-Dichloroethene	3.5	---	50,000
Methyltert-butylether	<1.0J	---	50,000
Tetrachloroethene	<1.0	---	5,000
Trichloroethene	<1.0J	---	20,000
Vinyl chloride	18	---	1,200

<b>TPH Remediation Area Well</b>		
Sample ID	CW-06	Compliance
Date Collected	11/5/2015	Standard <sup>1</sup>
CONSTITUENT	Primary	
<b>TPH (mg/L)</b>		
TPH	5.0	20

<b>Sewer Interceptor Area Wells</b>			
Sample ID	CW-01	CW-02	Compliance
Date Collected	11/5/2015	11/5/2015	Standard <sup>2</sup>
CONSTITUENT	Primary	Primary	
<b>VOCs (ug/L)</b>			
1,1-Dichloroethane	<50	<1.0	120,000
1,1-Dichloroethene	<50JD	<1.0	23,000
cis-1,2-Dichloroethene	700	<1.0	69,000
trans-1,2-Dichloroethene	<50	<1.0	79,000
Tetrachloroethene	<50JD	<1.0	NS
Trichloroethene	2000	<1.0	87,000

<b>Adelaide Avenue Wells</b>						
Sample ID	MW-112	MW-112	MW-112	MW-209D	MW-218S	Compliance
Date Collected	9/10/2015	10/1/2015	11/5/2015	11/5/2015	11/5/2015	Standard <sup>3</sup>
CONSTITUENT	Primary	Primary	Primary	Primary	Primary	
<b>VOCs (ug/L)</b>						
1,1-Dichloroethane	<5.0	<50	<10	<4.0	<1.0	2,400
1,1-Dichloroethene	<5.0	<50	<10	4.1	<1.0	7
cis-1,2-Dichloroethene	<5.0	<50	<10	17	<1.0	1,900
Methyltert-butylether	<5.0	<50	<10	<4.0JD	<1.0	5,000
Tetrachloroethene	2100D	2500	10000D	1800D	7	150
Trichloroethene	9.4	<50JD	12	130	<1.0	540
Vinyl chloride	<10	<100	<20	<8.0	<2.0	2

1. 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.

2. These compliance standards taken from Table 5 - Upper Concentration Limits for GB Groundwater, RIDEM Remediation Regulations.

3. 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.

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

NA = Indicates that the analysis was not performed.

< = Less than the laboratory reporting limit

ug/L = Micrograms per liter, parts per billion

mg/L = Milligrams per liter, parts per million

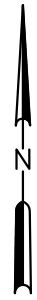
TPH = Total Petroleum Hydrocarbons

VOCs = Volatile organic compounds

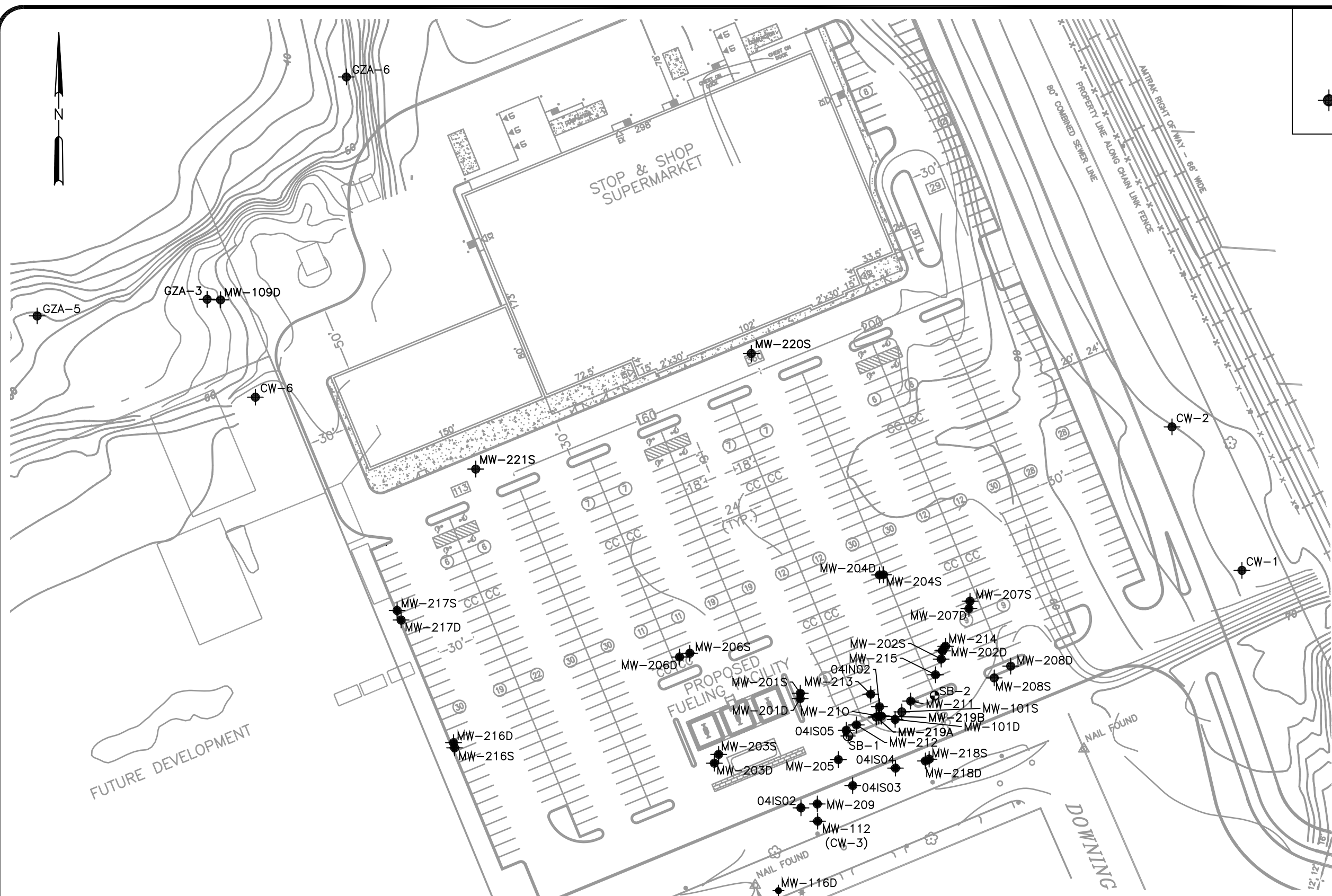
-- = Not analyzed for

D = Result reported from a diluted sample

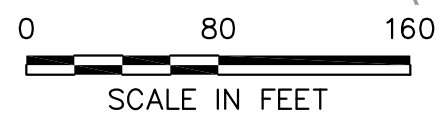
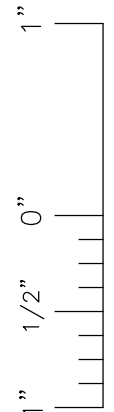
## FIGURES



LEGEND  
 ● MW-101S MONITORING WELL



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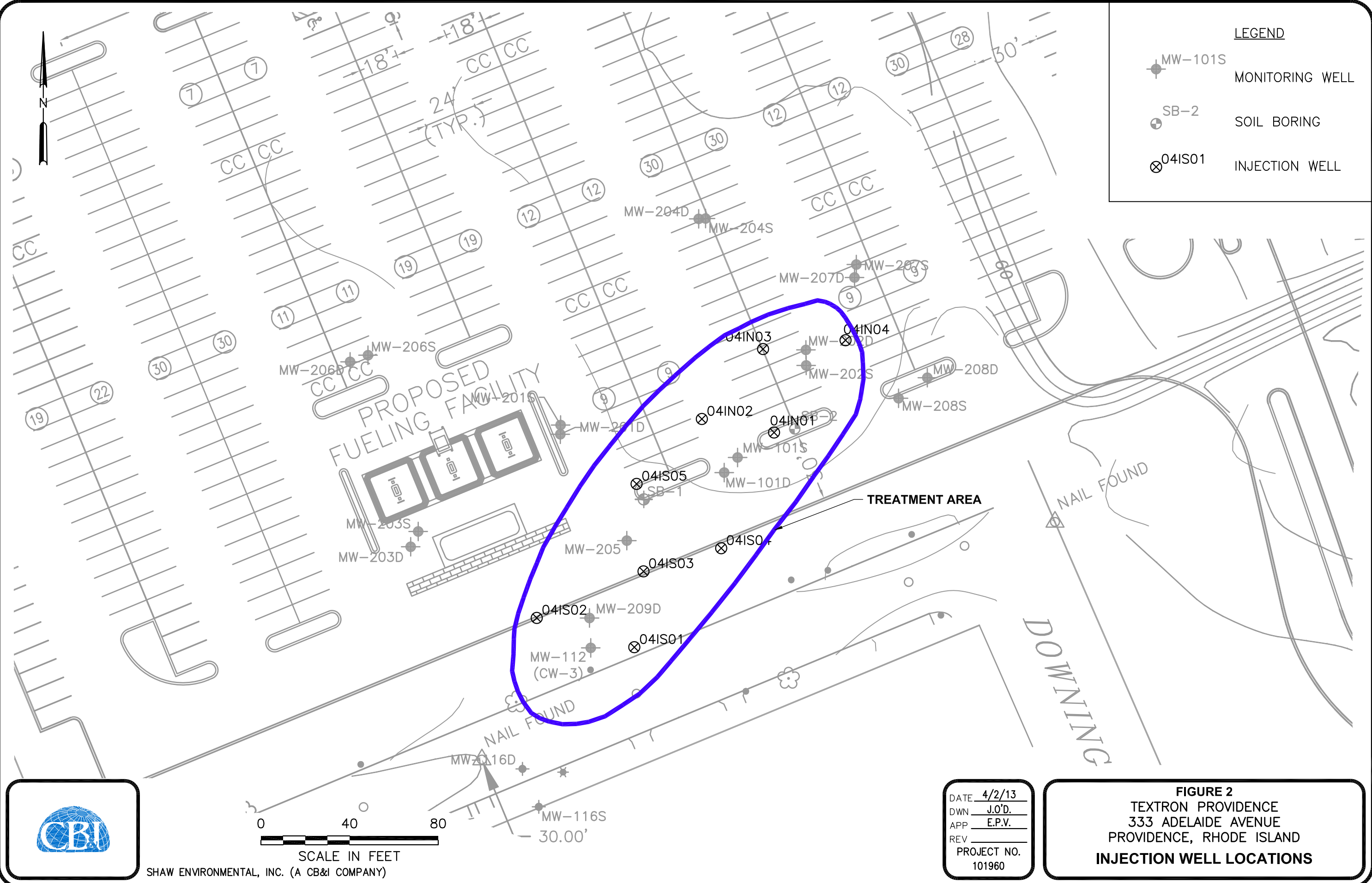
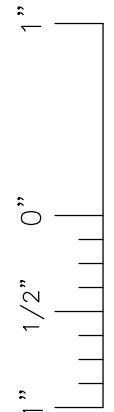


SHAW ENVIRONMENTAL, INC. (A CB&I COMPANY)

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**

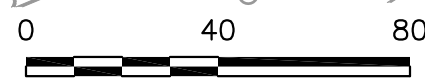
File: N:\dwg\Gorham\entgf-01.dwg User: James.O'Donnell Apr 02, 2013 - 11:05am  
Layout: Inj\_well



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**

**ATTACHMENT A**

**LABORATORY REPORTS**



September 25, 2015

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron Providence, RI  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 15I0523

Enclosed are results of analyses for samples received by the laboratory on September 11, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas  
Project Manager



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

CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 9/25/2015

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

**ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 1510523

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

PROJECT LOCATION: Textron Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	1510523-01	Ground Water		SW-846 8260C	
MW-116D	1510523-02	Ground Water		SW-846 8260C	
MW-116S	1510523-03	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:****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.

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

B131308-BS1, B131308-BSD1

**R-05**

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**

1510523-01[MW-112], 1510523-02[MW-116D], 1510523-03[MW-116S], B131308-BLK1, B131308-BS1, B131308-BSD1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

1510523-01[MW-112]

**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.

**Analyte & Samples(s) Qualified:****1,2,4-Trichlorobenzene**

1510523-01[MW-112], 1510523-02[MW-116D], 1510523-03[MW-116S], B131308-BLK1, B131308-BS1, B131308-BSD1

**1,4-Dioxane**

1510523-01[MW-112], 1510523-02[MW-116D], 1510523-03[MW-116S], B131308-BLK1, B131308-BS1, B131308-BSD1

**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.

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

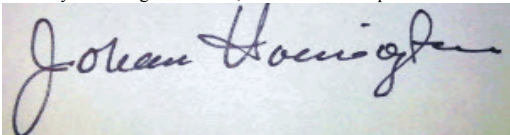
B131308-BS1, B131308-BSD1

**Naphthalene**

B131308-BS1, B131308-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 photograph of a handwritten signature in black ink on a light-colored background. The signature is written in a cursive style and reads "Johanna K. Harrington".

Johanna K. Harrington  
Manager, Laboratory Reporting

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 1510523

Date Received: 9/11/2015

Field Sample #: MW-112

Sampled: 9/10/2015 07:50

Sample ID: 1510523-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Benzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Bromoform	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Bromomethane	ND	10	µg/L	5	R-05	SW-846 8260C	9/23/15	9/23/15 12:04	MFF
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Chlorodibromomethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Chloroethane	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Chloroform	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Chloromethane	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 1510523

Date Received: 9/11/2015

Field Sample #: MW-112

Sampled: 9/10/2015 07:50

Sample ID: 1510523-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,4-Dioxane	ND	250	µg/L	5	V-05	SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Hexachlorobutadiene	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Naphthalene	ND	25	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Styrene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Tetrachloroethylene	2100	50	µg/L	50		SW-846 8260C	9/23/15	9/24/15 10:36	EEH
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Toluene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5	V-05	SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Trichloroethylene	9.4	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	9/23/15	9/23/15 12:04	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.7	70-130	9/23/15 12:04
1,2-Dichloroethane-d4	110	70-130	9/24/15 10:36
Toluene-d8	101	70-130	9/24/15 10:36
Toluene-d8	100	70-130	9/23/15 12:04
4-Bromofluorobenzene	98.4	70-130	9/23/15 12:04
4-Bromofluorobenzene	91.6	70-130	9/24/15 10:36

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 1510523

Date Received: 9/11/2015

Field Sample #: MW-116D

Sampled: 9/10/2015 08:50

Sample ID: 1510523-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	9/23/15	9/23/15 11:03	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Chlorodibromomethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 1510523

Date Received: 9/11/2015

Field Sample #: MW-116D

Sampled: 9/10/2015 08:50

Sample ID: 1510523-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05	SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Hexachlorobutadiene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:03	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	97.8	70-130	9/23/15 11:03
Toluene-d8	99.8	70-130	9/23/15 11:03
4-Bromofluorobenzene	97.4	70-130	9/23/15 11:03



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 1510523

Date Received: 9/11/2015

Field Sample #: MW-116S

Sampled: 9/10/2015 09:15

Sample ID: 1510523-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	9/23/15	9/23/15 11:34	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Chlorodibromomethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 1510523

Date Received: 9/11/2015

Field Sample #: MW-116S

Sampled: 9/10/2015 09:15

Sample ID: 1510523-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,4-Dioxane	ND	50	µg/L	1	V-05	SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Hexachlorobutadiene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Naphthalene	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	9/23/15	9/23/15 11:34	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.4	70-130	9/23/15 11:34
Toluene-d8	101	70-130	9/23/15 11:34
4-Bromofluorobenzene	98.4	70-130	9/23/15 11:34

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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15I0523-01 [MW-112]	B131308	1	5.00	09/23/15
15I0523-02 [MW-116D]	B131308	5	5.00	09/23/15
15I0523-03 [MW-116S]	B131308	5	5.00	09/23/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15I0523-01RE1 [MW-112]	B131368	0.1	5.00	09/23/15

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

**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 B131308 - SW-846 5030B**

**Blank (B131308-BLK1)**

Prepared & Analyzed: 09/23/15

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							R-05
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	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	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
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 B131308 - SW-846 5030B

Blank (B131308-BLK1)

Prepared & Analyzed: 09/23/15

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							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							V-05
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	24.8		µg/L	25.0		99.2	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0		96.0	70-130			

LCS (B131308-BS1)

Prepared & Analyzed: 09/23/15

Acetone	117	50	µg/L	100		117	70-160			†
Acrylonitrile	9.00	5.0	µg/L	10.0		90.0	70-130			
tert-Amyl Methyl Ether (TAME)	9.38	0.50	µg/L	10.0		93.8	70-130			
Benzene	10.1	1.0	µg/L	10.0		101	70-130			
Bromobenzene	9.69	1.0	µg/L	10.0		96.9	70-130			
Bromochloromethane	9.66	1.0	µg/L	10.0		96.6	70-130			
Bromodichloromethane	9.61	0.50	µg/L	10.0		96.1	70-130			
Bromoform	8.80	1.0	µg/L	10.0		88.0	70-130			
Bromomethane	4.93	2.0	µg/L	10.0		49.3	40-160		R-05, V-20	†
2-Butanone (MEK)	108	20	µg/L	100		108	40-160			†
tert-Butyl Alcohol (TBA)	86.0	20	µg/L	100		86.0	40-160			†
n-Butylbenzene	9.34	1.0	µg/L	10.0		93.4	70-130			
sec-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
tert-Butylbenzene	9.98	1.0	µg/L	10.0		99.8	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.60	0.50	µg/L	10.0		96.0	70-130			
Carbon Disulfide	12.1	4.0	µg/L	10.0		121	70-130			
Carbon Tetrachloride	10.0	5.0	µg/L	10.0		100	70-130			
Chlorobenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
Chlorodibromomethane	9.25	0.50	µg/L	10.0		92.5	70-130			
Chloroethane	10.4	2.0	µg/L	10.0		104	70-130			
Chloroform	9.87	2.0	µg/L	10.0		98.7	70-130			
Chloromethane	7.42	2.0	µg/L	10.0		74.2	40-160			†
2-Chlorotoluene	10.7	1.0	µg/L	10.0		107	70-130			

