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June 16, 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: April and March 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 April and May of 2015.

## **FIELD ACTIVITIES**

### **Limited VOC Sampling Activities April 2015**

Limited groundwater sampling was conducted on April 24, 2015. Monitoring wells MW-112, MW-116D, and MW-116S were sampled for volatile organic compound (VOC) analysis. Groundwater elevation results for these wells are also 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 April 24, 2015. Groundwater samples were delivered to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts for analysis.

### **Groundwater Sampling Activities May 2015**

The monitoring wells that comprise the groundwater monitoring program were monitored for field parameters and sampled for analysis on May 12, 2015.

### Monitoring Activities

Field parameters were measured in treatment area wells and compliance wells on May 12, 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 May 12, 2015 groundwater samples were collected for analysis for VOCs (EPA Method 8260C) from 21 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. One duplicate sample was also collected from CW-6 (CW-6 DUP) for TPH analysis. Samples were also collected for lead analysis (EPA Method 6010C) from monitoring wells MW-109D and GZA-3. One duplicate sample was 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 April 24 and May 12, 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 the activities reported herein. The reported PCE concentrations in well MW-112 were: 1,200 ug/L on April 24, 2015 and 160 ug/L on May 12, 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 April 24, 2015. (Note that due to sample dilution by the laboratory, the analytical reporting limits for vinyl chloride for well MW-112 were above the compound specific compliance standard for both the April 24 and May 12, 2015 sampling results.)

Mr. Joseph T. Martella, II

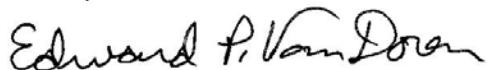
June 16, 2015

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## FUTURE ACTIVITIES

Future limited sampling will be conducted in June and July 2015 and the full sampling event will be conducted in August 2015.

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



Edward P. VanDoren  
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  
Jamieson Schiff, Textron  
Dave Heislein, AMEC  
Robert Azar, Providence Redevelopment Agency  
Jeff Morgan, Stop & Shop  
Ronald Ruth, Sherin and Lodgen

## CERTIFICATIONS

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

I, Edward P. Van Doren, as an authorized representative of CB&I Environmental & Infrastructure, Inc., and the person responsible for the preparation of this Status Report dated June 16, 2015, 2015, certify that the information contained in this report is complete and accurate to the best of my knowledge.

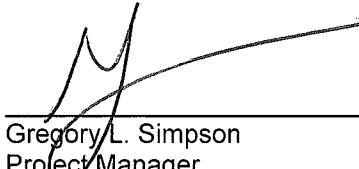
  
Edward P. Van Doren  
Project Manager

6-25-15

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

JUNE 22, 2015

Date:

## **TABLES**

**Table 1**  
**Summary Field Parameters**  
**April 2015 - May 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	5/12/2015	6.49	12.92	0.041	1.89	109.1
MW-101S	5/12/2015	6.23	13.11	1.019	0.97	53.6
MW-112	5/12/2015	5.97	12.76	1.252	3.63	204.4
MW-116D	5/12/2015	5.52	12.86	0.591	3.41	227
MW-116S	5/12/2015	5.80	13.17	0.282	5.33	214.5
MW-201D	5/12/2015	6.25	12.72	0.957	2.46	156.4
MW-202D	5/12/2015	6.63	12.26	0.323	2.10	150
MW-202S	5/12/2015	6.08	12.56	0.864	0.36	169.8
MW-207D	5/12/2015	8.13	12.18	0.041	2.13	87
MW-207S	5/12/2015	8.31	12.35	0.767	1.75	56.5
MW-209D	5/12/2015	6.84	12.48	0.208	3.86	144.7
MW-216D	5/12/2015	6.38	15.45	0.526	0.23	-16.4
MW-216S	5/12/2015	6.36	14.91	0.909	0.41	-72.1
MW-217D	5/12/2015	6.80	15.15	0.648	0.13	-117.1
MW-217S	5/12/2015	6.34	14.31	1.947	0.59	-68.5
MW-218D	5/12/2015	5.66	14.67	0.389	0.25	222.9
MW-218S	5/12/2015	6.21	14.31	0.800	1.51	213.6

Notes:

C° = degrees Celsius

mS/cm = millisiemens per centimeter

mg/L = milligrams per liter

mV = milli volts

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**(04/24/15 - 06/05/15)**

06/16/15

**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	05/12/15	99.52	25.27	--	--	74.25	DTB = 54.25'
CW-02	05/12/15	98.86	24.50	--	--	74.36	DTB = 54.36'
CW-06	05/12/15	99.52	24.87	--	--	74.65	DTB = 33.24'
GZA-3	05/12/15	NA	17.49	--	--	NA	DTB = 21.85'
MW-101D	05/12/15	98.91	24.50	--	--	74.41	DTB = 46.04'
MW-101S	05/12/15	98.90	24.08	--	--	74.82	DTB = 28.53'
MW-109D	05/12/15	NA	19.06	--	--	NA	DTB = 74.60'
MW-112	04/24/15	100.63	26.16	--	--	74.47	DTB = 34.95'
MW-112	05/12/15	100.63	26.01	--	--	74.62	DTB = 62.17'
MW-112	06/05/15	100.63	26.63	--	--	74.00	DTB = 34.60'
MW-116D	04/24/15	98.92	24.42	--	--	74.50	DTB = 44.25'
MW-116D	05/12/15	98.92	24.58	--	--	74.34	DTB = 44.25'
MW-116D	06/05/15	98.92	24.91	--	--	74.01	DTB = 44.31'
MW-116S	04/24/15	99.40	25.17	--	--	74.23	DTB = 28.59'
MW-116S	05/12/15	99.40	24.95	--	--	74.45	DTB = 28.56'
MW-116S	06/05/15	99.40	25.34	--	--	74.06	DTB = 26.18'
MW-201D	05/12/15	98.80	24.39	--	--	74.41	DTB = 47.22'
MW-202D	05/12/15	98.17	23.75	--	--	74.42	DTB = 47.45'
MW-202S	05/12/15	98.06	23.70	--	--	74.36	DTB = 38.09'
MW-207D	05/12/15	98.18	23.83	--	--	74.35	DTB = 50.96'
MW-207S	05/12/15	98.28	23.92	--	--	74.36	DTB = 37.60'
MW-209D	05/12/15	99.90	25.96	--	--	73.94	DTB = 62.20'
MW-216D	05/12/15	98.69	25.16	--	--	73.53	DTB = 39.30'
MW-216S	05/12/15	99.58	25.17	--	--	74.41	DTB = 29.61'
MW-217D	05/12/15	98.65	24.69	--	--	73.96	DTB = 46.77'
MW-217S	05/12/15	98.71	24.71	--	--	74.00	DTB = 29.39'
MW-218D	05/12/15	99.67	25.27	--	--	74.40	DTB = 46.65'
MW-218S	05/12/15	99.61	25.21	--	--	74.40	DTB = 29.45'
MW-220S	05/12/15	99.41	25.07	--	--	74.34	DTB = 31.78'
MW-221S	05/12/15	98.92	26.77	25.22	1.55	73.59	

Notes:

feet = feet measured below ground surface

NA = Not Available

NM = Not Measured

**TABLE 3**  
**Groundwater Analytical Results**  
**April 2015 - May 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	CW-01 5/12/2015 Primary	CW-02 5/12/2015 Primary	CW-06 5/12/2015 Primary	CW-06 5/12/2015 Duplicate	GZA-3 5/12/2015 Primary	GZA-3 5/12/2015 Duplicate	MW-101D 5/12/2015 Primary	MW-101S 5/12/2015 Primary	MW-101S 5/12/2015 Duplicate	MW-109D 5/12/2015 Primary
<b>(VOC (ug/L)</b>										
1,1-Dichloroethene	37D	<1.0	---	---	<1.0	---	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<25D	<1.0	---	---	<1.0	---	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<25D	<1.0	---	---	<1.0	---	<1.0	<1.0	<1.0	<1.0
Benzene	<25D	<1.0	---	---	<1.0J	---	<1.0	<1.0	<1.0	<1.0
Carbondisulfide	<100D	<4.0	---	---	<4.0	---	<4.0	<4.0	<4.0	<4.0
cis-1,2-Dichloroethene	160D	<1.0	---	---	8.6	---	<1.0J	67	64	<1.0
Ethylbenzene	<25D	<1.0	---	---	<1.0	---	<1.0	<1.0	<1.0	<1.0
Naphthalene	<50D	<2.0	---	---	<2.0	---	<2.0	<2.0	<2.0	<2.0
tert-AmylMethyl Ether	14D	<0.50	---	---	<0.50	---	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	<25D	<1.0	---	---	<1.0	---	16	2100D	1900D	<1.0
Trichloroethene	3100D	<1.0J	---	---	<1.0J	---	<1.0J	18	19	<1.0J
Vinyl chloride	<50D	<2.0	---	---	28	---	<2.0	<2.0J	<2.0J	<2.0
m/p-xylene	<50D	<2.0	---	---	<2.0	---	<2.0	<2.0	<2.0	<2.0
o-Xylene	<25D	<1.0	---	---	<1.0	---	<1.0	<1.0	<1.0	<1.0
Xylene (total)	<50D	<2.0	---	---	<2.0	---	<2.0	<2.0	<2.0	<2.0
<b>TPH (mg/L)</b>										
TPH	---	---	5.8	6.4	---	---	---	---	---	---
<b>Dissolved Lead (mg/L)</b>										
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**  
**April 2015 - May 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-112 4/24/2015 Primary	MW-112 5/12/2015 Primary	MW-116D 4/24/2015 Primary	MW-116D 5/12/2015 Primary	MW-116S 4/24/2015 Primary	MW-116S 5/12/2015 Primary	MW-201D 5/12/2015 Primary	MW-202D 5/12/2015 Primary	MW-202S 5/12/2015 Primary	MW-207D 5/12/2015 Primary
<b>(VOC (ug/L)</b>										
1,1-Dichloroethene	<5.0D	<4.0D	<1.0	<1.0	<1.0	<1.0	<100D	<1.0	<4.0D	<1.0
1,2,4-Trimethylbenzene	<5.0D	<4.0D	<1.0	<1.0	<1.0	<1.0	<100D	<1.0	<4.0D	<1.0
1,3,5-Trimethylbenzene	<5.0D	<4.0D	<1.0	<1.0	<1.0	<1.0	<100D	<1.0	<4.0D	<1.0
Benzene	<5.0D	<4.0D	<1.0	1.7	<1.0	<1.0	<100D	<1.0J	<4.0D	<1.0
Carbondisulfide	24D	<16D	<4.0	<4.0	<4.0	<4.0	<400D	<4.0	<16D	<4.0
cis-1,2-Dichloroethene	<5.0D	<4.0D	<1.0	<1.0	<1.0	<1.0	<100D	5.2	<4.0JD	<1.0
Ethylbenzene	<5.0D	<4.0D	<1.0	<1.0	<1.0	<1.0	<100D	<1.0	<4.0D	<1.0
Naphthalene	<10D	<8.0D	<2.0	<2.0	<2.0	<2.0	<200D	<2.0	<8.0D	<2.0
tert-AmylMethyl Ether	<2.5D	<2.0D	<0.50	<0.50	<0.50	<0.50	<50D	<0.50	<2.0D	<0.50
Tetrachloroethene	1200D	160D	<1.0	<1.0J	<1.0	<1.0	6100D	130	340D	7.4
Trichloroethene	<5.0D	<4.0JD	<1.0	<1.0J	<1.0	<1.0	190D	8	<4.0JD	<1.0J
Vinyl chloride	<10D	<8.0D	<2.0	<2.0	<2.0	<2.0	<200D	<2.0	<8.0D	<2.0
m/p-xylene	<10D	<8.0D	<2.0	<2.0	<2.0	<2.0	<200D	<2.0	<8.0D	<2.0
o-Xylene	<5.0D	<4.0D	<1.0	<1.0	<1.0	<1.0	<100D	<1.0	<4.0D	<1.0
Xylene (total)	<10D	<8.0D	<2.0	<2.0	<2.0	<2.0	<200D	<2.0	<8.0D	<2.0
<b>TPH (mg/L)</b>										
TPH	---	---	---	---	---	---	---	---	---	---
<b>Dissolved Lead (mg/L)</b>										
Lead	---	---	---	---	---	---	---	---	---	---