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

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 B131308 - SW-846 5030B</b>										
<b>LCS (B131308-BS1)</b>										
Prepared & Analyzed: 09/23/15										
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.3	5.0	µg/L	10.0		103	70-130			
1,2-Dibromoethane (EDB)	9.68	0.50	µg/L	10.0		96.8	70-130			
Dibromomethane	9.12	1.0	µg/L	10.0		91.2	70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,4-Dichlorobenzene	9.73	1.0	µg/L	10.0		97.3	70-130			
trans-1,4-Dichloro-2-butene	9.01	2.0	µg/L	10.0		90.1	70-130			
Dichlorodifluoromethane (Freon 12)	4.71	2.0	µg/L	10.0		47.1	40-160			†
1,1-Dichloroethane	10.1	1.0	µg/L	10.0		101	70-130			
1,2-Dichloroethane	9.68	1.0	µg/L	10.0		96.8	70-130			
1,1-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
cis-1,2-Dichloroethylene	9.75	1.0	µg/L	10.0		97.5	70-130			
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichloropropane	9.67	1.0	µg/L	10.0		96.7	70-130			
1,3-Dichloropropane	9.40	0.50	µg/L	10.0		94.0	70-130			
2,2-Dichloropropane	9.85	1.0	µg/L	10.0		98.5	40-130			†
1,1-Dichloropropene	9.59	2.0	µg/L	10.0		95.9	70-130			
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130			
trans-1,3-Dichloropropene	11.0	0.50	µg/L	10.0		110	70-130			
Diethyl Ether	9.18	2.0	µg/L	10.0		91.8	70-130			
Diisopropyl Ether (DIPE)	9.29	0.50	µg/L	10.0		92.9	70-130			
1,4-Dioxane	90.2	50	µg/L	100		90.2	40-130			V-05 †
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Hexachlorobutadiene	10.4	0.50	µg/L	10.0		104	70-130			
2-Hexanone (MBK)	106	10	µg/L	100		106	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)	9.33	1.0	µg/L	10.0		93.3	70-130			
Methylene Chloride	9.50	5.0	µg/L	10.0		95.0	70-130			
4-Methyl-2-pentanone (MIBK)	93.8	10	µg/L	100		93.8	70-160			†
<b>Naphthalene</b>	14.2	2.0	µg/L	10.0		142 *	40-130			L-02, V-20 †
n-Propylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
Styrene	10.4	1.0	µg/L	10.0		104	70-130			
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,1,2,2-Tetrachloroethane	9.45	0.50	µg/L	10.0		94.5	70-130			
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Tetrahydrofuran	9.20	10	µg/L	10.0		92.0	70-130			
Toluene	10.1	1.0	µg/L	10.0		101	70-130			
1,2,3-Trichlorobenzene	8.54	5.0	µg/L	10.0		85.4	70-130			
1,2,4-Trichlorobenzene	7.45	1.0	µg/L	10.0		74.5	70-130			V-05
1,3,5-Trichlorobenzene	8.72	1.0	µg/L	10.0		87.2	70-130			
1,1,1-Trichloroethane	9.95	1.0	µg/L	10.0		99.5	70-130			
1,1,2-Trichloroethane	9.62	1.0	µg/L	10.0		96.2	70-130			
Trichloroethylene	9.58	1.0	µg/L	10.0		95.8	70-130			
Trichlorofluoromethane (Freon 11)	10.2	2.0	µg/L	10.0		102	70-130			
1,2,3-Trichloropropane	9.90	2.0	µg/L	10.0		99.0	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2	1.0	µg/L	10.0		102	70-130			
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
Vinyl Chloride	8.72	2.0	µg/L	10.0		87.2	40-160			†

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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 B131308 - SW-846 5030B

LCS (B131308-BS1)

Prepared & Analyzed: 09/23/15

m+p Xylene	21.0	2.0	µg/L	20.0		105	70-130			
o-Xylene	10.2	1.0	µg/L	10.0		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.7		µg/L	25.0		98.8	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130			

LCS Dup (B131308-BSD1)

Prepared & Analyzed: 09/23/15

Acetone	104	50	µg/L	100		104	70-160	11.8	25	†
Acrylonitrile	9.53	5.0	µg/L	10.0		95.3	70-130	5.72	25	
tert-Amyl Methyl Ether (TAME)	9.24	0.50	µg/L	10.0		92.4	70-130	1.50	25	
Benzene	9.89	1.0	µg/L	10.0		98.9	70-130	2.10	25	
Bromobenzene	9.76	1.0	µg/L	10.0		97.6	70-130	0.720	25	
Bromochloromethane	9.65	1.0	µg/L	10.0		96.5	70-130	0.104	25	
Bromodichloromethane	9.51	0.50	µg/L	10.0		95.1	70-130	1.05	25	
Bromoform	8.87	1.0	µg/L	10.0		88.7	70-130	0.792	25	
Bromomethane	6.95	2.0	µg/L	10.0		69.5	40-160	34.0 *	25	R-05, V-20 †
2-Butanone (MEK)	99.3	20	µg/L	100		99.3	40-160	8.00	25	†
tert-Butyl Alcohol (TBA)	83.4	20	µg/L	100		83.4	40-160	3.18	25	†
n-Butylbenzene	8.72	1.0	µg/L	10.0		87.2	70-130	6.87	25	
sec-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	4.14	25	
tert-Butylbenzene	9.59	1.0	µg/L	10.0		95.9	70-130	3.99	25	
tert-Butyl Ethyl Ether (TBEE)	9.53	0.50	µg/L	10.0		95.3	70-130	0.732	25	
Carbon Disulfide	11.4	4.0	µg/L	10.0		114	70-130	5.36	25	
Carbon Tetrachloride	9.61	5.0	µg/L	10.0		96.1	70-130	4.48	25	
Chlorobenzene	9.76	1.0	µg/L	10.0		97.6	70-130	1.83	25	
Chlorodibromomethane	9.31	0.50	µg/L	10.0		93.1	70-130	0.647	25	
Chloroethane	9.74	2.0	µg/L	10.0		97.4	70-130	6.65	25	
Chloroform	9.65	2.0	µg/L	10.0		96.5	70-130	2.25	25	
Chloromethane	7.59	2.0	µg/L	10.0		75.9	40-160	2.27	25	†
2-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130	2.84	25	
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	0.887	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.89	5.0	µg/L	10.0		98.9	70-130	4.35	25	
1,2-Dibromoethane (EDB)	9.67	0.50	µg/L	10.0		96.7	70-130	0.103	25	
Dibromomethane	9.41	1.0	µg/L	10.0		94.1	70-130	3.13	25	
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	0.880	25	
1,3-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	2.74	25	
1,4-Dichlorobenzene	9.64	1.0	µg/L	10.0		96.4	70-130	0.929	25	
trans-1,4-Dichloro-2-butene	8.70	2.0	µg/L	10.0		87.0	70-130	3.50	25	
Dichlorodifluoromethane (Freon 12)	4.33	2.0	µg/L	10.0		43.3	40-160	8.41	25	†
1,1-Dichloroethane	9.93	1.0	µg/L	10.0		99.3	70-130	1.80	25	
1,2-Dichloroethane	9.66	1.0	µg/L	10.0		96.6	70-130	0.207	25	
1,1-Dichloroethylene	9.69	1.0	µg/L	10.0		96.9	70-130	5.42	25	
cis-1,2-Dichloroethylene	9.48	1.0	µg/L	10.0		94.8	70-130	2.81	25	
trans-1,2-Dichloroethylene	9.74	1.0	µg/L	10.0		97.4	70-130	5.01	25	
1,2-Dichloropropane	9.71	1.0	µg/L	10.0		97.1	70-130	0.413	25	
1,3-Dichloropropane	9.41	0.50	µg/L	10.0		94.1	70-130	0.106	25	
2,2-Dichloropropane	9.40	1.0	µg/L	10.0		94.0	40-130	4.68	25	†
1,1-Dichloropropene	8.79	2.0	µg/L	10.0		87.9	70-130	8.71	25	
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	0.789	25	
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130	1.75	25	
Diethyl Ether	9.22	2.0	µg/L	10.0		92.2	70-130	0.435	25	
Diisopropyl Ether (DIPE)	9.19	0.50	µg/L	10.0		91.9	70-130	1.08	25	

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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 B131308 - SW-846 5030B</b>										
<b>LCS Dup (B131308-BSD1)</b>										
Prepared & Analyzed: 09/23/15										
1,4-Dioxane	97.3	50	µg/L	100		97.3	40-130	7.61	50	V-05 † ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	3.19	25	
Hexachlorobutadiene	9.65	0.50	µg/L	10.0		96.5	70-130	7.58	25	
2-Hexanone (MBK)	98.6	10	µg/L	100		98.6	70-160	7.60	25	†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130	3.46	25	
p-Isopropyltoluene (p-Cymene)	10.9	1.0	µg/L	10.0		109	70-130	3.68	25	
Methyl tert-Butyl Ether (MTBE)	9.27	1.0	µg/L	10.0		92.7	70-130	0.645	25	
Methylene Chloride	9.21	5.0	µg/L	10.0		92.1	70-130	3.10	25	
4-Methyl-2-pentanone (MIBK)	91.2	10	µg/L	100		91.2	70-160	2.80	25	†
<b>Naphthalene</b>	13.9	2.0	µg/L	10.0		<b>139</b> *	40-130	1.71	25	L-02, V-20 †
n-Propylbenzene	10.5	1.0	µg/L	10.0		105	70-130	3.09	25	
Styrene	10.3	1.0	µg/L	10.0		103	70-130	0.676	25	
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130	1.07	25	
1,1,2,2-Tetrachloroethane	9.40	0.50	µg/L	10.0		94.0	70-130	0.531	25	
Tetrachloroethylene	9.88	1.0	µg/L	10.0		98.8	70-130	5.61	25	
Tetrahydrofuran	9.07	10	µg/L	10.0		90.7	70-130	1.42	25	
Toluene	9.91	1.0	µg/L	10.0		99.1	70-130	1.90	25	
1,2,3-Trichlorobenzene	8.01	5.0	µg/L	10.0		80.1	70-130	6.40	25	
1,2,4-Trichlorobenzene	7.01	1.0	µg/L	10.0		70.1	70-130	6.09	25	V-05
1,3,5-Trichlorobenzene	8.15	1.0	µg/L	10.0		81.5	70-130	6.76	25	
1,1,1-Trichloroethane	8.59	1.0	µg/L	10.0		85.9	70-130	14.7	25	
1,1,2-Trichloroethane	9.48	1.0	µg/L	10.0		94.8	70-130	1.47	25	
Trichloroethylene	9.25	1.0	µg/L	10.0		92.5	70-130	3.51	25	
Trichlorofluoromethane (Freon 11)	9.79	2.0	µg/L	10.0		97.9	70-130	3.61	25	
1,2,3-Trichloropropane	9.70	2.0	µg/L	10.0		97.0	70-130	2.04	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.81	1.0	µg/L	10.0		98.1	70-130	4.19	25	
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	2.82	25	
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	2.97	25	
Vinyl Chloride	8.34	2.0	µg/L	10.0		83.4	40-160	4.45	25	†
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130	3.49	25	
o-Xylene	9.95	1.0	µg/L	10.0		99.5	70-130	2.29	25	
Surrogate: 1,2-Dichloroethane-d4	24.8		µg/L	25.0		99.3	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.5	70-130			
Surrogate: 4-Bromofluorobenzene	25.3		µg/L	25.0		101	70-130			

**Batch B131368 - SW-846 5030B**

**Blank (B131368-BLK1)**

Prepared: 09/23/15 Analyzed: 09/24/15

Tetrachloroethylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	27.0		µg/L	25.0		108	70-130			
Surrogate: Toluene-d8	25.4		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	22.6		µg/L	25.0		90.4	70-130			



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**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 B131368 - SW-846 5030B**

**LCS (B131368-BS1)**

Prepared: 09/23/15 Analyzed: 09/24/15

Tetrachloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	27.4		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	25.7		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		µg/L	25.0		94.7	70-130			

**LCS Dup (B131368-BSD1)**

Prepared: 09/23/15 Analyzed: 09/24/15

Tetrachloroethylene	10.7	1.0	µg/L	10.0		107	70-130	3.95	25	
Surrogate: 1,2-Dichloroethane-d4	27.4		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	23.8		µg/L	25.0		95.2	70-130			

---

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

**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.
- 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.
  - R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
  - 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-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,NJ
Acrylonitrile	CT,NY,ME,NH,VA,NJ
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA,NJ
Benzene	CT,NY,ME,NH,VA,NJ
Bromochloromethane	NY,ME,NH,VA,NJ
Bromodichloromethane	CT,NY,ME,NH,VA,NJ
Bromoform	CT,NY,ME,NH,VA,NJ
Bromomethane	CT,NY,ME,NH,VA,NJ
2-Butanone (MEK)	CT,NY,ME,NH,VA,NJ
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA,NJ
n-Butylbenzene	NY,ME,VA,NJ
sec-Butylbenzene	NY,ME,VA,NJ
tert-Butylbenzene	NY,ME,VA,NJ
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA,NJ
Carbon Disulfide	CT,NY,ME,NH,VA,NJ
Carbon Tetrachloride	CT,NY,ME,NH,VA,NJ
Chlorobenzene	CT,NY,ME,NH,VA,NJ
Chlorodibromomethane	CT,NY,ME,NH,VA,NJ
Chloroethane	CT,NY,ME,NH,VA,NJ
Chloroform	CT,NY,ME,NH,VA,NJ
Chloromethane	CT,NY,ME,NH,VA,NJ
2-Chlorotoluene	NY,ME,NH,VA,NJ
4-Chlorotoluene	NY,ME,NH,VA,NJ
Dibromomethane	NY,ME,NH,VA,NJ
1,2-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,4-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA,NJ
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA,NJ
1,1-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,2-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,1-Dichloroethylene	CT,NY,ME,NH,VA,NJ
cis-1,2-Dichloroethylene	NY,ME,NJ
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA,NJ
1,2-Dichloropropane	CT,NY,ME,NH,VA,NJ
1,3-Dichloropropane	NY,ME,VA,NJ
2,2-Dichloropropane	NY,ME,NH,VA,NJ
1,1-Dichloropropene	NY,ME,NH,VA,NJ
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
Diisopropyl Ether (DIPE)	NY,ME,NH,VA,NJ
Ethylbenzene	CT,NY,ME,NH,VA,NJ
Hexachlorobutadiene	CT,NY,ME,NH,VA,NJ
2-Hexanone (MBK)	CT,NY,ME,NH,VA,NJ
Isopropylbenzene (Cumene)	NY,ME,VA,NJ
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA,NJ
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA,NJ

**CERTIFICATIONS**

**Certified Analyses included in this Report**

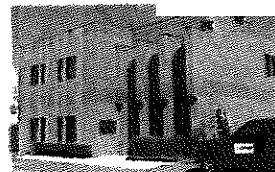
Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Methylene Chloride	CT,NY,ME,NH,VA,NJ
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA,NJ
Naphthalene	NY,ME,NH,VA,NJ
n-Propylbenzene	CT,NY,ME,NH,VA,NJ
Styrene	CT,NY,ME,NH,VA,NJ
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
Tetrachloroethylene	CT,NY,ME,NH,VA,NJ
Toluene	CT,NY,ME,NH,VA,NJ
1,2,3-Trichlorobenzene	NY,ME,NH,VA,NJ
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA,NJ
1,1,2-Trichloroethane	CT,NY,ME,NH,VA,NJ
Trichloroethylene	CT,NY,ME,NH,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA,NJ
1,2,3-Trichloropropane	NY,ME,NH,VA,NJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA,NJ
1,2,4-Trimethylbenzene	NY,ME,VA,NJ
1,3,5-Trimethylbenzene	NY,ME,VA,NJ
Vinyl Chloride	CT,NY,ME,NH,VA,NJ
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	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	09/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



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 RECEIVED BY: RLF DATE: 9/14/15

- 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 2.3

- 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: \_\_\_\_\_  
 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		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	9	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl 9 # Methanol \_\_\_\_\_  
 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_  
 Time and Date Frozen: \_\_\_\_\_

**Login Sample Receipt Checklist**  
 (Rejection Criteria Listing - Using Sample Acceptance Policy)  
 Any False statement will be brought to the attention of Client

Question	Answer (True/False)		Comment
	T/F/NA		
1) The cooler's custody seal, if present, is intact.	T		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	T		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.	NA		
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.	NA		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

Doc #277 Rev. 4 August 2013

Who notified of False statements?  
 Log-In Technician Initials:

Date/Time:  
 Date/Time:

RLT 9/11/15 1400

October 13, 2015

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron, Providence, RI  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 15J0070

Enclosed are results of analyses for samples received by the laboratory on October 2, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas  
Project Manager



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

CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021  
ATTN: Brian Cote

REPORT DATE: 10/13/2015

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

**ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 15J0070

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

PROJECT LOCATION: Textron, Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-112	15J0070-01	Ground Water		SW-846 8260C	
MW-116D	15J0070-02	Ground Water		SW-846 8260C	
MW-116S	15J0070-03	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.

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332  
SW-846 8260C

---

**Qualifications:****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.

**Analyte & Samples(s) Qualified:****1,4-Dioxane**

B132584-BS1, B132584-BSD1

**Chloroethane**

B132584-BS1, B132584-BSD1

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**L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

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

15J0070-01[MW-112], 15J0070-02[MW-116D], 15J0070-03[MW-116S], B132584-BLK1, B132584-BS1, B132584-BSD1

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**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.

**Analyte & Samples(s) Qualified:****Dichlorodifluoromethane (Freon 12)**

B132584-BSD1

---

**R-05**

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**

15J0070-01[MW-112], 15J0070-02[MW-116D], 15J0070-03[MW-116S], B132584-BLK1, B132584-BS1, B132584-BSD1

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**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

15J0070-01[MW-112]

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**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.

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

15J0070-01[MW-112], 15J0070-02[MW-116D], 15J0070-03[MW-116S], B132584-BLK1, B132584-BS1, B132584-BSD1

**Dichlorodifluoromethane (Freon 12)**

15J0070-01[MW-112], 15J0070-02[MW-116D], 15J0070-03[MW-116S], B132584-BLK1, B132584-BS1, B132584-BSD1

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**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.

**Analyte & Samples(s) Qualified:****1,4-Dioxane**

B132584-BS1, B132584-BSD1

**2,2-Dichloropropane**

B132584-BS1, B132584-BSD1

**2-Butanone (MEK)**

B132584-BS1, B132584-BSD1

**2-Hexanone (MBK)**

B132584-BS1, B132584-BSD1

**Acetone**

B132584-BS1, B132584-BSD1

**Chloroethane**

B132584-BS1, B132584-BSD1

**tert-Butyl Alcohol (TBA)**

B132584-BS1, B132584-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 "Tod Kopycinski". The signature is written in a cursive, somewhat stylized script.

Tod E. Kopycinski  
Laboratory Director

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15J0070

Date Received: 10/2/2015

Field Sample #: MW-112

Sampled: 10/1/2015 08:00

Sample ID: 15J0070-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Benzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Bromochloromethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Bromodichloromethane	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Bromoform	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Bromomethane	ND	100	µg/L	50	L-04, R-05	SW-846 8260C	10/9/15	10/9/15 22:40	EEH
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Carbon Disulfide	ND	200	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Chloroethane	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Chloroform	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Chloromethane	ND	100	µg/L	50	V-05	SW-846 8260C	10/9/15	10/9/15 22:40	EEH
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50	V-05	SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
cis-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15J0070

Date Received: 10/2/2015

Field Sample #: MW-112

Sampled: 10/1/2015 08:00

Sample ID: 15J0070-01

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Hexachlorobutadiene	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Naphthalene	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Styrene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Tetrachloroethylene	2500	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Toluene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Trichloroethylene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH
o-Xylene	ND	50	µg/L	50		SW-846 8260C	10/9/15	10/9/15 22:40	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	106	70-130	10/9/15 22:40
Toluene-d8	104	70-130	10/9/15 22:40
4-Bromofluorobenzene	99.1	70-130	10/9/15 22:40

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15J0070

Date Received: 10/2/2015

Field Sample #: MW-116D

Sampled: 10/1/2015 08:30

Sample ID: 15J0070-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Bromomethane	ND	2.0	µg/L	1	L-04, R-05	SW-846 8260C	10/9/15	10/9/15 20:26	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	10/9/15	10/9/15 20:26	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH



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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15J0070

Date Received: 10/2/2015

Field Sample #: MW-116D

Sampled: 10/1/2015 08:30

Sample ID: 15J0070-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:26	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	109	70-130	10/9/15 20:26
Toluene-d8	104	70-130	10/9/15 20:26
4-Bromofluorobenzene	100	70-130	10/9/15 20:26

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15J0070

Date Received: 10/2/2015

Field Sample #: MW-116S

Sampled: 10/1/2015 09:00

Sample ID: 15J0070-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Bromomethane	ND	2.0	µg/L	1	L-04, R-05	SW-846 8260C	10/9/15	10/9/15 20:52	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Chloromethane	ND	2.0	µg/L	1	V-05	SW-846 8260C	10/9/15	10/9/15 20:52	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	V-05	SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15J0070

Date Received: 10/2/2015

Field Sample #: MW-116S

Sampled: 10/1/2015 09:00

Sample ID: 15J0070-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	10/9/15	10/9/15 20:52	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	106	70-130	10/9/15 20:52
Toluene-d8	104	70-130	10/9/15 20:52
4-Bromofluorobenzene	99.4	70-130	10/9/15 20:52

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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15J0070-01 [MW-112]	B132584	0.1	5.00	10/09/15
15J0070-02 [MW-116D]	B132584	5	5.00	10/09/15
15J0070-03 [MW-116S]	B132584	5	5.00	10/09/15

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**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 B132584 - SW-846 5030B**

**Blank (B132584-BLK1)**

Prepared & Analyzed: 10/09/15

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							L-04, R-05
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	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							V-05
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							
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							

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**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 B132584 - SW-846 5030B</b>										
<b>Blank (B132584-BLK1)</b>					Prepared & Analyzed: 10/09/15					
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							
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	26.5		µg/L	25.0		106	70-130			
Surrogate: Toluene-d8	26.0		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0		100	70-130			
<b>LCS (B132584-BS1)</b>					Prepared & Analyzed: 10/09/15					
Acetone	129	50	µg/L	100		129	70-160			V-20 †
Acrylonitrile	12.9	5.0	µg/L	10.0		129	70-130			
tert-Amyl Methyl Ether (TAME)	10.5	0.50	µg/L	10.0		105	70-130			
Benzene	11.2	1.0	µg/L	10.0		112	70-130			
Bromobenzene	10.9	1.0	µg/L	10.0		109	70-130			
Bromochloromethane	10.9	1.0	µg/L	10.0		109	70-130			
Bromodichloromethane	9.82	0.50	µg/L	10.0		98.2	70-130			
Bromoform	8.43	1.0	µg/L	10.0		84.3	70-130			
<b>Bromomethane</b>	1.86	2.0	µg/L	10.0		<b>18.6</b> *	40-160			L-04, R-05 †
2-Butanone (MEK)	140	20	µg/L	100		140	40-160			V-20 †
tert-Butyl Alcohol (TBA)	152	20	µg/L	100		152	40-160			V-20 †
n-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
sec-Butylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
tert-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
tert-Butyl Ethyl Ether (TBEE)	11.6	0.50	µg/L	10.0		116	70-130			
Carbon Disulfide	12.5	4.0	µg/L	10.0		125	70-130			
Carbon Tetrachloride	10.9	5.0	µg/L	10.0		109	70-130			
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130			
Chlorodibromomethane	9.14	0.50	µg/L	10.0		91.4	70-130			
<b>Chloroethane</b>	18.2	2.0	µg/L	10.0		<b>182</b> *	70-130			L-02, V-20
Chloroform	11.0	2.0	µg/L	10.0		110	70-130			
Chloromethane	5.26	2.0	µg/L	10.0		52.6	40-160			V-05 †
2-Chlorotoluene	10.9	1.0	µg/L	10.0		109	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 B132584 - SW-846 5030B</b>										
<b>LCS (B132584-BS1)</b>										
Prepared & Analyzed: 10/09/15										
4-Chlorotoluene	10.8	1.0	µg/L	10.0		108	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11.7	5.0	µg/L	10.0		117	70-130			
1,2-Dibromoethane (EDB)	11.1	0.50	µg/L	10.0		111	70-130			
Dibromomethane	10.9	1.0	µg/L	10.0		109	70-130			
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130			
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130			
trans-1,4-Dichloro-2-butene	11.3	2.0	µg/L	10.0		113	70-130			
Dichlorodifluoromethane (Freon 12)	4.00	2.0	µg/L	10.0		40.0	40-160			V-05 †
1,1-Dichloroethane	11.8	1.0	µg/L	10.0		118	70-130			
1,2-Dichloroethane	11.2	1.0	µg/L	10.0		112	70-130			
1,1-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
cis-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0		116	70-130			
trans-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130			
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110	70-130			
2,2-Dichloropropane	12.8	1.0	µg/L	10.0		128	40-130			V-20 †
1,1-Dichloropropene	11.5	2.0	µg/L	10.0		115	70-130			
cis-1,3-Dichloropropene	11.1	0.50	µg/L	10.0		111	70-130			
trans-1,3-Dichloropropene	12.1	0.50	µg/L	10.0		121	70-130			
Diethyl Ether	10.8	2.0	µg/L	10.0		108	70-130			
Diisopropyl Ether (DIPE)	10.5	0.50	µg/L	10.0		105	70-130			
<b>1,4-Dioxane</b>	156	50	µg/L	100		<b>156</b> *	40-130			L-02, V-20 †
Ethylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
Hexachlorobutadiene	11.5	0.50	µg/L	10.0		115	70-130			
2-Hexanone (MBK)	129	10	µg/L	100		129	70-160			V-20 †
Isopropylbenzene (Cumene)	11.1	1.0	µg/L	10.0		111	70-130			
p-Isopropyltoluene (p-Cymene)	11.7	1.0	µg/L	10.0		117	70-130			
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.0		106	70-130			
Methylene Chloride	12.6	5.0	µg/L	10.0		126	70-130			
4-Methyl-2-pentanone (MIBK)	120	10	µg/L	100		120	70-160			†
Naphthalene	10.8	2.0	µg/L	10.0		108	40-130			†
n-Propylbenzene	11.2	1.0	µg/L	10.0		112	70-130			
Styrene	10.5	1.0	µg/L	10.0		105	70-130			
1,1,1,2-Tetrachloroethane	10.1	1.0	µg/L	10.0		101	70-130			
1,1,2,2-Tetrachloroethane	11.2	0.50	µg/L	10.0		112	70-130			
Tetrachloroethylene	11.7	1.0	µg/L	10.0		117	70-130			
Tetrahydrofuran	11.5	10	µg/L	10.0		115	70-130			
Toluene	11.2	1.0	µg/L	10.0		112	70-130			
1,2,3-Trichlorobenzene	10.5	5.0	µg/L	10.0		105	70-130			
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,3,5-Trichlorobenzene	9.30	1.0	µg/L	10.0		93.0	70-130			
1,1,1-Trichloroethane	11.2	1.0	µg/L	10.0		112	70-130			
1,1,2-Trichloroethane	11.2	1.0	µg/L	10.0		112	70-130			
Trichloroethylene	11.7	1.0	µg/L	10.0		117	70-130			
Trichlorofluoromethane (Freon 11)	9.56	2.0	µg/L	10.0		95.6	70-130			
1,2,3-Trichloropropane	12.0	2.0	µg/L	10.0		120	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0		108	70-130			
1,2,4-Trimethylbenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Vinyl Chloride	9.20	2.0	µg/L	10.0		92.0	40-160			†

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**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 B132584 - SW-846 5030B**

**LCS (B132584-BS1)**

Prepared & Analyzed: 10/09/15

m+p Xylene	22.0	2.0	µg/L	20.0		110	70-130			
o-Xylene	10.9	1.0	µg/L	10.0		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	27.2		µg/L	25.0		109	70-130			
Surrogate: Toluene-d8	25.9		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	70-130			

**LCS Dup (B132584-BS1)**

Prepared & Analyzed: 10/09/15

Acetone	130	50	µg/L	100		130	70-160	0.116	25	V-20 †
Acrylonitrile	12.4	5.0	µg/L	10.0		124	70-130	4.19	25	
tert-Amyl Methyl Ether (TAME)	10.5	0.50	µg/L	10.0		105	70-130	0.0952	25	
Benzene	10.8	1.0	µg/L	10.0		108	70-130	3.72	25	
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130	2.14	25	
Bromochloromethane	10.8	1.0	µg/L	10.0		108	70-130	0.923	25	
Bromodichloromethane	9.91	0.50	µg/L	10.0		99.1	70-130	0.912	25	
Bromoform	8.47	1.0	µg/L	10.0		84.7	70-130	0.473	25	
<b>Bromomethane</b>	2.88	2.0	µg/L	10.0		<b>28.8</b> *	40-160	<b>43.0</b> *	25	L-04, R-05 †
2-Butanone (MEK)	136	20	µg/L	100		136	40-160	2.28	25	V-20 †
tert-Butyl Alcohol (TBA)	158	20	µg/L	100		158	40-160	3.83	25	V-20 †
n-Butylbenzene	9.99	1.0	µg/L	10.0		99.9	70-130	3.35	25	
sec-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	2.66	25	
tert-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130	3.63	25	
tert-Butyl Ethyl Ether (TBEE)	11.2	0.50	µg/L	10.0		112	70-130	2.98	25	
Carbon Disulfide	11.9	4.0	µg/L	10.0		119	70-130	5.16	25	
Carbon Tetrachloride	10.4	5.0	µg/L	10.0		104	70-130	4.70	25	
Chlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	2.58	25	
Chlorodibromomethane	9.44	0.50	µg/L	10.0		94.4	70-130	3.23	25	
<b>Chloroethane</b>	17.8	2.0	µg/L	10.0		<b>178</b> *	70-130	2.27	25	L-02, V-20
Chloroform	10.7	2.0	µg/L	10.0		107	70-130	2.85	25	
Chloromethane	5.53	2.0	µg/L	10.0		55.3	40-160	5.00	25	V-05 †
2-Chlorotoluene	10.5	1.0	µg/L	10.0		105	70-130	3.37	25	
4-Chlorotoluene	10.6	1.0	µg/L	10.0		106	70-130	1.59	25	
1,2-Dibromo-3-chloropropane (DBCP)	11.8	5.0	µg/L	10.0		118	70-130	0.854	25	
1,2-Dibromoethane (EDB)	10.9	0.50	µg/L	10.0		109	70-130	1.36	25	
Dibromomethane	10.6	1.0	µg/L	10.0		106	70-130	2.04	25	
1,2-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	1.28	25	
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	1.39	25	
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	1.13	25	
trans-1,4-Dichloro-2-butene	11.1	2.0	µg/L	10.0		111	70-130	2.05	25	
<b>Dichlorodifluoromethane (Freon 12)</b>	3.88	2.0	µg/L	10.0		<b>38.8</b> *	40-160	3.05	25	L-07, V-05 †
1,1-Dichloroethane	11.6	1.0	µg/L	10.0		116	70-130	1.79	25	
1,2-Dichloroethane	11.2	1.0	µg/L	10.0		112	70-130	0.625	25	
1,1-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130	3.30	25	
cis-1,2-Dichloroethylene	11.2	1.0	µg/L	10.0		112	70-130	4.12	25	
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	1.36	25	
1,2-Dichloropropane	11.0	1.0	µg/L	10.0		110	70-130	1.44	25	
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130	1.18	25	
2,2-Dichloropropane	12.1	1.0	µg/L	10.0		121	40-130	5.45	25	V-20 †
1,1-Dichloropropene	11.1	2.0	µg/L	10.0		111	70-130	3.63	25	
cis-1,3-Dichloropropene	11.3	0.50	µg/L	10.0		113	70-130	1.07	25	
trans-1,3-Dichloropropene	12.1	0.50	µg/L	10.0		121	70-130	0.496	25	
Diethyl Ether	10.8	2.0	µg/L	10.0		108	70-130	0.00	25	
Diisopropyl Ether (DIPE)	10.5	0.50	µg/L	10.0		105	70-130	0.191	25	



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**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 B132584 - SW-846 5030B</b>										
<b>LCS Dup (B132584-BSD1)</b>										
					Prepared & Analyzed: 10/09/15					
1,4-Dioxane	145	50	µg/L	100		145 *	40-130	6.86	50	L-02, V-20 † ‡
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130	3.99	25	
Hexachlorobutadiene	11.0	0.50	µg/L	10.0		110	70-130	4.18	25	
2-Hexanone (MBK)	129	10	µg/L	100		129	70-160	0.333	25	V-20 †
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0		108	70-130	2.75	25	
p-Isopropyltoluene (p-Cymene)	11.3	1.0	µg/L	10.0		113	70-130	3.22	25	
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.0		106	70-130	0.0944	25	
Methylene Chloride	12.9	5.0	µg/L	10.0		129	70-130	2.66	25	
4-Methyl-2-pentanone (MIBK)	121	10	µg/L	100		121	70-160	1.10	25	†
Naphthalene	10.8	2.0	µg/L	10.0		108	40-130	0.185	25	†
n-Propylbenzene	11.1	1.0	µg/L	10.0		111	70-130	0.897	25	
Styrene	10.4	1.0	µg/L	10.0		104	70-130	0.960	25	
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130	1.28	25	
1,1,2,2-Tetrachloroethane	10.9	0.50	µg/L	10.0		109	70-130	2.08	25	
Tetrachloroethylene	11.5	1.0	µg/L	10.0		115	70-130	1.80	25	
Tetrahydrofuran	11.2	10	µg/L	10.0		112	70-130	2.20	25	
Toluene	11.1	1.0	µg/L	10.0		111	70-130	0.810	25	
1,2,3-Trichlorobenzene	10.8	5.0	µg/L	10.0		108	70-130	2.54	25	
1,2,4-Trichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	2.31	25	
1,3,5-Trichlorobenzene	9.20	1.0	µg/L	10.0		92.0	70-130	1.08	25	
1,1,1-Trichloroethane	10.6	1.0	µg/L	10.0		106	70-130	5.05	25	
1,1,2-Trichloroethane	11.2	1.0	µg/L	10.0		112	70-130	0.714	25	
Trichloroethylene	11.4	1.0	µg/L	10.0		114	70-130	2.51	25	
Trichlorofluoromethane (Freon 11)	9.49	2.0	µg/L	10.0		94.9	70-130	0.735	25	
1,2,3-Trichloropropane	12.0	2.0	µg/L	10.0		120	70-130	0.167	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.5	1.0	µg/L	10.0		105	70-130	3.19	25	
1,2,4-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	2.82	25	
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	2.40	25	
Vinyl Chloride	8.59	2.0	µg/L	10.0		85.9	40-160	6.86	25	†
m+p Xylene	21.5	2.0	µg/L	20.0		108	70-130	1.98	25	
o-Xylene	10.7	1.0	µg/L	10.0		107	70-130	2.50	25	
Surrogate: 1,2-Dichloroethane-d4	27.2		µg/L	25.0		109	70-130			
Surrogate: Toluene-d8	26.0		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.9	70-130			

---

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**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.
- 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-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low 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.
  - R-05 Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
  - 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-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,NJ
Acrylonitrile	CT,NY,ME,NH,VA,NJ
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA,NJ
Benzene	CT,NY,ME,NH,VA,NJ
Bromochloromethane	NY,ME,NH,VA,NJ
Bromodichloromethane	CT,NY,ME,NH,VA,NJ
Bromoform	CT,NY,ME,NH,VA,NJ
Bromomethane	CT,NY,ME,NH,VA,NJ
2-Butanone (MEK)	CT,NY,ME,NH,VA,NJ
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA,NJ
n-Butylbenzene	NY,ME,VA,NJ
sec-Butylbenzene	NY,ME,VA,NJ
tert-Butylbenzene	NY,ME,VA,NJ
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA,NJ
Carbon Disulfide	CT,NY,ME,NH,VA,NJ
Carbon Tetrachloride	CT,NY,ME,NH,VA,NJ
Chlorobenzene	CT,NY,ME,NH,VA,NJ
Chlorodibromomethane	CT,NY,ME,NH,VA,NJ
Chloroethane	CT,NY,ME,NH,VA,NJ
Chloroform	CT,NY,ME,NH,VA,NJ
Chloromethane	CT,NY,ME,NH,VA,NJ
2-Chlorotoluene	NY,ME,NH,VA,NJ
4-Chlorotoluene	NY,ME,NH,VA,NJ
Dibromomethane	NY,ME,NH,VA,NJ
1,2-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,4-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA,NJ
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA,NJ
1,1-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,2-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,1-Dichloroethylene	CT,NY,ME,NH,VA,NJ
cis-1,2-Dichloroethylene	NY,ME,NJ
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA,NJ
1,2-Dichloropropane	CT,NY,ME,NH,VA,NJ
1,3-Dichloropropane	NY,ME,VA,NJ
2,2-Dichloropropane	NY,ME,NH,VA,NJ
1,1-Dichloropropene	NY,ME,NH,VA,NJ
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
Diisopropyl Ether (DIPE)	NY,ME,NH,VA,NJ
Ethylbenzene	CT,NY,ME,NH,VA,NJ
Hexachlorobutadiene	CT,NY,ME,NH,VA,NJ
2-Hexanone (MBK)	CT,NY,ME,NH,VA,NJ
Isopropylbenzene (Cumene)	NY,ME,VA,NJ
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA,NJ
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA,NJ

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Methylene Chloride	CT,NY,ME,NH,VA,NJ
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA,NJ
Naphthalene	NY,ME,NH,VA,NJ
n-Propylbenzene	CT,NY,ME,NH,VA,NJ
Styrene	CT,NY,ME,NH,VA,NJ
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
Tetrachloroethylene	CT,NY,ME,NH,VA,NJ
Toluene	CT,NY,ME,NH,VA,NJ
1,2,3-Trichlorobenzene	NY,ME,NH,VA,NJ
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA,NJ
1,1,2-Trichloroethane	CT,NY,ME,NH,VA,NJ
Trichloroethylene	CT,NY,ME,NH,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA,NJ
1,2,3-Trichloropropane	NY,ME,NH,VA,NJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA,NJ
1,2,4-Trimethylbenzene	NY,ME,VA,NJ
1,3,5-Trimethylbenzene	NY,ME,VA,NJ
Vinyl Chloride	CT,NY,ME,NH,VA,NJ
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	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	10/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



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 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: CB&I Environmental Telephone: 617-589-6175

Address: 150 Royall Street Project # 130274

Canton, MA 02021 Client PO# 835493

Attention: Brian Cote DATA DELIVERY (check all that apply)

Project Location: Textron, Providence, RI  FAX  EMAIL  WEBSITE

Sampled By: *Paul Hedeen* Email: Brian.Cote@CBI.com

Project Proposal Provided? (for billing purposes)  yes  no proposal date

Format:  PDF  EXCEL  GIS  OTHER GISKEY  "Enhanced Data Package"