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**  
**April 2015 - May 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

CONSTITUENT	MW-207S 5/12/2015 Primary	MW-209D 5/12/2015 Primary	MW-216D 5/12/2015 Primary	MW-216S 5/12/2015 Primary	MW-217D 5/12/2015 Primary	MW-217S 5/12/2015 Primary	MW-218D 5/12/2015 Primary	MW-218S 5/12/2015 Primary
<b>(VOC (ug/L)</b>								
1,1-Dichloroethene	<1.0	<1.0	<1.0	<2.0D	<1.0J	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	9.8D	<1.0J	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	6.5D	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<2.0JD	<1.0	<1.0	<1.0J	<1.0
Carbondisulfide	<4.0	<4.0	<4.0	<8.0D	<4.0	<4.0	<4.0	<4.0
cis-1,2-Dichloroethene	<1.0J	3.3	<1.0J	97D	66	2	<1.0J	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	2.7D	<1.0J	<1.0J	<1.0	<1.0
Naphthalene	<2.0	<2.0	<2.0	20D	<2.0	<2.0	<2.0	<2.0
tert-AmylMethyl Ether	<0.50	<0.50	<0.50	<1.0D	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	8.4	55	<1.0	<2.0JD	<1.0J	2.8	23	7.3
Trichloroethene	1.7	12	<1.0J	<2.0D	7.2	2.2	3.5	<1.0
Vinyl chloride	<2.0	<2.0	<2.0	<4.0D	<2.0	<2.0J	<2.0	<2.0
m/p-xylene	<2.0	<2.0	<2.0	4.8D	<2.0	<2.0	<2.0	<2.0
o-Xylene	<1.0	<1.0	<1.0	8.8D	<1.0	<1.0	<1.0	<1.0
Xylene (total)	<2.0	<2.0	<2.0	13.6D	<2.0	<2.0	<2.0	<2.0
<b>TPH (mg/L)</b>								
TPH	---	---	---	---	---	---	---	---
<b>Dissolved Lead (mg/L)</b>								
Lead	---	---	---	---	---	---	---	---

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 4**  
**Groundwater Analytical Results**  
**April 2015 - May 2015**

Former Gorham Manufacturing Facility  
 Providence, Rhode Island

<b>Mashapaug Pond Compliance Wells</b>			
Sample ID	GZA-3 5/12/2015 Primary	GZA-3 5/12/2015 Duplicate	Compliance Standard <sup>1</sup>
<b>Metals (mg/L)</b>			
Lead	<0.010J	<0.010	0.03
<b>VOCs (ug/L)</b>			
1,1-Dichloroethane	<1.0J	---	50,000
1,1-Dichloroethene	<1.0	---	50,000
cis-1,2-Dichloroethene	8.6	---	50,000
Methyltert-butylether	<1.0J	---	50,000
Tetrachloroethene	<1.0	---	5,000
Trichloroethene	<1.0J	---	20,000
Vinyl chloride	28	---	1,200

<b>TPH Remediation Area Well</b>			
Sample ID	CW-06 5/12/2015 Primary	CW-06 5/12/2015 Duplicate	Compliance Standard <sup>1</sup>
<b>TPH (mg/L)</b>			
TPH	5.8	6.4	20

<b>Sewer Interceptor Area Wells</b>			
Sample ID	CW-01 5/12/2015 Primary	CW-02 5/12/2015 Primary	Compliance Standard <sup>2</sup>
<b>VOCs (ug/L)</b>			
1,1-Dichloroethane	<25D	<1.0	120,000
1,1-Dichloroethene	37D	<1.0	23,000
cis-1,2-Dichloroethene	160D	<1.0	69,000
trans-1,2-Dichloroethene	<25JD	<1.0	79,000
Tetrachloroethene	<25D	<1.0	NS
Trichloroethene	3100D	<1.0J	87,000