Con-Test Lab ID <small>(laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	Matrix	Cont. Code
		Beginning Date/Time	Ending Date/Time				
01	MW-112	10.1.13	08:00		3	GW	U
02	MW-116D	10.1.13	08:30		3		
03	MW-116S	10.1.13	09:00		3		

Comments:

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

### Detection Limit Requirements

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

Turnaround <sup>††</sup>

7-Day  
 10-Day  
 Other \_\_\_\_\_

RUSH <sup>†</sup>  
 24-Hr  48-Hr  
 72-Hr  14-Day  
 Require lab approval

Relinquished by: (signature) <i>Paul Hedeen</i>	Date/Time: 10/2/13 07:00
Received by: (signature) <i>Brian Cote</i>	Date/Time: 10/2/13 10:14
Finalized by: (signature) <i>Brian Cote</i>	Date/Time: 10/2/13 16:00
Received by: (signature) <i>Brian Cote</i>	Date/Time: 10/2/13 16:00

### Is your project MCP or RCP?

- MCP Form Required
- RCP Form Required
- MA State DW Form Required PWSID # \_\_\_\_\_



Accredited  
 NELAC & AIHA-LAP, LLC

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 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. 01026  
 P: 413-525-2332  
 F: 413-525-6405  
 www.contestlabs.com



### Sample Receipt Checklist

CLIENT NAME: C B + I FAN RECEIVED BY: JDL DATE: 10/2/15

- 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 S.O

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		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	9	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl <u>9</u> # Methanol _____	Time and Date Frozen:
Doc# 277 # Bisulfate _____ # DI Water _____	
Rev. 4 August 2013 # Thiosulfate _____ Unpreserved _____	

**Login Sample Receipt Checklist****(Rejection Criteria Listing - Using Sample Acceptance Policy)****Any False statement will be brought to the attention of Client**

<u>Question</u>	<u>Answer (True/False)</u>		<u>Comment</u>
	T/F/NA		
1) The cooler's custody seal, if present, is intact.	NA		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	+		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.	NA		
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.	NI		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials:

JDL

Date/Time:

Date/Time:

10/2/15 1600

November 19, 2015

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron Providence, RI  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 15K0448

Enclosed are results of analyses for samples received by the laboratory on November 10, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas  
Project Manager



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

CB&I Env. & Infrastructure - MA  
 150 Royall Street  
 Canton, MA 02021  
 ATTN: Brian Cote

REPORT DATE: 11/19/2015

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 15K0448

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

PROJECT LOCATION: Textron Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW 207D	15K0448-01	Ground Water		SW-846 8260C	
MW 207S	15K0448-02	Ground Water		SW-846 8260C	
MW 202D	15K0448-03	Ground Water		SW-846 8260C	
MW 202S	15K0448-04	Ground Water		SW-846 8260C	
MW 218D	15K0448-05	Ground Water		SW-846 8260C	
MW 218S	15K0448-06	Ground Water		SW-846 8260C	
MW 116S	15K0448-07	Ground Water		SW-846 8260C	
MW 116D	15K0448-08	Ground Water		SW-846 8260C	
MW 217D	15K0448-09	Ground Water		SW-846 8260C	
MW 217S	15K0448-10	Ground Water		SW-846 8260C	
GZA-3	15K0448-11	Ground Water		SW-846 6010C	
				SW-846 8260C	
GZA-3 DUP	15K0448-12	Ground Water		SW-846 6010C	
MW 109D	15K0448-13	Ground Water		SW-846 6010C	
				SW-846 8260C	
CW-1	15K0448-14	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:****L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

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

15K0448-01[MW 207D], 15K0448-02[MW 207S], 15K0448-03[MW 202D], 15K0448-04[MW 202S], 15K0448-05[MW 218D], 15K0448-06[MW 218S], 15K0448-07[MW 116S], 15K0448-08[MW 116D], 15K0448-09[MW 217D], 15K0448-11[GZA-3], 15K0448-13[MW 109D], 15K0448-14[CW-1], B135272-BLK1, B135272-BS1, B135272-BSD1

**Dichlorodifluoromethane (Freon 1)**

15K0448-10[MW 217S], B135493-BLK1, B135493-BS1, B135493-BSD1

**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.

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

B135493-BS1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

15K0448-03[MW 202D], 15K0448-04[MW 202S], 15K0448-05[MW 218D], 15K0448-10[MW 217S], 15K0448-14[CW-1]

**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.

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

15K0448-01[MW 207D], 15K0448-02[MW 207S], 15K0448-03[MW 202D], 15K0448-04[MW 202S], 15K0448-05[MW 218D], 15K0448-06[MW 218S], 15K0448-07[MW 116S], 15K0448-08[MW 116D], 15K0448-09[MW 217D], 15K0448-11[GZA-3], 15K0448-13[MW 109D], 15K0448-14[CW-1], B135272-BLK1, B135272-BS1, B135272-BSD1

**Bromoform**

15K0448-01[MW 207D], 15K0448-02[MW 207S], 15K0448-03[MW 202D], 15K0448-04[MW 202S], 15K0448-05[MW 218D], 15K0448-06[MW 218S], 15K0448-07[MW 116S], 15K0448-08[MW 116D], 15K0448-09[MW 217D], 15K0448-11[GZA-3], 15K0448-13[MW 109D], 15K0448-14[CW-1], B135272-BLK1, B135272-BS1, B135272-BSD1

**V-20**

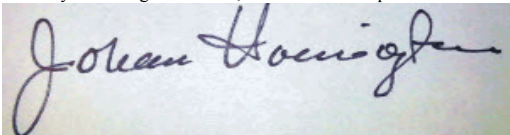
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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

B135493-BS1, B135493-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 "Johanna K. Harrington", is written over a light-colored rectangular background.

Johanna K. Harrington  
Manager, Laboratory Reporting

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 207D

Sampled: 11/5/2015 06:30

Sample ID: 15K0448-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
cis-1,2-Dichloroethylene	17	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 207D

Sampled: 11/5/2015 06:30

Sample ID: 15K0448-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Tetrachloroethylene	9.0	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Trichloroethylene	1.8	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 22:48	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	110	70-130	11/12/15 22:48
Toluene-d8	101	70-130	11/12/15 22:48
4-Bromofluorobenzene	89.0	70-130	11/12/15 22:48

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 207S

Sampled: 11/5/2015 07:00

Sample ID: 15K0448-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 207S

Sampled: 11/5/2015 07:00

Sample ID: 15K0448-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Tetrachloroethylene	9.4	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Trichloroethylene	3.2	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:14	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	109	70-130	11/12/15 23:14
Toluene-d8	103	70-130	11/12/15 23:14
4-Bromofluorobenzene	87.4	70-130	11/12/15 23:14

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 202D

Sampled: 11/5/2015 08:00

Sample ID: 15K0448-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Benzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Bromoform	ND	2.0	µg/L	2	V-05	SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Bromomethane	ND	10	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
cis-1,2-Dichloroethylene	24	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 202D

Sampled: 11/5/2015 08:00

Sample ID: 15K0448-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Naphthalene	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Styrene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Tetrachloroethylene	270	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Toluene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Trichloroethylene	8.9	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF
o-Xylene	ND	2.0	µg/L	2		SW-846 8260C	11/12/15	11/13/15 2:42	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	109	70-130	11/13/15 2:42
Toluene-d8	102	70-130	11/13/15 2:42
4-Bromofluorobenzene	87.9	70-130	11/13/15 2:42

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 202S

Sampled: 11/5/2015 08:30

Sample ID: 15K0448-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Benzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Bromoform	ND	4.0	µg/L	4	V-05	SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Bromomethane	ND	20	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Carbon Disulfide	ND	16	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Chloroform	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Chloromethane	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
2,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 202S

Sampled: 11/5/2015 08:30

Sample ID: 15K0448-04

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Hexachlorobutadiene	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Styrene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Tetrachloroethylene	120	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Toluene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Trichloroethylene	6.0	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C	11/12/15	11/13/15 3:08	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	107	70-130	11/13/15 3:08
Toluene-d8	101	70-130	11/13/15 3:08
4-Bromofluorobenzene	90.2	70-130	11/13/15 3:08

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 218D

Sampled: 11/5/2015 10:00

Sample ID: 15K0448-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Benzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Bromoform	ND	5.0	µg/L	5	V-05	SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Bromomethane	ND	25	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Chloroethane	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Chloroform	13	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Chloromethane	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 218D

Sampled: 11/5/2015 10:00

Sample ID: 15K0448-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Hexachlorobutadiene	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Naphthalene	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Styrene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Tetrachloroethylene	200	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Toluene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Trichloroethylene	5.6	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	11/12/15	11/13/15 3:34	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	109	70-130	11/13/15 3:34
Toluene-d8	101	70-130	11/13/15 3:34
4-Bromofluorobenzene	89.1	70-130	11/13/15 3:34



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 218S

Sampled: 11/5/2015 09:30

Sample ID: 15K0448-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 218S

Sampled: 11/5/2015 09:30

Sample ID: 15K0448-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Tetrachloroethylene	7.0	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/12/15 23:40	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	109	70-130	11/12/15 23:40
Toluene-d8	101	70-130	11/12/15 23:40
4-Bromofluorobenzene	88.6	70-130	11/12/15 23:40

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 116S

Sampled: 11/5/2015 11:00

Sample ID: 15K0448-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 116S

Sampled: 11/5/2015 11:00

Sample ID: 15K0448-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:06	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	115	70-130	11/13/15 0:06
Toluene-d8	101	70-130	11/13/15 0:06
4-Bromofluorobenzene	86.4	70-130	11/13/15 0:06

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 116D

Sampled: 11/5/2015 11:30

Sample ID: 15K0448-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 116D

Sampled: 11/5/2015 11:30

Sample ID: 15K0448-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:32	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	113	70-130	11/13/15 0:32
Toluene-d8	103	70-130	11/13/15 0:32
4-Bromofluorobenzene	86.9	70-130	11/13/15 0:32

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 217D

Sampled: 11/5/2015 12:30

Sample ID: 15K0448-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
cis-1,2-Dichloroethylene	14	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 217D

Sampled: 11/5/2015 12:30

Sample ID: 15K0448-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Trichloroethylene	2.7	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 0:58	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	111	70-130	11/13/15 0:58
Toluene-d8	103	70-130	11/13/15 0:58
4-Bromofluorobenzene	88.6	70-130	11/13/15 0:58



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 217S

Sampled: 11/5/2015 13:00

Sample ID: 15K0448-10

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Bromomethane	ND	10	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2	L-04	SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1-Dichloroethane	2.0	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
cis-1,2-Dichloroethylene	56	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 217S

Sampled: 11/5/2015 13:00

Sample ID: 15K0448-10

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Ethylbenzene	7.3	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Naphthalene	120	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
n-Propylbenzene	2.3	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Tetrachloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,2,4-Trimethylbenzene	5.9	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
Vinyl Chloride	10	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
m+p Xylene	9.5	4.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD
o-Xylene	7.1	2.0	µg/L	2		SW-846 8260C	11/16/15	11/16/15 16:45	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	87.6	70-130	11/16/15 16:45
Toluene-d8	108	70-130	11/16/15 16:45
4-Bromofluorobenzene	92.9	70-130	11/16/15 16:45

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: GZA-3

Sampled: 11/5/2015 13:30

Sample ID: 15K0448-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1-Dichloroethane	1.2	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
cis-1,2-Dichloroethylene	3.5	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: GZA-3

Sampled: 11/5/2015 13:30

Sample ID: 15K0448-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
Vinyl Chloride	18	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 1:50	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	111	70-130	11/13/15 1:50
Toluene-d8	101	70-130	11/13/15 1:50
4-Bromofluorobenzene	90.9	70-130	11/13/15 1:50

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: GZA-3

Sampled: 11/5/2015 13:30

Sample ID: 15K0448-11

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.010	mg/L	1		SW-846 6010C	11/11/15	11/13/15 19:04	AME

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: GZA-3 DUP

Sampled: 11/5/2015 13:30

Sample ID: 15K0448-12

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.010	mg/L	1		SW-846 6010C	11/11/15	11/13/15 19:09	AME

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 109D

Sampled: 11/5/2015 14:00

Sample ID: 15K0448-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: MW 109D

Sampled: 11/5/2015 14:00

Sample ID: 15K0448-13

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/12/15	11/13/15 2:16	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	110	70-130	11/13/15 2:16
Toluene-d8	101	70-130	11/13/15 2:16
4-Bromofluorobenzene	89.6	70-130	11/13/15 2:16

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Sampled: 11/5/2015 14:00

Field Sample #: MW 109D

Sample ID: 15K0448-13

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Lead	ND	0.010	mg/L	1		SW-846 6010C	11/11/15	11/13/15 19:14	AME



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: CW-1

Sampled: 11/5/2015 14:30

Sample ID: 15K0448-14

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	µg/L	50	L-04, V-05	SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Acrylonitrile	ND	250	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
tert-Amyl Methyl Ether (TAME)	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Benzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Bromobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Bromochloromethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Bromodichloromethane	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Bromoform	ND	50	µg/L	50	V-05	SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Bromomethane	ND	250	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
2-Butanone (MEK)	ND	1000	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
tert-Butyl Alcohol (TBA)	ND	1000	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
n-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
sec-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
tert-Butylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Carbon Disulfide	ND	200	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Carbon Tetrachloride	ND	250	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Chlorobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Chlorodibromomethane	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Chloroethane	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Chloroform	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Chloromethane	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
2-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
4-Chlorotoluene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2-Dibromoethane (EDB)	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Dibromomethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,3-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,4-Dichlorobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
trans-1,4-Dichloro-2-butene	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Dichlorodifluoromethane (Freon 12)	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2-Dichloroethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
cis-1,2-Dichloroethylene	700	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
trans-1,2-Dichloroethylene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,3-Dichloropropane	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
2,2-Dichloropropane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1-Dichloropropene	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
cis-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
trans-1,3-Dichloropropene	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Diethyl Ether	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0448

Date Received: 11/10/2015

Field Sample #: CW-1

Sampled: 11/5/2015 14:30

Sample ID: 15K0448-14

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,4-Dioxane	ND	2500	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Ethylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Hexachlorobutadiene	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
2-Hexanone (MBK)	ND	500	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Isopropylbenzene (Cumene)	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
p-Isopropyltoluene (p-Cymene)	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Methyl tert-Butyl Ether (MTBE)	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Methylene Chloride	ND	250	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
4-Methyl-2-pentanone (MIBK)	ND	500	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Naphthalene	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
n-Propylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Styrene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1,2,2-Tetrachloroethane	ND	25	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Tetrachloroethylene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Tetrahydrofuran	ND	500	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Toluene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2,3-Trichlorobenzene	ND	250	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2,4-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,3,5-Trichlorobenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1,1-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1,2-Trichloroethane	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Trichloroethylene	2000	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Trichlorofluoromethane (Freon 11)	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2,3-Trichloropropane	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,2,4-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
1,3,5-Trimethylbenzene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
Vinyl Chloride	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
m+p Xylene	ND	100	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF
o-Xylene	ND	50	µg/L	50		SW-846 8260C	11/12/15	11/13/15 4:00	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	113	70-130	11/13/15 4:00
Toluene-d8	105	70-130	11/13/15 4:00
4-Bromofluorobenzene	88.8	70-130	11/13/15 4:00

**Sample Extraction Data**

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0448-11 [GZA-3]	B135179	50.0	50.0	11/11/15
15K0448-12 [GZA-3 DUP]	B135179	50.0	50.0	11/11/15
15K0448-13 [MW 109D]	B135179	50.0	50.0	11/11/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0448-01 [MW 207D]	B135272	5	5.00	11/12/15
15K0448-02 [MW 207S]	B135272	5	5.00	11/12/15
15K0448-03 [MW 202D]	B135272	2.5	5.00	11/12/15
15K0448-04 [MW 202S]	B135272	1.25	5.00	11/12/15
15K0448-05 [MW 218D]	B135272	1	5.00	11/12/15
15K0448-06 [MW 218S]	B135272	5	5.00	11/12/15
15K0448-07 [MW 116S]	B135272	5	5.00	11/12/15
15K0448-08 [MW 116D]	B135272	5	5.00	11/12/15
15K0448-09 [MW 217D]	B135272	5	5.00	11/12/15
15K0448-11 [GZA-3]	B135272	5	5.00	11/12/15
15K0448-13 [MW 109D]	B135272	5	5.00	11/12/15
15K0448-14 [CW-1]	B135272	0.1	5.00	11/12/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0448-10 [MW 217S]	B135493	2.5	5.00	11/16/15

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

**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 B135272 - SW-846 5030B**

**Blank (B135272-BLK1)**

Prepared & Analyzed: 11/12/15

Acetone	ND	50	µg/L							L-04, V-05
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							V-05
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	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	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							
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							

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

**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 B135272 - SW-846 5030B**

**Blank (B135272-BLK1)**

Prepared & Analyzed: 11/12/15

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							
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	27.3		µg/L	25.0		109	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	22.0		µg/L	25.0		88.1	70-130			

**LCS (B135272-BS1)**

Prepared & Analyzed: 11/12/15

Acetone	47.7	50	µg/L	100		47.7 *	70-160			L-04, V-05 †
Acrylonitrile	9.41	5.0	µg/L	10.0		94.1	70-130			
tert-Amyl Methyl Ether (TAME)	9.03	0.50	µg/L	10.0		90.3	70-130			
Benzene	10.7	1.0	µg/L	10.0		107	70-130			
Bromobenzene	10.3	1.0	µg/L	10.0		103	70-130			
Bromochloromethane	11.8	1.0	µg/L	10.0		118	70-130			
Bromodichloromethane	9.86	0.50	µg/L	10.0		98.6	70-130			
Bromoform	8.16	1.0	µg/L	10.0		81.6	70-130			V-05
Bromomethane	5.39	2.0	µg/L	10.0		53.9	40-160			†
2-Butanone (MEK)	81.7	20	µg/L	100		81.7	40-160			†
tert-Butyl Alcohol (TBA)	74.0	20	µg/L	100		74.0	40-160			†
n-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
sec-Butylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.40	0.50	µg/L	10.0		94.0	70-130			
Carbon Disulfide	10.3	4.0	µg/L	10.0		103	70-130			
Carbon Tetrachloride	10.7	5.0	µg/L	10.0		107	70-130			
Chlorobenzene	10.7	1.0	µg/L	10.0		107	70-130			
Chlorodibromomethane	9.12	0.50	µg/L	10.0		91.2	70-130			
Chloroethane	9.48	2.0	µg/L	10.0		94.8	70-130			
Chloroform	10.4	2.0	µg/L	10.0		104	70-130			
Chloromethane	8.08	2.0	µg/L	10.0		80.8	40-160			†
2-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130			

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

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 B135272 - SW-846 5030B</b>										
<b>LCS (B135272-BS1)</b>										
Prepared & Analyzed: 11/12/15										
4-Chlorotoluene	9.70	1.0	µg/L	10.0		97.0	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.93	5.0	µg/L	10.0		89.3	70-130			
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130			
Dibromomethane	11.8	1.0	µg/L	10.0		118	70-130			
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
trans-1,4-Dichloro-2-butene	8.58	2.0	µg/L	10.0		85.8	70-130			
Dichlorodifluoromethane (Freon 12)	4.92	2.0	µg/L	10.0		49.2	40-160			†
1,1-Dichloroethane	11.3	1.0	µg/L	10.0		113	70-130			
1,2-Dichloroethane	12.0	1.0	µg/L	10.0		120	70-130			
1,1-Dichloroethylene	12.3	1.0	µg/L	10.0		123	70-130			
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
trans-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	70-130			
1,3-Dichloropropane	10.9	0.50	µg/L	10.0		109	70-130			
2,2-Dichloropropane	8.24	1.0	µg/L	10.0		82.4	40-130			†
1,1-Dichloropropene	11.4	2.0	µg/L	10.0		114	70-130			
cis-1,3-Dichloropropene	9.94	0.50	µg/L	10.0		99.4	70-130			
trans-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130			
Diethyl Ether	10.2	2.0	µg/L	10.0		102	70-130			
Diisopropyl Ether (DIPE)	9.96	0.50	µg/L	10.0		99.6	70-130			
1,4-Dioxane	80.6	50	µg/L	100		80.6	40-130			†
Ethylbenzene	9.87	1.0	µg/L	10.0		98.7	70-130			
Hexachlorobutadiene	9.48	0.50	µg/L	10.0		94.8	70-130			
2-Hexanone (MBK)	86.0	10	µg/L	100		86.0	70-160			†
Isopropylbenzene (Cumene)	9.81	1.0	µg/L	10.0		98.1	70-130			
p-Isopropyltoluene (p-Cymene)	9.96	1.0	µg/L	10.0		99.6	70-130			
Methyl tert-Butyl Ether (MTBE)	9.21	1.0	µg/L	10.0		92.1	70-130			
Methylene Chloride	11.3	5.0	µg/L	10.0		113	70-130			
4-Methyl-2-pentanone (MIBK)	88.7	10	µg/L	100		88.7	70-160			†
Naphthalene	9.82	2.0	µg/L	10.0		98.2	40-130			†
n-Propylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Styrene	9.51	1.0	µg/L	10.0		95.1	70-130			
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0		100	70-130			
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Tetrahydrofuran	9.40	10	µg/L	10.0		94.0	70-130			
Toluene	11.0	1.0	µg/L	10.0		110	70-130			
1,2,3-Trichlorobenzene	9.75	5.0	µg/L	10.0		97.5	70-130			
1,2,4-Trichlorobenzene	9.61	1.0	µg/L	10.0		96.1	70-130			
1,3,5-Trichlorobenzene	9.54	1.0	µg/L	10.0		95.4	70-130			
1,1,1-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130			
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130			
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
Trichlorofluoromethane (Freon 11)	10.1	2.0	µg/L	10.0		101	70-130			
1,2,3-Trichloropropane	8.80	2.0	µg/L	10.0		88.0	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.0		109	70-130			
1,2,4-Trimethylbenzene	9.79	1.0	µg/L	10.0		97.9	70-130			
1,3,5-Trimethylbenzene	9.62	1.0	µg/L	10.0		96.2	70-130			
Vinyl Chloride	8.68	2.0	µg/L	10.0		86.8	40-160			†

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

**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 B135272 - SW-846 5030B**

**LCS (B135272-BS1)**

Prepared & Analyzed: 11/12/15

m+p Xylene	19.8	2.0	µg/L	20.0		99.1	70-130			
o-Xylene	9.75	1.0	µg/L	10.0		97.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.4		µg/L	25.0		106	70-130			
Surrogate: Toluene-d8	26.2		µg/L	25.0		105	70-130			
Surrogate: 4-Bromofluorobenzene	23.3		µg/L	25.0		93.1	70-130			

**LCS Dup (B135272-BSD1)**

Prepared & Analyzed: 11/12/15

<b>Acetone</b>	47.4	50	µg/L	100		<b>47.4</b> *	70-160	0.631	25	L-04, V-05 †
Acrylonitrile	9.27	5.0	µg/L	10.0		92.7	70-130	1.50	25	
tert-Amyl Methyl Ether (TAME)	8.74	0.50	µg/L	10.0		87.4	70-130	3.26	25	
Benzene	10.7	1.0	µg/L	10.0		107	70-130	0.186	25	
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.08	25	
Bromochloromethane	10.7	1.0	µg/L	10.0		107	70-130	9.15	25	
Bromodichloromethane	9.68	0.50	µg/L	10.0		96.8	70-130	1.84	25	
Bromoform	7.79	1.0	µg/L	10.0		77.9	70-130	4.64	25	V-05
Bromomethane	5.70	2.0	µg/L	10.0		57.0	40-160	5.59	25	†
2-Butanone (MEK)	82.5	20	µg/L	100		82.5	40-160	0.889	25	†
tert-Butyl Alcohol (TBA)	73.4	20	µg/L	100		73.4	40-160	0.800	25	†
n-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	0.386	25	
sec-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130	1.33	25	
tert-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130	1.18	25	
tert-Butyl Ethyl Ether (TBEE)	9.37	0.50	µg/L	10.0		93.7	70-130	0.320	25	
Carbon Disulfide	9.34	4.0	µg/L	10.0		93.4	70-130	9.78	25	
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102	70-130	4.02	25	
Chlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	0.745	25	
Chlorodibromomethane	9.23	0.50	µg/L	10.0		92.3	70-130	1.20	25	
Chloroethane	9.72	2.0	µg/L	10.0		97.2	70-130	2.50	25	
Chloroform	10.5	2.0	µg/L	10.0		105	70-130	0.862	25	
Chloromethane	8.57	2.0	µg/L	10.0		85.7	40-160	5.89	25	†
2-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	1.09	25	
4-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130	3.35	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.38	5.0	µg/L	10.0		83.8	70-130	6.35	25	
1,2-Dibromoethane (EDB)	11.2	0.50	µg/L	10.0		112	70-130	9.67	25	
Dibromomethane	11.4	1.0	µg/L	10.0		114	70-130	3.20	25	
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	0.00	25	
1,3-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	3.01	25	
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	0.577	25	
trans-1,4-Dichloro-2-butene	8.74	2.0	µg/L	10.0		87.4	70-130	1.85	25	
Dichlorodifluoromethane (Freon 12)	5.04	2.0	µg/L	10.0		50.4	40-160	2.41	25	†
1,1-Dichloroethane	11.2	1.0	µg/L	10.0		112	70-130	0.622	25	
1,2-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130	2.28	25	
1,1-Dichloroethylene	11.7	1.0	µg/L	10.0		117	70-130	4.74	25	
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130	3.63	25	
trans-1,2-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130	4.04	25	
1,2-Dichloropropane	11.3	1.0	µg/L	10.0		113	70-130	5.65	25	
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130	0.554	25	
2,2-Dichloropropane	7.74	1.0	µg/L	10.0		77.4	40-130	6.26	25	†
1,1-Dichloropropene	10.6	2.0	µg/L	10.0		106	70-130	7.16	25	
cis-1,3-Dichloropropene	9.78	0.50	µg/L	10.0		97.8	70-130	1.62	25	
trans-1,3-Dichloropropene	10.4	0.50	µg/L	10.0		104	70-130	7.57	25	
Diethyl Ether	10.0	2.0	µg/L	10.0		100	70-130	2.08	25	
Diisopropyl Ether (DIPE)	9.86	0.50	µg/L	10.0		98.6	70-130	1.01	25	

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

**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 B135272 - SW-846 5030B**

**LCS Dup (B135272-BSD1)**

Prepared & Analyzed: 11/12/15

1,4-Dioxane	86.1	50	µg/L	100		86.1	40-130	6.64	50	† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	3.19	25	
Hexachlorobutadiene	9.40	0.50	µg/L	10.0		94.0	70-130	0.847	25	
2-Hexanone (MBK)	85.2	10	µg/L	100		85.2	70-160	0.876	25	†
Isopropylbenzene (Cumene)	9.99	1.0	µg/L	10.0		99.9	70-130	1.82	25	
p-Isopropyltoluene (p-Cymene)	10.5	1.0	µg/L	10.0		105	70-130	5.28	25	
Methyl tert-Butyl Ether (MTBE)	8.89	1.0	µg/L	10.0		88.9	70-130	3.54	25	
Methylene Chloride	11.1	5.0	µg/L	10.0		111	70-130	1.78	25	
4-Methyl-2-pentanone (MIBK)	89.0	10	µg/L	100		89.0	70-160	0.326	25	†
Naphthalene	9.98	2.0	µg/L	10.0		99.8	40-130	1.62	25	†
n-Propylbenzene	10.4	1.0	µg/L	10.0		104	70-130	1.05	25	
Styrene	9.44	1.0	µg/L	10.0		94.4	70-130	0.739	25	
1,1,1,2-Tetrachloroethane	9.95	1.0	µg/L	10.0		99.5	70-130	2.09	25	
1,1,2,2-Tetrachloroethane	9.84	0.50	µg/L	10.0		98.4	70-130	1.61	25	
Tetrachloroethylene	10.5	1.0	µg/L	10.0		105	70-130	1.43	25	
Tetrahydrofuran	9.16	10	µg/L	10.0		91.6	70-130	2.59	25	
Toluene	11.0	1.0	µg/L	10.0		110	70-130	0.637	25	
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130	5.39	25	
1,2,4-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	4.87	25	
1,3,5-Trichlorobenzene	9.59	1.0	µg/L	10.0		95.9	70-130	0.523	25	
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130	6.07	25	
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130	1.30	25	
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130	0.566	25	
Trichlorofluoromethane (Freon 11)	10.1	2.0	µg/L	10.0		101	70-130	0.0988	25	
1,2,3-Trichloropropane	8.68	2.0	µg/L	10.0		86.8	70-130	1.37	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.1	1.0	µg/L	10.0		111	70-130	1.45	25	
1,2,4-Trimethylbenzene	9.71	1.0	µg/L	10.0		97.1	70-130	0.821	25	
1,3,5-Trimethylbenzene	9.60	1.0	µg/L	10.0		96.0	70-130	0.208	25	
Vinyl Chloride	8.57	2.0	µg/L	10.0		85.7	40-160	1.28	25	†
m+p Xylene	19.9	2.0	µg/L	20.0		99.6	70-130	0.553	25	
o-Xylene	9.57	1.0	µg/L	10.0		95.7	70-130	1.86	25	
Surrogate: 1,2-Dichloroethane-d4	26.3		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	26.4		µg/L	25.0		106	70-130			
Surrogate: 4-Bromofluorobenzene	23.3		µg/L	25.0		93.1	70-130			

**Batch B135493 - SW-846 5030B**

**Blank (B135493-BLK1)**

Prepared & Analyzed: 11/16/15

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							



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

**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 B135493 - SW-846 5030B**

**Blank (B135493-BLK1)**

Prepared & Analyzed: 11/16/15

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							L-04
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							
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							
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							

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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 B135493 - SW-846 5030B</b>										
<b>Blank (B135493-BLK1)</b>										
Prepared & Analyzed: 11/16/15										
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	28.5		µg/L	25.0		114	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	22.4		µg/L	25.0		89.4	70-130			
<b>LCS (B135493-BS1)</b>										
Prepared & Analyzed: 11/16/15										
Acetone	68.8	50	µg/L	100		68.8 *	70-160			L-07 †
Acrylonitrile	9.83	5.0	µg/L	10.0		98.3	70-130			
tert-Amyl Methyl Ether (TAME)	9.24	0.50	µg/L	10.0		92.4	70-130			
Benzene	10.9	1.0	µg/L	10.0		109	70-130			
Bromobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Bromochloromethane	11.6	1.0	µg/L	10.0		116	70-130			
Bromodichloromethane	9.89	0.50	µg/L	10.0		98.9	70-130			
Bromoform	8.57	1.0	µg/L	10.0		85.7	70-130			
Bromomethane	6.67	2.0	µg/L	10.0		66.7	40-160			V-20 †
2-Butanone (MEK)	88.7	20	µg/L	100		88.7	40-160			†
tert-Butyl Alcohol (TBA)	78.0	20	µg/L	100		78.0	40-160			†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
sec-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.81	0.50	µg/L	10.0		98.1	70-130			
Carbon Disulfide	11.0	4.0	µg/L	10.0		110	70-130			
Carbon Tetrachloride	11.1	5.0	µg/L	10.0		111	70-130			
Chlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
Chlorodibromomethane	9.69	0.50	µg/L	10.0		96.9	70-130			
Chloroethane	9.31	2.0	µg/L	10.0		93.1	70-130			
Chloroform	11.0	2.0	µg/L	10.0		110	70-130			
Chloromethane	7.30	2.0	µg/L	10.0		73.0	40-160			†
2-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130			
4-Chlorotoluene	9.83	1.0	µg/L	10.0		98.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.07	5.0	µg/L	10.0		90.7	70-130			
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130			
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,3-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
trans-1,4-Dichloro-2-butene	10.2	2.0	µg/L	10.0		102	70-130			
Dichlorodifluoromethane (Freon 12)	3.15	2.0	µg/L	10.0		31.5 *	40-160			L-04 †
1,1-Dichloroethane	11.4	1.0	µg/L	10.0		114	70-130			
1,2-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130			
1,1-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130			
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
trans-1,2-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130			

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**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 B135493 - SW-846 5030B</b>										
<b>LCS (B135493-BS1)</b>										
Prepared & Analyzed: 11/16/15										
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130			
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130			
2,2-Dichloropropane	9.72	1.0	µg/L	10.0		97.2	40-130			†
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130			
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
trans-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130			
Diethyl Ether	10.4	2.0	µg/L	10.0		104	70-130			
Diisopropyl Ether (DIPE)	10.2	0.50	µg/L	10.0		102	70-130			
1,4-Dioxane	84.6	50	µg/L	100		84.6	40-130			†
Ethylbenzene	9.89	1.0	µg/L	10.0		98.9	70-130			
Hexachlorobutadiene	9.52	0.50	µg/L	10.0		95.2	70-130			
2-Hexanone (MBK)	90.4	10	µg/L	100		90.4	70-160			†
Isopropylbenzene (Cumene)	9.87	1.0	µg/L	10.0		98.7	70-130			
p-Isopropyltoluene (p-Cymene)	10.5	1.0	µg/L	10.0		105	70-130			
Methyl tert-Butyl Ether (MTBE)	9.30	1.0	µg/L	10.0		93.0	70-130			
Methylene Chloride	11.6	5.0	µg/L	10.0		116	70-130			
4-Methyl-2-pentanone (MIBK)	92.7	10	µg/L	100		92.7	70-160			†
Naphthalene	10.2	2.0	µg/L	10.0		102	40-130			†
n-Propylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
Styrene	9.43	1.0	µg/L	10.0		94.3	70-130			
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1,2,2-Tetrachloroethane	9.47	0.50	µg/L	10.0		94.7	70-130			
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130			
Toluene	10.9	1.0	µg/L	10.0		109	70-130			
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130			
1,2,4-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,1,1-Trichloroethane	11.1	1.0	µg/L	10.0		111	70-130			
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130			
Trichloroethylene	11.3	1.0	µg/L	10.0		113	70-130			
Trichlorofluoromethane (Freon 11)	10.0	2.0	µg/L	10.0		100	70-130			
1,2,3-Trichloropropane	9.38	2.0	µg/L	10.0		93.8	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.0		109	70-130			
1,2,4-Trimethylbenzene	9.84	1.0	µg/L	10.0		98.4	70-130			
1,3,5-Trimethylbenzene	9.70	1.0	µg/L	10.0		97.0	70-130			
Vinyl Chloride	7.92	2.0	µg/L	10.0		79.2	40-160			†
m+p Xylene	19.9	2.0	µg/L	20.0		99.6	70-130			
o-Xylene	9.56	1.0	µg/L	10.0		95.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.7		µg/L	25.0		107	70-130			
Surrogate: Toluene-d8	26.0		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.2	70-130			

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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 B135493 - SW-846 5030B

LCS Dup (B135493-BSD1)

Prepared & Analyzed: 11/16/15

Acetone	71.5	50	µg/L	100		71.5	70-160	3.78	25	†
Acrylonitrile	10.3	5.0	µg/L	10.0		103	70-130	4.86	25	
tert-Amyl Methyl Ether (TAME)	9.37	0.50	µg/L	10.0		93.7	70-130	1.40	25	
Benzene	11.2	1.0	µg/L	10.0		112	70-130	2.72	25	
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.94	25	
Bromochloromethane	12.2	1.0	µg/L	10.0		122	70-130	4.53	25	
Bromodichloromethane	10.2	0.50	µg/L	10.0		102	70-130	2.89	25	
Bromoform	8.78	1.0	µg/L	10.0		87.8	70-130	2.42	25	
Bromomethane	7.19	2.0	µg/L	10.0		71.9	40-160	7.50	25	V-20 †
2-Butanone (MEK)	91.1	20	µg/L	100		91.1	40-160	2.64	25	†
tert-Butyl Alcohol (TBA)	82.3	20	µg/L	100		82.3	40-160	5.38	25	†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.00	25	
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	0.638	25	
tert-Butylbenzene	10.0	1.0	µg/L	10.0		100	70-130	1.09	25	
tert-Butyl Ethyl Ether (TBEE)	9.65	0.50	µg/L	10.0		96.5	70-130	1.64	25	
Carbon Disulfide	10.3	4.0	µg/L	10.0		103	70-130	6.57	25	
Carbon Tetrachloride	11.0	5.0	µg/L	10.0		110	70-130	0.902	25	
Chlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	3.50	25	
Chlorodibromomethane	9.61	0.50	µg/L	10.0		96.1	70-130	0.829	25	
Chloroethane	9.01	2.0	µg/L	10.0		90.1	70-130	3.28	25	
Chloroform	11.4	2.0	µg/L	10.0		114	70-130	3.56	25	
Chloromethane	7.69	2.0	µg/L	10.0		76.9	40-160	5.20	25	†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130	2.65	25	
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	3.10	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.42	5.0	µg/L	10.0		94.2	70-130	3.79	25	
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107	70-130	5.06	25	
Dibromomethane	11.4	1.0	µg/L	10.0		114	70-130	2.13	25	
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	4.65	25	
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	1.20	25	
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	0.0946	25	
trans-1,4-Dichloro-2-butene	10.3	2.0	µg/L	10.0		103	70-130	0.972	25	
Dichlorodifluoromethane (Freon 12)	3.56	2.0	µg/L	10.0		35.6 *	40-160	12.2	25	L-04 †
1,1-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130	3.94	25	
1,2-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130	1.70	25	
1,1-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130	0.250	25	
cis-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0		114	70-130	4.78	25	
trans-1,2-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	2.03	25	
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130	2.65	25	
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110	70-130	3.72	25	
2,2-Dichloropropane	9.91	1.0	µg/L	10.0		99.1	40-130	1.94	25	†
1,1-Dichloropropene	11.1	2.0	µg/L	10.0		111	70-130	2.18	25	
cis-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130	3.16	25	
trans-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116	70-130	3.07	25	
Diethyl Ether	10.5	2.0	µg/L	10.0		105	70-130	1.34	25	
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0		104	70-130	1.07	25	
1,4-Dioxane	97.7	50	µg/L	100		97.7	40-130	14.3	50	† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	2.59	25	
Hexachlorobutadiene	9.66	0.50	µg/L	10.0		96.6	70-130	1.46	25	
2-Hexanone (MBK)	90.7	10	µg/L	100		90.7	70-160	0.331	25	†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0		101	70-130	2.01	25	
p-Isopropyltoluene (p-Cymene)	10.6	1.0	µg/L	10.0		106	70-130	0.949	25	
Methyl tert-Butyl Ether (MTBE)	9.50	1.0	µg/L	10.0		95.0	70-130	2.13	25	