<b>Adelaide Avenue Wells</b>					
Sample ID	MW-112 4/24/2015 Primary	MW-112 5/12/2015 Primary	MW-209D 5/12/2015 Primary	MW-218S 5/12/2015 Primary	Compliance Standard <sup>3</sup>
<b>VOCs (ug/L)</b>					
1,1-Dichloroethane	<5.0D	<4.0D	<1.0	<1.0	2,400
1,1-Dichloroethene	<5.0D	<4.0D	<1.0	<1.0	7
cis-1,2-Dichloroethene	<5.0D	<4.0D	3.3	<1.0	1,900
Methyltert-butylether	<5.0D	<4.0D	<1.0	<1.0	5,000
Tetrachloroethene	1200D	160D	55	7.3	150
Trichloroethene	<5.0D	<4.0JD	12	<1.0	540
Vinyl chloride	<10D	<8.0D	<2.0	<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

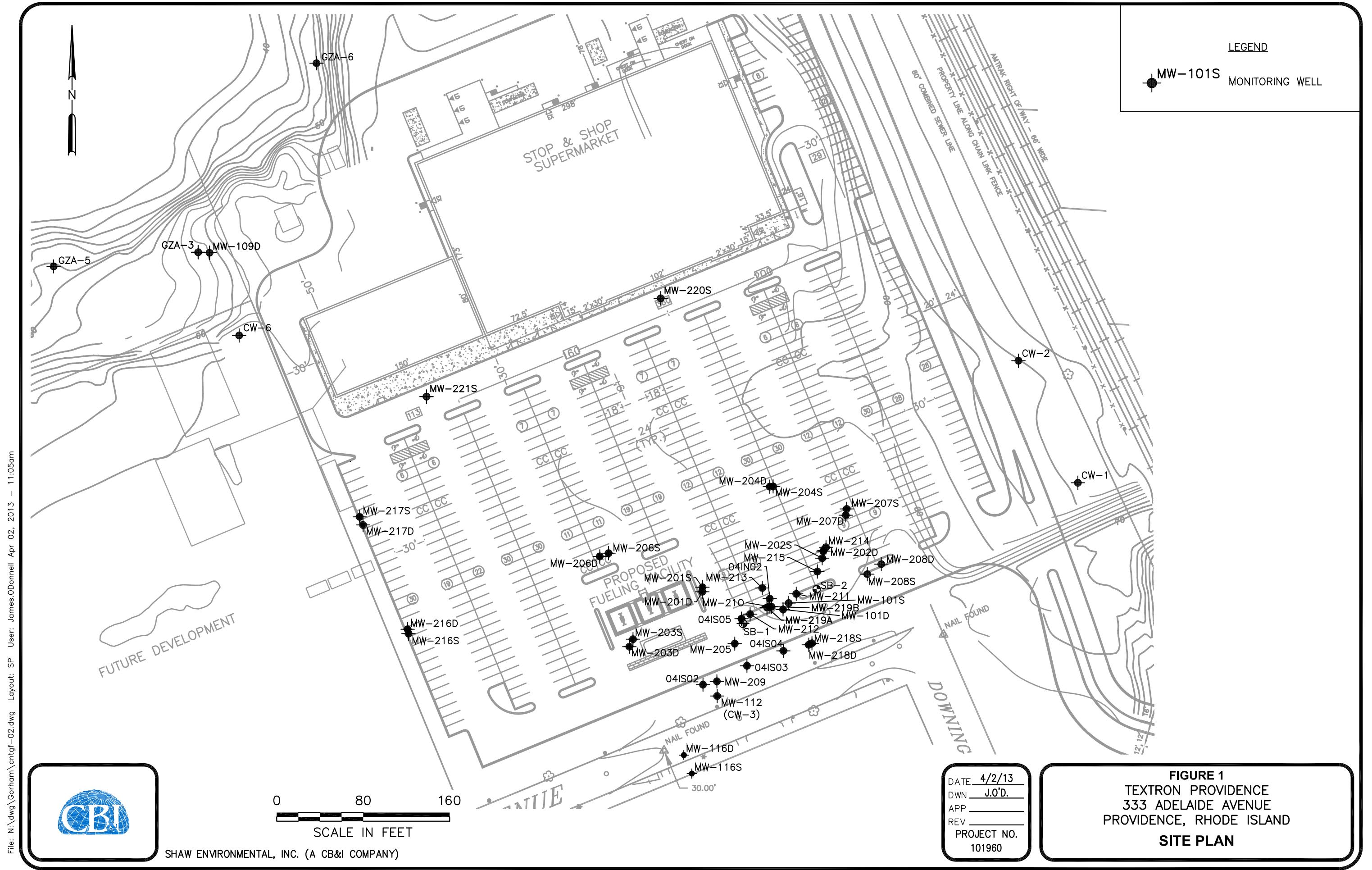
TPH = Total Petroleum Hydrocarbons

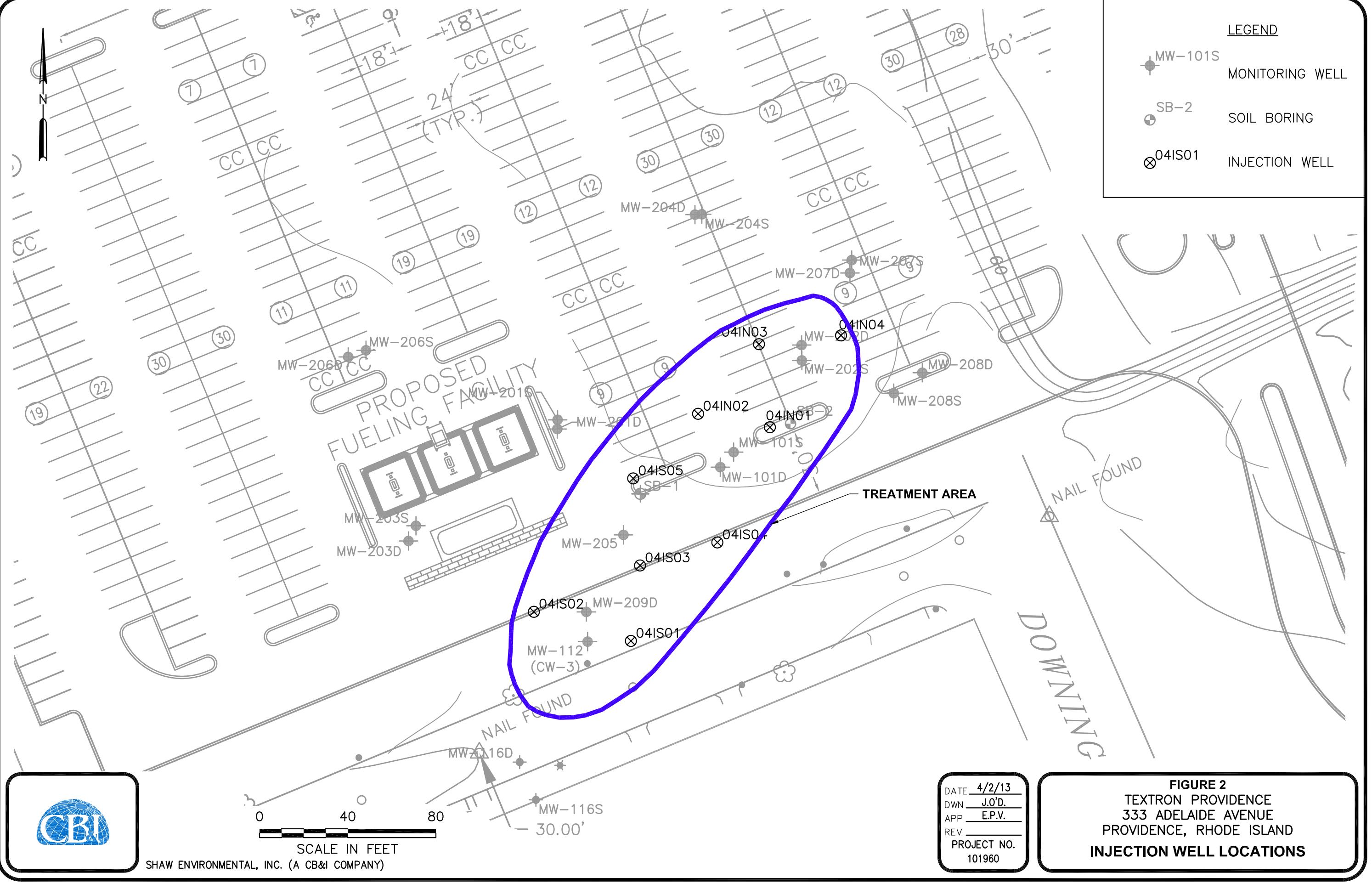
VOCs = Volatile organic compounds

-- = Not analyzed for

D = Result reported from a diluted sample

## **FIGURES**





**ATTACHMENT A**

**LABORATORY REPORTS**



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

May 12, 2015

Edward Van Doren  
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: 15D1393

Enclosed are results of analyses for samples received by the laboratory on April 28, 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 M. Georgantas".

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: Edward Van Doren

REPORT DATE: 5/12/2015

PURCHASE ORDER NUMBER: 835493-000 OP

PROJECT NUMBER: 130274

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15D1393

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	15D1393-01	Ground Water		SW-846 8260C	
MW-116D	15D1393-02	Ground Water		SW-846 8260C	
MW-116S	15D1393-03	Ground Water		SW-846 8260C	



---

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

**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 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**

B121175-BS1, B121175-BSD1

**Acetone**

B121175-BS1, B121175-BSD1

**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:**

**1,2,3-Trichlorobenzene**

15D1393-01[MW-112], 15D1393-02[MW-116D], 15D1393-03[MW-116S], B121175-BLK1, B121175-BS1, B121175-BSD1, B121176-BLK1, B121176-BS1, B121176-BSD1

**1,2-Dibromo-3-chloropropane (DB)**

B121176-BLK1, B121176-BS1, B121176-BSD1

**Tetrahydrofuran**

B121176-BLK1, B121176-BS1, B121176-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:**