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**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 B135493 - SW-846 5030B</b>										
<b>LCS Dup (B135493-BSD1)</b>										
Prepared & Analyzed: 11/16/15										
Methylene Chloride	11.9	5.0	µg/L	10.0		119	70-130	1.87	25	
4-Methyl-2-pentanone (MIBK)	94.0	10	µg/L	100		94.0	70-160	1.47	25	†
Naphthalene	10.4	2.0	µg/L	10.0		104	40-130	2.05	25	†
n-Propylbenzene	10.6	1.0	µg/L	10.0		106	70-130	3.46	25	
Styrene	10.0	1.0	µg/L	10.0		100	70-130	6.07	25	
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0		106	70-130	3.06	25	
1,1,2,2-Tetrachloroethane	9.84	0.50	µg/L	10.0		98.4	70-130	3.83	25	
Tetrachloroethylene	10.9	1.0	µg/L	10.0		109	70-130	4.68	25	
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130	0.00	25	
Toluene	11.0	1.0	µg/L	10.0		110	70-130	1.28	25	
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130	0.389	25	
1,2,4-Trichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	0.795	25	
1,3,5-Trichlorobenzene	9.77	1.0	µg/L	10.0		97.7	70-130	3.12	25	
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	2.56	25	
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.0		111	70-130	3.68	25	
Trichloroethylene	11.1	1.0	µg/L	10.0		111	70-130	1.34	25	
Trichlorofluoromethane (Freon 11)	10.0	2.0	µg/L	10.0		100	70-130	0.200	25	
1,2,3-Trichloropropane	9.44	2.0	µg/L	10.0		94.4	70-130	0.638	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.1	1.0	µg/L	10.0		111	70-130	1.91	25	
1,2,4-Trimethylbenzene	9.96	1.0	µg/L	10.0		99.6	70-130	1.21	25	
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130	0.617	25	
Vinyl Chloride	8.01	2.0	µg/L	10.0		80.1	40-160	1.13	25	†
m+p Xylene	20.5	2.0	µg/L	20.0		102	70-130	2.72	25	
o-Xylene	9.85	1.0	µg/L	10.0		98.5	70-130	2.99	25	
Surrogate: 1,2-Dichloroethane-d4	27.0		µg/L	25.0		108	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.7	70-130			

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**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 B135179 - SW-846 3005A Dissolved</b>										
<b>Blank (B135179-BLK1)</b>				Prepared: 11/11/15 Analyzed: 11/13/15						
Lead	ND	0.010	mg/L							
<b>LCS (B135179-BS1)</b>				Prepared: 11/11/15 Analyzed: 11/13/15						
Lead	0.463	0.010	mg/L	0.500		92.5	80-120			
<b>LCS Dup (B135179-BSD1)</b>				Prepared: 11/11/15 Analyzed: 11/13/15						
Lead	0.464	0.010	mg/L	0.500		92.8	80-120	0.353	20	
<b>Duplicate (B135179-DUP1)</b>				<b>Source: 15K0448-11</b>			Prepared: 11/11/15 Analyzed: 11/13/15			
Lead	ND	0.010	mg/L		ND			NC	20	
<b>Matrix Spike (B135179-MS1)</b>				<b>Source: 15K0448-11</b>			Prepared: 11/11/15 Analyzed: 11/13/15			
Lead	0.393	0.010	mg/L	0.500	ND	78.6	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.
- L-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low 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-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**

<b>Analyte</b>	<b>Certifications</b>
<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	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



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 \_\_\_\_\_ of \_\_\_\_\_

Company Name: CB&I Environmental  
 Address: 150 Royal Street  
 Canton, MA 02021  
 Attention: Brian Cote  
 Project Location: Textron Providence, RI  
 Sampled By: *B. Cote* 617-713-8271  
 Project Proposal Provided? (for billing purposes)  
 Yes  No proposal date

Telephone: 617-589-6175  
 Project # 130274  
 Client PO# 835493  
 DATA DELIVERY (check all that apply)  
 FAX  EMAIL  WEBSITE  
 Fax #  
 Email: Brian.Cote@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			Matrix Code	Conc. Date
		Beginning Date/Time	Ending Date/Time	Composite		
01	MW 207 D	11-05-15	0630	<input checked="" type="checkbox"/>	GW	U
02	MW 207 S		0700	<input checked="" type="checkbox"/>		
03	MW 207 D		0800	<input checked="" type="checkbox"/>		
04	MW 207 S		0830	<input checked="" type="checkbox"/>		
05	MW 218 D		1000	<input checked="" type="checkbox"/>		
06	MW 218 S		0930	<input checked="" type="checkbox"/>		
07	MW 116 S		1100	<input checked="" type="checkbox"/>		
08	MW 116 D		1130	<input checked="" type="checkbox"/>		
09	MW 217 D		1230	<input checked="" type="checkbox"/>		
10	MW 217 S		1300	<input checked="" type="checkbox"/>		

Comments: Please email GISKey formatted EDD & PDF of report to: Brian.Cote@cbi.com and catherine.joe@cbi.com.  
 Dissolved 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

Requisitioned by: (signature) *[Signature]* Date/Time: 11-05-15  
 Received by: (signature) *[Signature]* Date/Time: 11-05-15  
 Requisitioned by: (signature) *[Signature]* Date/Time: 11-10-15  
 Received by: (signature) *[Signature]* Date/Time: 11-10-15  
 Requisitioned by: (signature) *[Signature]* Date/Time: 11-10-15  
 Received by: (signature) *[Signature]* Date/Time: 11-10-15

Turnaround <sup>††</sup>  
 7-Day  
 10-Day  
 Other  
 RUSH <sup>1</sup>  
 24-Hr  48-Hr  
 72-Hr  14-Day  
<sup>†</sup> 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 # \_\_\_\_\_

Accredited  
 NELAC & AIHA-LAP, LLC  
 WBE/DBE Certificate



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# CHAIN OF CUSTODY RECORD

39 Spruce Street  
 East longmeadow, MA 01028

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

Telephone: 617-589-6175

Project # 130274  
 Client PO# 835493

DATA DELIVERY (check all that apply)  
 FAX  EMAIL  WEBSITE

Fax #  
 Email: Brian.Cote@CBI.com

Format:  PDF  EXCEL  GIS  
 OTHER GISKey format  
 "Enhanced Data Package"

Company Name: CB&I Environmental  
 Address: 150 Royal Street  
 Canton, MA 02021  
 Attention: Brian Cote  
 Project Location: Textron Providence, RI  
 Sampled By: Paul Hedrick 617-218-8071

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	Date/Time
		Beginning Date/Time	Ending Date/Time				
11	GZA-3	11-5-15	1330			GW	U
12	GZA-3 Dup	11-5-15	1330				
13	Mw-109 D	11-5-15	1420				
14	CW-1	11-5-15	1430				
	CW-2	11-5-15					

Comments: Please email GISKey formatted EDD & PDF of report to:  
 Brian.Cote@cbi.com and Catherine.Joe@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:

Relinquished by: (signature) \_\_\_\_\_ Date/Time: 12:00 11-5-17

Prepared by: (signature) \_\_\_\_\_ Date/Time: 11-10-15

Finalized by: (signature) \_\_\_\_\_ Date/Time: 11-10-15

Received by: (signature) \_\_\_\_\_ Date/Time: 11-10-15

3.6 11/10/15

Require lab approval

### Detection Limit Requirements

Massachusetts: \_\_\_\_\_

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

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

### Is your project MCP or RCP?

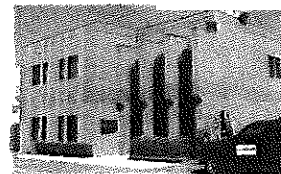
- MCP Form Required
- RCP Form Required
- MA State DW Form Required PWSID # \_\_\_\_\_



# of Containers	** Preservation	*** Container Code	Dissoved Metals
3	H	V	<input type="radio"/> Field Filtered <input type="radio"/> Lab to Filter
2	I	A	*** Cont. Code: A=amber glass G=glass P=plastic ST=sterile V=vial S=summa can T=tedlar bag O=Other
1	N	F	** 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
ANALYSIS REQUESTED			
EPA 8260B (VOCs)	Total Petroleum Hydrocarbons	Dissolved Lead	
3	1	1	
3	1	1	
3	1	1	
3	1	1	

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 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: CB&I RECEIVED BY: RLI DATE: 11/10/15

- 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 3.6°C

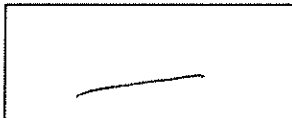
5) Are there Dissolved samples for the lab to filter? Yes  No

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: \_\_\_\_\_



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	<u>2</u>	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		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	<u>27</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

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

40 mL vials: # HCl 27 # Methanol \_\_\_\_\_  
 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

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

Page 2 of 2

**Login Sample Receipt Checklist**

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>		<u>Comment</u>
	T/F/NA		
1) The cooler's custody seal, if present, is intact.	T		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	T		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.	NA		
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.	NA		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials:

Date/Time:

Date/Time:

PLF 11/10/15 1940

November 25, 2015

Brian Cote  
CB&I Env. & Infrastructure - MA  
150 Royall Street  
Canton, MA 02021

Project Location: Textron Providence, RI  
Client Job Number:  
Project Number: 130274  
Laboratory Work Order Number: 15K0449

Enclosed are results of analyses for samples received by the laboratory on November 10, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas  
Project Manager

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

CB&I Env. & Infrastructure - MA  
 150 Royall Street  
 Canton, MA 02021  
 ATTN: Brian Cote

REPORT DATE: 11/25/2015

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 15K0449

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

PROJECT LOCATION: Textron Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW 101S	15K0449-01	Ground Water		SW-846 8260C	
MW 101S Dup	15K0449-02	Ground Water		SW-846 8260C	
MW 101D	15K0449-03	Ground Water		SW-846 8260C	
MW 201D	15K0449-04	Ground Water		SW-846 8260C	
MW 209D	15K0449-05	Ground Water		SW-846 8260C	
MW 112	15K0449-06	Ground Water		SW-846 8260C	
MW 216D	15K0449-07	Ground Water		SW-846 8260C	
MW 216S	15K0449-08	Ground Water		SW-846 8260C	
CW-6	15K0449-09	Ground Water		SW-846 8015C	
CW -2	15K0449-10	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.

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SW-846 8015C

---

**Qualifications:****O-31**

Sample chromatography does not match reference standard exactly, possibly due to weathering.

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

15K0449-09[CW-6]

SW-846 8260C

---

**Qualifications:****L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

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

15K0449-01[MW 101S], 15K0449-02[MW 101S Dup], 15K0449-03[MW 101D], 15K0449-04[MW 201D], 15K0449-05[MW 209D], 15K0449-06[MW 112], 15K0449-07[MW 216D], 15K0449-10[CW -2], B135340-BLK1, B135340-BS1, B135340-BSD1

**Dichlorodifluoromethane (Freon 12)**

15K0449-08[MW 216S], B135493-BLK1, B135493-BS1, B135493-BSD1

---

**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.

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

B135493-BS1

---

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

15K0449-01[MW 101S], 15K0449-02[MW 101S Dup], 15K0449-03[MW 101D], 15K0449-04[MW 201D], 15K0449-05[MW 209D], 15K0449-06[MW 112]

---

**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.

**Analyte & Samples(s) Qualified:****2,2-Dichloropropane**

15K0449-01[MW 101S], 15K0449-02[MW 101S Dup], 15K0449-03[MW 101D], 15K0449-04[MW 201D], 15K0449-05[MW 209D], 15K0449-06[MW 112], 15K0449-07[MW 216D], 15K0449-10[CW -2], B135340-BLK1, B135340-BS1, B135340-BSD1

**Bromoform**

15K0449-01[MW 101S], 15K0449-02[MW 101S Dup], 15K0449-03[MW 101D], 15K0449-04[MW 201D], 15K0449-05[MW 209D], 15K0449-06[MW 112], 15K0449-07[MW 216D], 15K0449-10[CW -2], B135340-BLK1, B135340-BS1, B135340-BSD1

**trans-1,4-Dichloro-2-butene**

15K0449-01[MW 101S], 15K0449-02[MW 101S Dup], 15K0449-03[MW 101D], 15K0449-04[MW 201D], 15K0449-05[MW 209D], 15K0449-06[MW 112], 15K0449-07[MW 216D], 15K0449-10[CW -2], B135340-BLK1, B135340-BS1, B135340-BSD1

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**V-20**

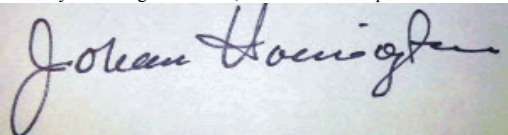
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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

B135340-BS1, B135340-BSD1, B135493-BS1, B135493-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 photograph of a handwritten signature in black ink on a light-colored background. The signature is written in a cursive style and reads "Johanna K. Harrington".

Johanna K. Harrington  
Manager, Laboratory Reporting

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 101S

Sampled: 11/5/2015 08:15

Sample ID: 15K0449-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5	L-04	SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Benzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Bromoform	ND	5.0	µg/L	5	V-05	SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Bromomethane	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Chloroethane	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Chloroform	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Chloromethane	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5	V-05	SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
cis-1,2-Dichloroethylene	11	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
2,2-Dichloropropane	ND	5.0	µg/L	5	V-05	SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 101S

Sampled: 11/5/2015 08:15

Sample ID: 15K0449-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Hexachlorobutadiene	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Naphthalene	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Styrene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Tetrachloroethylene	620	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Toluene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Trichloroethylene	10	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:18	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	112	70-130	11/14/15 6:18
Toluene-d8	100	70-130	11/14/15 6:18
4-Bromofluorobenzene	88.6	70-130	11/14/15 6:18

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 101S Dup

Sampled: 11/5/2015 08:20

Sample ID: 15K0449-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	µg/L	5	L-04	SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Benzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Bromoform	ND	5.0	µg/L	5	V-05	SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Bromomethane	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Carbon Disulfide	ND	20	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Chloroethane	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Chloroform	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Chloromethane	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5	V-05	SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
cis-1,2-Dichloroethylene	10	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
2,2-Dichloropropane	ND	5.0	µg/L	5	V-05	SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 101S Dup

Sampled: 11/5/2015 08:20

Sample ID: 15K0449-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Hexachlorobutadiene	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Naphthalene	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Styrene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Tetrachloroethylene	580	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Tetrahydrofuran	ND	50	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Toluene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2,3-Trichlorobenzene	ND	25	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Trichloroethylene	9.4	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	11/13/15	11/14/15 6:44	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	109	70-130	11/14/15 6:44
Toluene-d8	102	70-130	11/14/15 6:44
4-Bromofluorobenzene	87.7	70-130	11/14/15 6:44

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 101D

Sampled: 11/5/2015 08:00

Sample ID: 15K0449-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	µg/L	2	L-04	SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Benzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Bromoform	ND	2.0	µg/L	2	V-05	SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Bromomethane	ND	10	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Chloroform	5.7	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2	V-05	SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
cis-1,2-Dichloroethylene	2.3	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
2,2-Dichloropropane	ND	2.0	µg/L	2	V-05	SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 101D

Sampled: 11/5/2015 08:00

Sample ID: 15K0449-03

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Ethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Naphthalene	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Styrene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Tetrachloroethylene	2500	200	µg/L	200		SW-846 8260C	11/17/15	11/17/15 21:17	LBD
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Toluene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Trichloroethylene	15	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,2,4-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
1,3,5-Trimethylbenzene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
m+p Xylene	ND	4.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD
o-Xylene	ND	2.0	µg/L	2		SW-846 8260C	11/13/15	11/14/15 7:10	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	110	70-130	11/14/15 7:10
1,2-Dichloroethane-d4	106	70-130	11/17/15 21:17
Toluene-d8	99.4	70-130	11/17/15 21:17
Toluene-d8	102	70-130	11/14/15 7:10
4-Bromofluorobenzene	91.2	70-130	11/14/15 7:10
4-Bromofluorobenzene	86.8	70-130	11/17/15 21:17

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

Project Location: Tectron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 201D

Sampled: 11/5/2015 09:05

Sample ID: 15K0449-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5000	µg/L	100	L-04	SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Acrylonitrile	ND	500	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
tert-Amyl Methyl Ether (TAME)	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Benzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Bromobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Bromochloromethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Bromodichloromethane	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Bromoform	ND	100	µg/L	100	V-05	SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Bromomethane	ND	500	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
2-Butanone (MEK)	ND	2000	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
tert-Butyl Alcohol (TBA)	ND	2000	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
n-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
sec-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
tert-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Carbon Disulfide	ND	400	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Carbon Tetrachloride	ND	500	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Chlorobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Chlorodibromomethane	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Chloroethane	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Chloroform	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Chloromethane	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
2-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
4-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2-Dibromoethane (EDB)	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Dibromomethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,3-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,4-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
trans-1,4-Dichloro-2-butene	ND	200	µg/L	100	V-05	SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Dichlorodifluoromethane (Freon 12)	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
cis-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
trans-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2-Dichloropropane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,3-Dichloropropane	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
2,2-Dichloropropane	ND	100	µg/L	100	V-05	SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1-Dichloropropene	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
cis-1,3-Dichloropropene	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
trans-1,3-Dichloropropene	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Diethyl Ether	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 201D

Sampled: 11/5/2015 09:05

Sample ID: 15K0449-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,4-Dioxane	ND	5000	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Ethylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Hexachlorobutadiene	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
2-Hexanone (MBK)	ND	1000	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Isopropylbenzene (Cumene)	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
p-Isopropyltoluene (p-Cymene)	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Methyl tert-Butyl Ether (MTBE)	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Methylene Chloride	ND	500	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
4-Methyl-2-pentanone (MIBK)	ND	1000	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Naphthalene	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
n-Propylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Styrene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1,1,2-Tetrachloroethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1,2,2-Tetrachloroethane	ND	50	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Tetrachloroethylene	12000	200	µg/L	200		SW-846 8260C	11/16/15	11/16/15 15:27	LBD
Tetrahydrofuran	ND	1000	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Toluene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2,3-Trichlorobenzene	ND	500	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2,4-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,3,5-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1,1-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1,2-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Trichloroethylene	260	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Trichlorofluoromethane (Freon 11)	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2,3-Trichloropropane	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,2,4-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
1,3,5-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
Vinyl Chloride	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
m+p Xylene	ND	200	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD
o-Xylene	ND	100	µg/L	100		SW-846 8260C	11/13/15	11/14/15 7:36	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	114	70-130	11/14/15 7:36
1,2-Dichloroethane-d4	117	70-130	11/16/15 15:27
Toluene-d8	102	70-130	11/16/15 15:27
Toluene-d8	101	70-130	11/14/15 7:36
4-Bromofluorobenzene	87.5	70-130	11/14/15 7:36
4-Bromofluorobenzene	86.2	70-130	11/16/15 15:27

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 209D

Sampled: 11/5/2015 09:40

Sample ID: 15K0449-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	µg/L	4	L-04	SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Benzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Bromoform	ND	4.0	µg/L	4	V-05	SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Bromomethane	ND	20	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Carbon Disulfide	ND	16	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Chloroform	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Chloromethane	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4	V-05	SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1-Dichloroethylene	4.1	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
cis-1,2-Dichloroethylene	17	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 209D

Sampled: 11/5/2015 09:40

Sample ID: 15K0449-05

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Hexachlorobutadiene	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Styrene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Tetrachloroethylene	1800	50	µg/L	50		SW-846 8260C	11/16/15	11/16/15 17:11	LBD
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Toluene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Trichloroethylene	130	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C	11/13/15	11/14/15 8:02	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	113	70-130	11/16/15 17:11
1,2-Dichloroethane-d4	108	70-130	11/14/15 8:02
Toluene-d8	101	70-130	11/16/15 17:11
Toluene-d8	99.9	70-130	11/14/15 8:02
4-Bromofluorobenzene	87.5	70-130	11/16/15 17:11
4-Bromofluorobenzene	90.3	70-130	11/14/15 8:02

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 112

Sampled: 11/5/2015 10:10

Sample ID: 15K0449-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	µg/L	10	L-04	SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Acrylonitrile	ND	50	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Benzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Bromobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Bromochloromethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Bromodichloromethane	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Bromoform	ND	10	µg/L	10	V-05	SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Bromomethane	ND	50	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
2-Butanone (MEK)	ND	200	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
tert-Butyl Alcohol (TBA)	ND	200	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
n-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
sec-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
tert-Butylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Carbon Disulfide	ND	40	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Carbon Tetrachloride	ND	50	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Chlorobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Chlorodibromomethane	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Chloroethane	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Chloroform	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Chloromethane	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
2-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
4-Chlorotoluene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Dibromomethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,3-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,4-Dichlorobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
trans-1,4-Dichloro-2-butene	ND	20	µg/L	10	V-05	SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Dichlorodifluoromethane (Freon 12)	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2-Dichloroethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
cis-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
trans-1,2-Dichloroethylene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2-Dichloropropane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,3-Dichloropropane	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
2,2-Dichloropropane	ND	10	µg/L	10	V-05	SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1-Dichloropropene	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
cis-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
trans-1,3-Dichloropropene	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Diethyl Ether	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 112

Sampled: 11/5/2015 10:10

Sample ID: 15K0449-06

Sample Matrix: Ground Water

Sample Flags: RL-11

**Volatile Organic Compounds by GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,4-Dioxane	ND	500	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Ethylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Hexachlorobutadiene	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
2-Hexanone (MBK)	ND	100	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Isopropylbenzene (Cumene)	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
p-Isopropyltoluene (p-Cymene)	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Methyl tert-Butyl Ether (MTBE)	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Methylene Chloride	ND	50	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
4-Methyl-2-pentanone (MIBK)	ND	100	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Naphthalene	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
n-Propylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Styrene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1,1,2-Tetrachloroethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Tetrachloroethylene	10000	500	µg/L	500		SW-846 8260C	11/16/15	11/16/15 16:19	LBD
Tetrahydrofuran	ND	100	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Toluene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2,3-Trichlorobenzene	ND	50	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2,4-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,3,5-Trichlorobenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1,1-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1,2-Trichloroethane	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Trichloroethylene	12	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Trichlorofluoromethane (Freon 11)	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2,3-Trichloropropane	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,2,4-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
1,3,5-Trimethylbenzene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
Vinyl Chloride	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
m+p Xylene	ND	20	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD
o-Xylene	ND	10	µg/L	10		SW-846 8260C	11/13/15	11/14/15 8:28	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	108	70-130	11/16/15 16:19
1,2-Dichloroethane-d4	112	70-130	11/14/15 8:28
Toluene-d8	103	70-130	11/16/15 16:19
Toluene-d8	101	70-130	11/14/15 8:28
4-Bromofluorobenzene	92.4	70-130	11/16/15 16:19
4-Bromofluorobenzene	88.1	70-130	11/14/15 8:28



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 216D

Sampled: 11/5/2015 11:10

Sample ID: 15K0449-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04	SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 216D

Sampled: 11/5/2015 11:10

Sample ID: 15K0449-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Trichloroethylene	1.1	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:08	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	111	70-130	11/14/15 4:08
Toluene-d8	104	70-130	11/14/15 4:08
4-Bromofluorobenzene	87.7	70-130	11/14/15 4:08

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

Project Location: Tectron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 216S

Sampled: 11/5/2015 10:50

Sample ID: 15K0449-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1	L-04	SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
cis-1,2-Dichloroethylene	51	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: MW 216S

Sampled: 11/5/2015 10:50

Sample ID: 15K0449-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Ethylbenzene	3.0	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
p-Isopropyltoluene (p-Cymene)	1.2	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Naphthalene	23	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Tetrachloroethylene	1.1	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Toluene	1.6	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,2,4-Trimethylbenzene	12	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
1,3,5-Trimethylbenzene	6.5	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
m+p Xylene	4.7	2.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD
o-Xylene	8.6	1.0	µg/L	1		SW-846 8260C	11/16/15	11/16/15 15:53	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	115	70-130	11/16/15 15:53
Toluene-d8	103	70-130	11/16/15 15:53
4-Bromofluorobenzene	91.5	70-130	11/16/15 15:53

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: CW-6

Sampled: 11/5/2015 12:50

Sample ID: 15K0449-09

Sample Matrix: Ground Water

**Petroleum Hydrocarbons Analyses**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Fuel Oil #2	5.0	0.20	mg/L	1	O-31	SW-846 8015C	11/10/15	11/12/15 18:40	CJM
<b>Surrogates</b>		<b>% Recovery</b>			<b>Recovery Limits</b>				
o-Terphenyl		107			40-140			11/12/15 18:40	

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

Project Location: Tectron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: CW -2

Sampled: 11/5/2015 13:40

Sample ID: 15K0449-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	µg/L	1	L-04	SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Benzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Bromoform	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Bromomethane	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15K0449

Date Received: 11/10/2015

Field Sample #: CW -2

Sampled: 11/5/2015 13:40

Sample ID: 15K0449-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Styrene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	11/13/15	11/14/15 4:34	LBD

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	111	70-130	11/14/15 4:34
Toluene-d8	101	70-130	11/14/15 4:34
4-Bromofluorobenzene	87.6	70-130	11/14/15 4:34

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

**Sample Extraction Data**

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0449-09 [CW-6]	B135065	1000	1.00	11/10/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0449-01 [MW 101S]	B135340	1	5.00	11/13/15
15K0449-02 [MW 101S Dup]	B135340	1	5.00	11/13/15
15K0449-03 [MW 101D]	B135340	2.5	5.00	11/13/15
15K0449-04 [MW 201D]	B135340	0.05	5.00	11/13/15
15K0449-05 [MW 209D]	B135340	1.25	5.00	11/13/15
15K0449-06 [MW 112]	B135340	0.5	5.00	11/13/15
15K0449-07 [MW 216D]	B135340	5	5.00	11/13/15
15K0449-10 [CW -2]	B135340	5	5.00	11/13/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0449-04RE1 [MW 201D]	B135493	0.025	5.00	11/16/15
15K0449-05RE1 [MW 209D]	B135493	0.1	5.00	11/16/15
15K0449-06RE1 [MW 112]	B135493	0.01	5.00	11/16/15
15K0449-08 [MW 216S]	B135493	5	5.00	11/16/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0449-03RE1 [MW 101D]	B135635	0.025	5.00	11/17/15

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**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 B135340 - SW-846 5030B</b>										
<b>Blank (B135340-BLK1)</b>										
				Prepared: 11/13/15 Analyzed: 11/14/15						
Acetone	ND	50	µg/L							L-04
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							V-05
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	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							V-05
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							V-05
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							
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							



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**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 B135340 - SW-846 5030B**

**Blank (B135340-BLK1)**

Prepared: 11/13/15 Analyzed: 11/14/15

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							
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	28.1		µg/L	25.0		112	70-130			
Surrogate: Toluene-d8	25.3		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	22.1		µg/L	25.0		88.4	70-130			

**LCS (B135340-BS1)**

Prepared: 11/13/15 Analyzed: 11/14/15

Acetone	68.9	50	µg/L	100		68.9 *	70-160			L-04 †
Acrylonitrile	10.4	5.0	µg/L	10.0		104	70-130			
tert-Amyl Methyl Ether (TAME)	9.06	0.50	µg/L	10.0		90.6	70-130			
Benzene	11.3	1.0	µg/L	10.0		113	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	11.8	1.0	µg/L	10.0		118	70-130			
Bromodichloromethane	10.1	0.50	µg/L	10.0		101	70-130			
Bromoform	8.00	1.0	µg/L	10.0		80.0	70-130			V-05
Bromomethane	6.74	2.0	µg/L	10.0		67.4	40-160			V-20 †
2-Butanone (MEK)	90.0	20	µg/L	100		90.0	40-160			†
tert-Butyl Alcohol (TBA)	78.3	20	µg/L	100		78.3	40-160			†
n-Butylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.72	0.50	µg/L	10.0		97.2	70-130			
Carbon Disulfide	10.1	4.0	µg/L	10.0		101	70-130			
Carbon Tetrachloride	10.6	5.0	µg/L	10.0		106	70-130			
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130			
Chlorodibromomethane	9.15	0.50	µg/L	10.0		91.5	70-130			
Chloroethane	10.1	2.0	µg/L	10.0		101	70-130			
Chloroform	11.2	2.0	µg/L	10.0		112	70-130			
Chloromethane	8.35	2.0	µg/L	10.0		83.5	40-160			†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130			

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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 B135340 - SW-846 5030B</b>										
<b>LCS (B135340-BS1)</b>										
					Prepared: 11/13/15 Analyzed: 11/14/15					
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.77	5.0	µg/L	10.0		97.7	70-130			
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0		104	70-130			
Dibromomethane	11.4	1.0	µg/L	10.0		114	70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,3-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130			
trans-1,4-Dichloro-2-butene	7.99	2.0	µg/L	10.0		79.9	70-130			V-05
Dichlorodifluoromethane (Freon 12)	4.85	2.0	µg/L	10.0		48.5	40-160			†
1,1-Dichloroethane	11.6	1.0	µg/L	10.0		116	70-130			
1,2-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130			
1,1-Dichloroethylene	12.6	1.0	µg/L	10.0		126	70-130			
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
trans-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	70-130			
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130			
2,2-Dichloropropane	5.86	1.0	µg/L	10.0		58.6	40-130			V-05 †
1,1-Dichloropropene	11.6	2.0	µg/L	10.0		116	70-130			
cis-1,3-Dichloropropene	9.48	0.50	µg/L	10.0		94.8	70-130			
trans-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130			
Diethyl Ether	10.6	2.0	µg/L	10.0		106	70-130			
Diisopropyl Ether (DIPE)	9.78	0.50	µg/L	10.0		97.8	70-130			
1,4-Dioxane	92.1	50	µg/L	100		92.1	40-130			†
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Hexachlorobutadiene	9.19	0.50	µg/L	10.0		91.9	70-130			
2-Hexanone (MBK)	89.1	10	µg/L	100		89.1	70-160			†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0		103	70-130			
p-Isopropyltoluene (p-Cymene)	10.6	1.0	µg/L	10.0		106	70-130			
Methyl tert-Butyl Ether (MTBE)	9.27	1.0	µg/L	10.0		92.7	70-130			
Methylene Chloride	11.6	5.0	µg/L	10.0		116	70-130			
4-Methyl-2-pentanone (MIBK)	93.2	10	µg/L	100		93.2	70-160			†
Naphthalene	10.2	2.0	µg/L	10.0		102	40-130			†
n-Propylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Styrene	10.0	1.0	µg/L	10.0		100	70-130			
1,1,1,2-Tetrachloroethane	10.9	1.0	µg/L	10.0		109	70-130			
1,1,2,2-Tetrachloroethane	9.32	0.50	µg/L	10.0		93.2	70-130			
Tetrachloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130			
Toluene	11.3	1.0	µg/L	10.0		113	70-130			
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130			
1,2,4-Trichlorobenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
1,3,5-Trichlorobenzene	9.58	1.0	µg/L	10.0		95.8	70-130			
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.0		111	70-130			
Trichloroethylene	11.9	1.0	µg/L	10.0		119	70-130			
Trichlorofluoromethane (Freon 11)	10.4	2.0	µg/L	10.0		104	70-130			
1,2,3-Trichloropropane	8.99	2.0	µg/L	10.0		89.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.4	1.0	µg/L	10.0		114	70-130			
1,2,4-Trimethylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
1,3,5-Trimethylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
Vinyl Chloride	9.06	2.0	µg/L	10.0		90.6	40-160			†

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

**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 B135340 - SW-846 5030B**

**LCS (B135340-BS1)**

Prepared: 11/13/15 Analyzed: 11/14/15

m+p Xylene	20.9	2.0	µg/L	20.0		105	70-130			
o-Xylene	9.89	1.0	µg/L	10.0		98.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.4		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	26.5		µg/L	25.0		106	70-130			
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0		95.8	70-130			

**LCS Dup (B135340-BSD1)**

Prepared: 11/13/15 Analyzed: 11/14/15

Acetone	67.0	50	µg/L	100		67.0 *	70-160	2.81	25	L-04 †
Acrylonitrile	9.74	5.0	µg/L	10.0		97.4	70-130	6.46	25	
tert-Amyl Methyl Ether (TAME)	8.60	0.50	µg/L	10.0		86.0	70-130	5.21	25	
Benzene	10.8	1.0	µg/L	10.0		108	70-130	5.07	25	
Bromobenzene	10.2	1.0	µg/L	10.0		102	70-130	3.67	25	
Bromochloromethane	11.2	1.0	µg/L	10.0		112	70-130	4.95	25	
Bromodichloromethane	9.77	0.50	µg/L	10.0		97.7	70-130	3.22	25	
Bromoform	8.26	1.0	µg/L	10.0		82.6	70-130	3.20	25	V-05
Bromomethane	6.71	2.0	µg/L	10.0		67.1	40-160	0.446	25	V-20 †
2-Butanone (MEK)	87.1	20	µg/L	100		87.1	40-160	3.35	25	†
tert-Butyl Alcohol (TBA)	72.5	20	µg/L	100		72.5	40-160	7.65	25	†
n-Butylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130	7.21	25	
sec-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130	7.15	25	
tert-Butylbenzene	9.52	1.0	µg/L	10.0		95.2	70-130	7.29	25	
tert-Butyl Ethyl Ether (TBEE)	9.33	0.50	µg/L	10.0		93.3	70-130	4.09	25	
Carbon Disulfide	8.89	4.0	µg/L	10.0		88.9	70-130	13.0	25	
Carbon Tetrachloride	10.7	5.0	µg/L	10.0		107	70-130	0.470	25	
Chlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	2.95	25	
Chlorodibromomethane	9.18	0.50	µg/L	10.0		91.8	70-130	0.327	25	
Chloroethane	9.64	2.0	µg/L	10.0		96.4	70-130	4.26	25	
Chloroform	10.6	2.0	µg/L	10.0		106	70-130	4.68	25	
Chloromethane	8.16	2.0	µg/L	10.0		81.6	40-160	2.30	25	†
2-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130	0.579	25	
4-Chlorotoluene	9.95	1.0	µg/L	10.0		99.5	70-130	2.68	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.57	5.0	µg/L	10.0		85.7	70-130	13.1	25	
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0		106	70-130	1.90	25	
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130	2.75	25	
1,2-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	3.34	25	
1,3-Dichlorobenzene	9.94	1.0	µg/L	10.0		99.4	70-130	7.92	25	
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	5.49	25	
trans-1,4-Dichloro-2-butene	8.45	2.0	µg/L	10.0		84.5	70-130	5.60	25	V-05
Dichlorodifluoromethane (Freon 12)	4.86	2.0	µg/L	10.0		48.6	40-160	0.206	25	†
1,1-Dichloroethane	11.5	1.0	µg/L	10.0		115	70-130	1.30	25	
1,2-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130	0.336	25	
1,1-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130	4.23	25	
cis-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	3.94	25	
trans-1,2-Dichloroethylene	11.2	1.0	µg/L	10.0		112	70-130	0.539	25	
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130	1.08	25	
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130	2.92	25	
2,2-Dichloropropane	5.28	1.0	µg/L	10.0		52.8	40-130	10.4	25	V-05 †
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130	6.06	25	
cis-1,3-Dichloropropene	9.89	0.50	µg/L	10.0		98.9	70-130	4.23	25	
trans-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130	2.45	25	
Diethyl Ether	10.5	2.0	µg/L	10.0		105	70-130	0.944	25	
Diisopropyl Ether (DIPE)	9.56	0.50	µg/L	10.0		95.6	70-130	2.28	25	

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

**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 B135340 - SW-846 5030B**

**LCS Dup (B135340-BSD1)**

Prepared: 11/13/15 Analyzed: 11/14/15

1,4-Dioxane	87.0	50	µg/L	100		87.0	40-130	5.74	50	† ‡
Ethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	2.45	25	
Hexachlorobutadiene	8.78	0.50	µg/L	10.0		87.8	70-130	4.56	25	
2-Hexanone (MBK)	87.8	10	µg/L	100		87.8	70-160	1.46	25	†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130	1.08	25	
p-Isopropyltoluene (p-Cymene)	9.88	1.0	µg/L	10.0		98.8	70-130	7.50	25	
Methyl tert-Butyl Ether (MTBE)	9.18	1.0	µg/L	10.0		91.8	70-130	0.976	25	
Methylene Chloride	11.1	5.0	µg/L	10.0		111	70-130	4.93	25	
4-Methyl-2-pentanone (MIBK)	92.2	10	µg/L	100		92.2	70-160	1.09	25	†
Naphthalene	9.60	2.0	µg/L	10.0		96.0	40-130	6.45	25	†
n-Propylbenzene	10.2	1.0	µg/L	10.0		102	70-130	2.32	25	
Styrene	9.35	1.0	µg/L	10.0		93.5	70-130	7.02	25	
1,1,1,2-Tetrachloroethane	10.2	1.0	µg/L	10.0		102	70-130	6.07	25	
1,1,2,2-Tetrachloroethane	9.09	0.50	µg/L	10.0		90.9	70-130	2.50	25	
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130	4.36	25	
Tetrahydrofuran	9.68	10	µg/L	10.0		96.8	70-130	5.43	25	
Toluene	10.9	1.0	µg/L	10.0		109	70-130	2.97	25	
1,2,3-Trichlorobenzene	9.35	5.0	µg/L	10.0		93.5	70-130	9.77	25	
1,2,4-Trichlorobenzene	9.38	1.0	µg/L	10.0		93.8	70-130	5.80	25	
1,3,5-Trichlorobenzene	8.85	1.0	µg/L	10.0		88.5	70-130	7.92	25	
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	5.04	25	
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	2.92	25	
Trichloroethylene	11.6	1.0	µg/L	10.0		116	70-130	2.13	25	
Trichlorofluoromethane (Freon 11)	9.96	2.0	µg/L	10.0		99.6	70-130	4.71	25	
1,2,3-Trichloropropane	8.90	2.0	µg/L	10.0		89.0	70-130	1.01	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.5	1.0	µg/L	10.0		105	70-130	8.21	25	
1,2,4-Trimethylbenzene	9.14	1.0	µg/L	10.0		91.4	70-130	8.39	25	
1,3,5-Trimethylbenzene	9.92	1.0	µg/L	10.0		99.2	70-130	1.20	25	
Vinyl Chloride	8.54	2.0	µg/L	10.0		85.4	40-160	5.91	25	†
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130	3.20	25	
o-Xylene	9.75	1.0	µg/L	10.0		97.5	70-130	1.43	25	
Surrogate: 1,2-Dichloroethane-d4	25.1		µg/L	25.0		101	70-130			
Surrogate: Toluene-d8	26.4		µg/L	25.0		106	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.2	70-130			