**1,2-Dibromo-3-chloropropane (DB)**

B121175-BSD1

**1,4-Dioxane**

B121176-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:**

**Acetone**

15D1393-01[MW-112], 15D1393-02[MW-116D], 15D1393-03[MW-116S], B121175-BLK1, B121175-BS1, B121175-BSD1

**Tetrahydrofuran**

15D1393-01[MW-112], 15D1393-02[MW-116D], 15D1393-03[MW-116S], B121175-BLK1, B121175-BS1, B121175-BSD1

**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:**

**1,2,3-Trichlorobenzene**

15D1393-01[MW-112], 15D1393-02[MW-116D], 15D1393-03[MW-116S], B121175-BLK1, B121175-BS1, B121175-BSD1, B121176-BLK1, B121176-BS1, B121176-BSD1

**1,2-Dibromo-3-chloropropane (DB)**

15D1393-01[MW-112], 15D1393-02[MW-116D], 15D1393-03[MW-116S], B121175-BLK1, B121175-BS1, B121175-BSD1

**2,2-Dichloropropane**

B121176-BLK1, B121176-BS1, B121176-BSD1

**Naphthalene**

15D1393-01[MW-112], 15D1393-02[MW-116D], 15D1393-03[MW-116S], B121175-BLK1, B121175-BS1, B121175-BSD1, B121176-BLK1, B121176-BS1, B121176-BSD1

**Tetrahydrofuran**

B121176-BLK1, B121176-BS1, B121176-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**

B121175-BS1, B121175-BSD1

**Acetone**

B121175-BS1, B121175-BSD1

**tert-Butyl Alcohol (TBA)**

B121175-BS1, B121175-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". The signature is written in a cursive, flowing style.

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: 15D1393

Date Received: 4/28/2015

**Field Sample #:** MW-112

Sampled: 4/24/2015 10:10

**Sample ID:** 15D1393-01

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	250	µg/L	5	R-05	SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Acrylonitrile	ND	25	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
tert-Amyl Methyl Ether (TAME)	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Benzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Bromobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Bromochloromethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Bromodichloromethane	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Bromoform	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Bromomethane	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
2-Butanone (MEK)	ND	100	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
tert-Butyl Alcohol (TBA)	ND	100	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
n-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
sec-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
tert-Butylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Carbon Disulfide	24	20	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Carbon Tetrachloride	ND	25	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Chlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Chlorodibromomethane	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Chloroethane	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Chloroform	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Chloromethane	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
2-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
4-Chlorotoluene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	µg/L	5	V-05	SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2-Dibromoethane (EDB)	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Dibromomethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,3-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,4-Dichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
trans-1,4-Dichloro-2-butene	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2-Dichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
cis-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
trans-1,2-Dichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,3-Dichloropropane	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
2,2-Dichloropropane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1-Dichloropropene	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
cis-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
trans-1,3-Dichloropropene	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Diethyl Ether	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	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: 15D1393

Date Received: 4/28/2015

**Field Sample #:** MW-112

Sampled: 4/24/2015 10:10

**Sample ID:** 15D1393-01**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	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,4-Dioxane	ND	250	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Ethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Hexachlorobutadiene	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
2-Hexanone (MBK)	ND	50	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Isopropylbenzene (Cumene)	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Methylene Chloride	ND	25	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Naphthalene	ND	10	µg/L	5	V-05	SW-846 8260C	5/7/15	5/7/15 16:28	MFF
n-Propylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Styrene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1,2,2-Tetrachloroethane	ND	2.5	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Tetrachloroethylene	1200	500	µg/L	500		SW-846 8260C	5/8/15	5/8/15 10:13	MFF
Tetrahydrofuran	ND	50	µg/L	5	R-05	SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Toluene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2,3-Trichlorobenzene	ND	25	µg/L	5	L-04, V-05	SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,3,5-Trichlorobenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1,1-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1,2-Trichloroethane	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Trichloroethylene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Trichlorofluoromethane (Freon 11)	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2,3-Trichloropropane	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,2,4-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
1,3,5-Trimethylbenzene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Vinyl Chloride	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
m+p Xylene	ND	10	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
o-Xylene	ND	5.0	µg/L	5		SW-846 8260C	5/7/15	5/7/15 16:28	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.0	70-130					5/7/15 16:28		
1,2-Dichloroethane-d4	83.6	70-130					5/8/15 10:13		
Toluene-d8	95.8	70-130					5/8/15 10:13		
Toluene-d8	96.4	70-130					5/7/15 16:28		
4-Bromofluorobenzene	91.8	70-130					5/7/15 16:28		
4-Bromofluorobenzene	92.4	70-130					5/8/15 10:13		



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Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15D1393

Date Received: 4/28/2015

**Field Sample #:** MW-116D

Sampled: 4/24/2015 10:45

**Sample ID:** 15D1393-02

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	R-05	SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	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: 15D1393

Date Received: 4/28/2015

**Field Sample #:** MW-116D

Sampled: 4/24/2015 10:45

**Sample ID:** 15D1393-02Sample 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	5/7/15	5/7/15 12:55	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Hexachlorobutadiene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/7/15	5/7/15 12:55	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 12:55	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.2	70-130	5/7/15 12:55
Toluene-d8	97.8	70-130	5/7/15 12:55
4-Bromofluorobenzene	93.6	70-130	5/7/15 12:55

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

Project Location: Textron, Providence, RI

Sample Description:

Work Order: 15D1393

Date Received: 4/28/2015

**Field Sample #:** MW-116S

Sampled: 4/24/2015 11:20

**Sample ID:** 15D1393-03**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	R-05	SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	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: 15D1393

Date Received: 4/28/2015

**Field Sample #:** MW-116S

Sampled: 4/24/2015 11:20

**Sample ID:** 15D1393-03Sample 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	5/7/15	5/7/15 13:26	MFF
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Hexachlorobutadiene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Naphthalene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/7/15	5/7/15 13:26	MFF
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Tetrahydrofuran	ND	10	µg/L	1	R-05	SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1	L-04, V-05	SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/7/15	5/7/15 13:26	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		5/7/15 13:26
Toluene-d8	98.6	70-130		5/7/15 13:26
4-Bromofluorobenzene	92.0	70-130		5/7/15 13:26



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
15D1393-01 [MW-112]	B121175	1	5.00	05/07/15
15D1393-02 [MW-116D]	B121175	5	5.00	05/07/15
15D1393-03 [MW-116S]	B121175	5	5.00	05/07/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15D1393-01RE1 [MW-112]	B121176	0.01	5.00	05/08/15

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B121175 - SW-846 5030B**

<b>Blank (B121175-BLK1)</b>										Prepared & Analyzed: 05/07/15
Acetone	ND	50	µg/L							R-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							
Bromoform	ND	0.50	µg/L							
Bromomethane	ND	1.0	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							V-05
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	2.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

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 B121175 - SW-846 5030B**

<b>Blank (B121175-BLK1)</b>	Prepared & Analyzed: 05/07/15							
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	24.2		µg/L	25.0	96.6	70-130		
Surrogate: Toluene-d8	24.5		µg/L	25.0	97.9	70-130		
Surrogate: 4-Bromofluorobenzene	22.9		µg/L	25.0	91.5	70-130		

<b>LCS (B121175-BS1)</b>	Prepared & Analyzed: 05/07/15						
Acetone	212	50	µg/L	100	212 *	70-160	L-02, R-05, V-20 †
Acrylonitrile	10.8	5.0	µg/L	10.0	108	70-130	
tert-Amyl Methyl Ether (TAME)	9.84	0.50	µg/L	10.0	98.4	70-130	
Benzene	10.2	1.0	µg/L	10.0	102	70-130	
Bromobenzene	9.96	1.0	µg/L	10.0	99.6	70-130	
Bromoform	9.49	1.0	µg/L	10.0	94.9	70-130	
Bromochloromethane	9.26	0.50	µg/L	10.0	92.6	70-130	
Bromodichloromethane	8.63	1.0	µg/L	10.0	86.3	70-130	
Bromomethane	6.84	2.0	µg/L	10.0	68.4	40-160	†
2-Butanone (MEK)	119	20	µg/L	100	119	40-160	†
tert-Butyl Alcohol (TBA)	123	20	µg/L	100	123	40-160	V-20 †
n-Butylbenzene	8.60	1.0	µg/L	10.0	86.0	70-130	
sec-Butylbenzene	10.4	1.0	µg/L	10.0	104	70-130	
tert-Butylbenzene	9.65	1.0	µg/L	10.0	96.5	70-130	
tert-Butyl Ethyl Ether (TBEE)	10.4	0.50	µg/L	10.0	104	70-130	
Carbon Disulfide	11.6	4.0	µg/L	10.0	116	70-130	
Carbon Tetrachloride	9.68	5.0	µg/L	10.0	96.8	70-130	
Chlorobenzene	10.8	1.0	µg/L	10.0	108	70-130	
Chlorodibromomethane	9.79	0.50	µg/L	10.0	97.9	70-130	
Chloroethane	9.58	2.0	µg/L	10.0	95.8	70-130	
Chloroform	8.54	2.0	µg/L	10.0	85.4	70-130	
Chloromethane	8.31	2.0	µg/L	10.0	83.1	40-160	†
2-Chlorotoluene	10.4	1.0	µg/L	10.0	104	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	RPD Limit	Notes
<b>Batch B121175 - SW-846 5030B</b>										
<b>LCS (B121175-BS1)</b>										
Prepared & Analyzed: 05/07/15										
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	7.30	5.0	µg/L	10.0	73.0	70-130				V-05
1,2-Dibromoethane (EDB)	9.86	0.50	µg/L	10.0	98.6	70-130				
Dibromomethane	10.4	1.0	µg/L	10.0	104	70-130				
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0	104	70-130				
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130				
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130				
trans-1,4-Dichloro-2-butene	10.7	2.0	µg/L	10.0	107	70-130				
Dichlorodifluoromethane (Freon 12)	5.37	2.0	µg/L	10.0	53.7	40-160				†
1,1-Dichloroethane	9.49	1.0	µg/L	10.0	94.9	70-130				
1,2-Dichloroethane	10.1	1.0	µg/L	10.0	101	70-130				
1,1-Dichloroethylene	11.6	1.0	µg/L	10.0	116	70-130				
cis-1,2-Dichloroethylene	9.33	1.0	µg/L	10.0	93.3	70-130				
trans-1,2-Dichloroethylene	11.3	1.0	µg/L	10.0	113	70-130				
1,2-Dichloropropane	10.6	1.0	µg/L	10.0	106	70-130				
1,3-Dichloropropane	9.81	0.50	µg/L	10.0	98.1	70-130				
2,2-Dichloropropane	9.05	1.0	µg/L	10.0	90.5	40-130				†
1,1-Dichloropropene	11.0	2.0	µg/L	10.0	110	70-130				
cis-1,3-Dichloropropene	9.85	0.50	µg/L	10.0	98.5	70-130				
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0	108	70-130				
Diethyl Ether	10.9	2.0	µg/L	10.0	109	70-130				
Diisopropyl Ether (DIPE)	10.3	0.50	µg/L	10.0	103	70-130				
<b>1,4-Dioxane</b>	162	50	µg/L	100	<b>162</b>	*	40-130			L-02, V-20 †
Ethylbenzene	10.6	1.0	µg/L	10.0	106	70-130				
Hexachlorobutadiene	8.54	2.0	µg/L	10.0	85.4	70-130				
2-Hexanone (MBK)	123	10	µg/L	100	123	70-160				†
Isopropylbenzene (Cumene)	11.4	1.0	µg/L	10.0	114	70-130				
p-Isopropyltoluene (p-Cymene)	11.1	1.0	µg/L	10.0	111	70-130				
Methyl tert-Butyl Ether (MTBE)	11.3	1.0	µg/L	10.0	113	70-130				
Methylene Chloride	12.0	5.0	µg/L	10.0	120	70-130				
4-Methyl-2-pentanone (MIBK)	112	10	µg/L	100	112	70-160				†
Naphthalene	5.03	2.0	µg/L	10.0	50.3	40-130				V-05 †
n-Propylbenzene	10.8	1.0	µg/L	10.0	108	70-130				
Styrene	10.9	1.0	µg/L	10.0	109	70-130				
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0	107	70-130				
1,1,2,2-Tetrachloroethane	8.92	0.50	µg/L	10.0	89.2	70-130				
Tetrachloroethylene	11.7	1.0	µg/L	10.0	117	70-130				
Tetrahydrofuran	7.35	10	µg/L	10.0	73.5	70-130				R-05
Toluene	10.6	1.0	µg/L	10.0	106	70-130				
<b>1,2,3-Trichlorobenzene</b>	5.31	5.0	µg/L	10.0	<b>53.1</b>	*	70-130			L-04, V-05
1,2,4-Trichlorobenzene	9.82	1.0	µg/L	10.0	98.2	70-130				
1,3,5-Trichlorobenzene	8.73	1.0	µg/L	10.0	87.3	70-130				
1,1,1-Trichloroethane	8.58	1.0	µg/L	10.0	85.8	70-130				
1,1,2-Trichloroethane	8.89	1.0	µg/L	10.0	88.9	70-130				
Trichloroethylene	9.29	1.0	µg/L	10.0	92.9	70-130				
Trichlorofluoromethane (Freon 11)	10.8	2.0	µg/L	10.0	108	70-130				
1,2,3-Trichloropropane	8.62	2.0	µg/L	10.0	86.2	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.6	1.0	µg/L	10.0	116	70-130				
1,2,4-Trimethylbenzene	9.85	1.0	µg/L	10.0	98.5	70-130				
1,3,5-Trimethylbenzene	10.8	1.0	µg/L	10.0	108	70-130				
Vinyl Chloride	8.44	2.0	µg/L	10.0	84.4	40-160				†