**Batch B135493 - SW-846 5030B**

**Blank (B135493-BLK1)**

Prepared & Analyzed: 11/16/15

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							

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

**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 B135493 - SW-846 5030B**

**Blank (B135493-BLK1)**

Prepared & Analyzed: 11/16/15

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							L-04
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							
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							
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							

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**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 B135493 - SW-846 5030B</b>										
<b>Blank (B135493-BLK1)</b>										
Prepared & Analyzed: 11/16/15										
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	28.5		µg/L	25.0		114	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	22.4		µg/L	25.0		89.4	70-130			
<b>LCS (B135493-BS1)</b>										
Prepared & Analyzed: 11/16/15										
<b>Acetone</b>	68.8	50	µg/L	100		<b>68.8</b> *	70-160			L-07 †
Acrylonitrile	9.83	5.0	µg/L	10.0		98.3	70-130			
tert-Amyl Methyl Ether (TAME)	9.24	0.50	µg/L	10.0		92.4	70-130			
Benzene	10.9	1.0	µg/L	10.0		109	70-130			
Bromobenzene	10.0	1.0	µg/L	10.0		100	70-130			
Bromochloromethane	11.6	1.0	µg/L	10.0		116	70-130			
Bromodichloromethane	9.89	0.50	µg/L	10.0		98.9	70-130			
Bromoform	8.57	1.0	µg/L	10.0		85.7	70-130			
Bromomethane	6.67	2.0	µg/L	10.0		66.7	40-160			V-20 †
2-Butanone (MEK)	88.7	20	µg/L	100		88.7	40-160			†
tert-Butyl Alcohol (TBA)	78.0	20	µg/L	100		78.0	40-160			†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
sec-Butylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.81	0.50	µg/L	10.0		98.1	70-130			
Carbon Disulfide	11.0	4.0	µg/L	10.0		110	70-130			
Carbon Tetrachloride	11.1	5.0	µg/L	10.0		111	70-130			
Chlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
Chlorodibromomethane	9.69	0.50	µg/L	10.0		96.9	70-130			
Chloroethane	9.31	2.0	µg/L	10.0		93.1	70-130			
Chloroform	11.0	2.0	µg/L	10.0		110	70-130			
Chloromethane	7.30	2.0	µg/L	10.0		73.0	40-160			†
2-Chlorotoluene	10.0	1.0	µg/L	10.0		100	70-130			
4-Chlorotoluene	9.83	1.0	µg/L	10.0		98.3	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.07	5.0	µg/L	10.0		90.7	70-130			
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130			
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,3-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130			
trans-1,4-Dichloro-2-butene	10.2	2.0	µg/L	10.0		102	70-130			
<b>Dichlorodifluoromethane (Freon 12)</b>	3.15	2.0	µg/L	10.0		<b>31.5</b> *	40-160			L-04 †
1,1-Dichloroethane	11.4	1.0	µg/L	10.0		114	70-130			
1,2-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130			
1,1-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130			
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
trans-1,2-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130			

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**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 B135493 - SW-846 5030B</b>										
<b>LCS (B135493-BS1)</b>										
Prepared & Analyzed: 11/16/15										
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130			
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130			
2,2-Dichloropropane	9.72	1.0	µg/L	10.0		97.2	40-130			†
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130			
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
trans-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130			
Diethyl Ether	10.4	2.0	µg/L	10.0		104	70-130			
Diisopropyl Ether (DIPE)	10.2	0.50	µg/L	10.0		102	70-130			
1,4-Dioxane	84.6	50	µg/L	100		84.6	40-130			†
Ethylbenzene	9.89	1.0	µg/L	10.0		98.9	70-130			
Hexachlorobutadiene	9.52	0.50	µg/L	10.0		95.2	70-130			
2-Hexanone (MBK)	90.4	10	µg/L	100		90.4	70-160			†
Isopropylbenzene (Cumene)	9.87	1.0	µg/L	10.0		98.7	70-130			
p-Isopropyltoluene (p-Cymene)	10.5	1.0	µg/L	10.0		105	70-130			
Methyl tert-Butyl Ether (MTBE)	9.30	1.0	µg/L	10.0		93.0	70-130			
Methylene Chloride	11.6	5.0	µg/L	10.0		116	70-130			
4-Methyl-2-pentanone (MIBK)	92.7	10	µg/L	100		92.7	70-160			†
Naphthalene	10.2	2.0	µg/L	10.0		102	40-130			†
n-Propylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
Styrene	9.43	1.0	µg/L	10.0		94.3	70-130			
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1,2,2-Tetrachloroethane	9.47	0.50	µg/L	10.0		94.7	70-130			
Tetrachloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130			
Toluene	10.9	1.0	µg/L	10.0		109	70-130			
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130			
1,2,4-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,1,1-Trichloroethane	11.1	1.0	µg/L	10.0		111	70-130			
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130			
Trichloroethylene	11.3	1.0	µg/L	10.0		113	70-130			
Trichlorofluoromethane (Freon 11)	10.0	2.0	µg/L	10.0		100	70-130			
1,2,3-Trichloropropane	9.38	2.0	µg/L	10.0		93.8	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.0		109	70-130			
1,2,4-Trimethylbenzene	9.84	1.0	µg/L	10.0		98.4	70-130			
1,3,5-Trimethylbenzene	9.70	1.0	µg/L	10.0		97.0	70-130			
Vinyl Chloride	7.92	2.0	µg/L	10.0		79.2	40-160			†
m+p Xylene	19.9	2.0	µg/L	20.0		99.6	70-130			
o-Xylene	9.56	1.0	µg/L	10.0		95.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.7		µg/L	25.0		107	70-130			
Surrogate: Toluene-d8	26.0		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.2	70-130			

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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 B135493 - SW-846 5030B

LCS Dup (B135493-BSD1)

Prepared & Analyzed: 11/16/15

Acetone	71.5	50	µg/L	100		71.5	70-160	3.78	25	†
Acrylonitrile	10.3	5.0	µg/L	10.0		103	70-130	4.86	25	
tert-Amyl Methyl Ether (TAME)	9.37	0.50	µg/L	10.0		93.7	70-130	1.40	25	
Benzene	11.2	1.0	µg/L	10.0		112	70-130	2.72	25	
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.94	25	
Bromochloromethane	12.2	1.0	µg/L	10.0		122	70-130	4.53	25	
Bromodichloromethane	10.2	0.50	µg/L	10.0		102	70-130	2.89	25	
Bromoform	8.78	1.0	µg/L	10.0		87.8	70-130	2.42	25	
Bromomethane	7.19	2.0	µg/L	10.0		71.9	40-160	7.50	25	V-20 †
2-Butanone (MEK)	91.1	20	µg/L	100		91.1	40-160	2.64	25	†
tert-Butyl Alcohol (TBA)	82.3	20	µg/L	100		82.3	40-160	5.38	25	†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.00	25	
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	0.638	25	
tert-Butylbenzene	10.0	1.0	µg/L	10.0		100	70-130	1.09	25	
tert-Butyl Ethyl Ether (TBEE)	9.65	0.50	µg/L	10.0		96.5	70-130	1.64	25	
Carbon Disulfide	10.3	4.0	µg/L	10.0		103	70-130	6.57	25	
Carbon Tetrachloride	11.0	5.0	µg/L	10.0		110	70-130	0.902	25	
Chlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	3.50	25	
Chlorodibromomethane	9.61	0.50	µg/L	10.0		96.1	70-130	0.829	25	
Chloroethane	9.01	2.0	µg/L	10.0		90.1	70-130	3.28	25	
Chloroform	11.4	2.0	µg/L	10.0		114	70-130	3.56	25	
Chloromethane	7.69	2.0	µg/L	10.0		76.9	40-160	5.20	25	†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130	2.65	25	
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130	3.10	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.42	5.0	µg/L	10.0		94.2	70-130	3.79	25	
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107	70-130	5.06	25	
Dibromomethane	11.4	1.0	µg/L	10.0		114	70-130	2.13	25	
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	4.65	25	
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	1.20	25	
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	0.0946	25	
trans-1,4-Dichloro-2-butene	10.3	2.0	µg/L	10.0		103	70-130	0.972	25	
<b>Dichlorodifluoromethane (Freon 12)</b>	3.56	2.0	µg/L	10.0		<b>35.6 *</b>	40-160	12.2	25	L-04 †
1,1-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130	3.94	25	
1,2-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130	1.70	25	
1,1-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130	0.250	25	
cis-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0		114	70-130	4.78	25	
trans-1,2-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	2.03	25	
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130	2.65	25	
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110	70-130	3.72	25	
2,2-Dichloropropane	9.91	1.0	µg/L	10.0		99.1	40-130	1.94	25	†
1,1-Dichloropropene	11.1	2.0	µg/L	10.0		111	70-130	2.18	25	
cis-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130	3.16	25	
trans-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116	70-130	3.07	25	
Diethyl Ether	10.5	2.0	µg/L	10.0		105	70-130	1.34	25	
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0		104	70-130	1.07	25	
1,4-Dioxane	97.7	50	µg/L	100		97.7	40-130	14.3	50	† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	2.59	25	
Hexachlorobutadiene	9.66	0.50	µg/L	10.0		96.6	70-130	1.46	25	
2-Hexanone (MBK)	90.7	10	µg/L	100		90.7	70-160	0.331	25	†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.0		101	70-130	2.01	25	
p-Isopropyltoluene (p-Cymene)	10.6	1.0	µg/L	10.0		106	70-130	0.949	25	
Methyl tert-Butyl Ether (MTBE)	9.50	1.0	µg/L	10.0		95.0	70-130	2.13	25	



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**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 B135493 - SW-846 5030B**

**LCS Dup (B135493-BSD1)**

Prepared & Analyzed: 11/16/15

Methylene Chloride	11.9	5.0	µg/L	10.0		119	70-130	1.87	25	
4-Methyl-2-pentanone (MIBK)	94.0	10	µg/L	100		94.0	70-160	1.47	25	†
Naphthalene	10.4	2.0	µg/L	10.0		104	40-130	2.05	25	†
n-Propylbenzene	10.6	1.0	µg/L	10.0		106	70-130	3.46	25	
Styrene	10.0	1.0	µg/L	10.0		100	70-130	6.07	25	
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0		106	70-130	3.06	25	
1,1,2,2-Tetrachloroethane	9.84	0.50	µg/L	10.0		98.4	70-130	3.83	25	
Tetrachloroethylene	10.9	1.0	µg/L	10.0		109	70-130	4.68	25	
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130	0.00	25	
Toluene	11.0	1.0	µg/L	10.0		110	70-130	1.28	25	
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130	0.389	25	
1,2,4-Trichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	0.795	25	
1,3,5-Trichlorobenzene	9.77	1.0	µg/L	10.0		97.7	70-130	3.12	25	
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	2.56	25	
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.0		111	70-130	3.68	25	
Trichloroethylene	11.1	1.0	µg/L	10.0		111	70-130	1.34	25	
Trichlorofluoromethane (Freon 11)	10.0	2.0	µg/L	10.0		100	70-130	0.200	25	
1,2,3-Trichloropropane	9.44	2.0	µg/L	10.0		94.4	70-130	0.638	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.1	1.0	µg/L	10.0		111	70-130	1.91	25	
1,2,4-Trimethylbenzene	9.96	1.0	µg/L	10.0		99.6	70-130	1.21	25	
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130	0.617	25	
Vinyl Chloride	8.01	2.0	µg/L	10.0		80.1	40-160	1.13	25	†
m+p Xylene	20.5	2.0	µg/L	20.0		102	70-130	2.72	25	
o-Xylene	9.85	1.0	µg/L	10.0		98.5	70-130	2.99	25	
Surrogate: 1,2-Dichloroethane-d4	27.0		µg/L	25.0		108	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.7	70-130			

**Batch B135635 - SW-846 5030B**

**Blank (B135635-BLK1)**

Prepared & Analyzed: 11/17/15

Tetrachloroethylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.4		µg/L	25.0		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	21.7		µg/L	25.0		86.9	70-130			

**LCS (B135635-BS1)**

Prepared & Analyzed: 11/17/15

Tetrachloroethylene	9.26	1.0	µg/L	10.0		92.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.5		µg/L	25.0		97.9	70-130			
Surrogate: Toluene-d8	25.4		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	23.0		µg/L	25.0		91.8	70-130			

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**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 B135635 - SW-846 5030B**

**LCS Dup (B135635-BSD1)**

Prepared & Analyzed: 11/17/15

Tetrachloroethylene	9.48	1.0	µg/L	10.0		94.8	70-130	2.35	25	
Surrogate: 1,2-Dichloroethane-d4	24.9		µg/L	25.0		99.8	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0		98.2	70-130			
Surrogate: 4-Bromofluorobenzene	22.7		µg/L	25.0		90.9	70-130			

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**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 B135065 - SW-846 3510C</b>										
<b>Blank (B135065-BLK1)</b>				Prepared: 11/10/15 Analyzed: 11/12/15						
Fuel Oil #2	ND	0.20	mg/L							
Surrogate: o-Terphenyl	0.0972		mg/L	0.100		97.2	40-140			
<b>LCS (B135065-BS1)</b>				Prepared: 11/10/15 Analyzed: 11/12/15						
Fuel Oil #2	0.814	0.20	mg/L	1.00		81.4	40-140			
Surrogate: o-Terphenyl	0.114		mg/L	0.100		114	40-140			
<b>LCS Dup (B135065-BSD1)</b>				Prepared: 11/10/15 Analyzed: 11/12/15						
Fuel Oil #2	0.800	0.20	mg/L	1.00		80.0	40-140	1.80	25	
Surrogate: o-Terphenyl	0.113		mg/L	0.100		113	40-140			

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**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.
- L-04 Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low 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.
  - O-31 Sample chromatography does not match reference standard exactly, possibly due to weathering.
  - 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-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	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



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 \_\_\_\_\_ of \_\_\_\_\_

Company Name: CB&I Environmental  
 Address: 150 Royall Street  
 Canton, MA 02021  
 Attention: Brian Cote  
 Project Location: Textron Providence, RI  
 Sampled By: *Austin Hagan 774-551-6197*

Telephone: 617-589-6175

Project # 130274  
 Client PO# 835493

DATA DELIVERY (check all that apply)  
 FAX  EMAIL  WEBSITE  
 Fax #  
 Email: Brian.Cote@CBI.com  
 Format:  PDF  EXCEL  GIS  
 OTHER GISKey\_format  
 "Enhanced Data Package"

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

Con-Test Lab ID <small>(laboratory use only)</small>	Client Sample ID / Description	Collection		*Matrix Code	Date Code
		Beginning Date/Time	Ending Date/Time		
01	MW-1015	11-05	0815	GW	U
02	MW-1015 Dup	11-05	0820		
03	MW-1017	11-05	0800		
04	MW-201D	11-05	0905		
05	MW-209D	11-05	0940		
06	MW-112	11-05	1010		
07	MW-216D	11-05	1110		
08	MW-216S	11-05	1050		
09	CW-6	11-05	1750		
10	CW-2	11-05	1340		

Comments: Please email GISKey formatted EDD & PDF of report to:  
 Brian.Cote@cbi.com and Catherine.Joe@cbi.com.  
 Dissolved 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:

Relinquished by (signature)	Date/Time	Turnaround <sup>†</sup>	Detection Limit Requirements
<i>[Signature]</i>	11-05-15 1500	<input type="checkbox"/> 7-Day <input checked="" type="checkbox"/> 10-Day <input type="checkbox"/> Other	Massachusetts: _____ Connecticut: _____ Other: _____
<i>[Signature]</i>	11-10-15 1145	RUSH <sup>†</sup> <input type="checkbox"/> 24-Hr <input type="checkbox"/> 48-Hr <input type="checkbox"/> 72-Hr <input type="checkbox"/> 14-Day	
<i>[Signature]</i>	11-10-15 1940	<input type="checkbox"/> Require lab approval	
<i>[Signature]</i>	11/10/15 1940		

H - High; M - Medium; L - Low; C - Clean; U - Unknown

Is your project MCP or RCP?

- MCP Form Required
- RCP Form Required
- MA State DW Form Required PWSID # \_\_\_\_\_

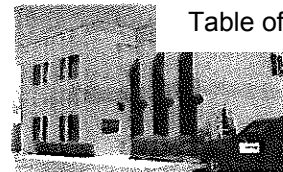


NELAC & AIHA-LAP, LLC  
 Accredited

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 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  
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 F: 413-525-6405  
 www.contestlabs.com



### Sample Receipt Checklist

CLIENT NAME: CB and I Environmental RECEIVED BY: VP DATE: 11/10/15

- 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 3.6

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			Plastic Bag / Ziploc	
500 mL Plastic			SOC Kit	
250 mL plastic	3		Non-ConTest Container	
40 mL Vial - type listed below	39		Perchlorate Kit	
Colisure / bacteria bottle			Flashpoint bottle	
Dissolved Oxygen bottle			Other glass jar	
Encore			Other	

Laboratory Comments:

40 mL vials: # HCl 39 # Methanol \_\_\_\_\_  
 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen:

Doc# 277

Rev. 4 August 2013



**Login Sample Receipt Checklist****(Rejection Criteria Listing - Using Sample Acceptance Policy)****Any False statement will be brought to the attention of Client**

<u>Question</u>	<u>Answer (True/False)</u>		<u>Comment</u>
	T/F/NA		
1) The cooler's custody seal, if present, is intact.	NA		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	T		
4) Cooler Temperature is acceptable.	T		
5) Cooler Temperature is recorded.	T		
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) There are no discrepancies between the sample IDs on the container and the COC.	T		
10) Samples are received within Holding Time.	T		
11) Sample containers have legible labels.	T		
12) Containers are not broken or leaking.	T		
13) Air Cassettes are not broken/open.	NA		
14) Sample collection date/times are provided.	T		
15) Appropriate sample containers are used.	T		
16) Proper collection media used.	T		
17) No headspace sample bottles are completely filled.	T		
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
19) Trip blanks provided if applicable.	NA		
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T		
21) Samples do not require splitting or compositing.	T		

Doc #277 Rev. 4 August 2013      Who notified of False statements?  
 Log-In Technician Initials: V P

Date/Time:      Date/Time: 11/10/15 1940