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B121175 - SW-846 5030B</b>									
<b>LCS (B121175-BS1)</b>									
Prepared & Analyzed: 05/07/15									
m+p Xylene	21.4	2.0	µg/L	20.0	107	70-130			
o-Xylene	10.2	1.0	µg/L	10.0	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	22.5		µg/L	25.0	89.9	70-130			
Surrogate: Toluene-d8	24.3		µg/L	25.0	97.3	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0	97.1	70-130			
<b>LCS Dup (B121175-BSD1)</b>									
Prepared & Analyzed: 05/07/15									
Acetone	163	50	µg/L	100	163 *	70-160	26.4 *	25	L-02, R-05, V-20 †
Acrylonitrile	10.3	5.0	µg/L	10.0	103	70-130	5.31	25	
tert-Amyl Methyl Ether (TAME)	10.0	0.50	µg/L	10.0	100	70-130	1.91	25	
Benzene	9.75	1.0	µg/L	10.0	97.5	70-130	4.71	25	
Bromobenzene	9.24	1.0	µg/L	10.0	92.4	70-130	7.50	25	
Bromoform	8.65	1.0	µg/L	10.0	96.5	70-130	1.67	25	
Bromochloromethane	8.59	0.50	µg/L	10.0	85.9	70-130	7.51	25	
Bromodichloromethane	8.20	1.0	µg/L	10.0	82.0	70-130	5.11	25	
Bromomethane	7.78	2.0	µg/L	10.0	77.8	40-160	12.9	25	†
2-Butanone (MEK)	105	20	µg/L	100	105	40-160	12.1	25	†
tert-Butyl Alcohol (TBA)	122	20	µg/L	100	122	40-160	0.945	25	V-20 †
n-Butylbenzene	7.57	1.0	µg/L	10.0	75.7	70-130	12.7	25	
sec-Butylbenzene	9.14	1.0	µg/L	10.0	91.4	70-130	13.2	25	
tert-Butylbenzene	8.64	1.0	µg/L	10.0	86.4	70-130	11.0	25	
tert-Butyl Ethyl Ether (TBEE)	10.2	0.50	µg/L	10.0	102	70-130	2.91	25	
Carbon Disulfide	10.0	4.0	µg/L	10.0	100	70-130	14.9	25	
Carbon Tetrachloride	9.13	5.0	µg/L	10.0	91.3	70-130	5.85	25	
Chlorobenzene	10.3	1.0	µg/L	10.0	103	70-130	4.65	25	
Chlorodibromomethane	9.23	0.50	µg/L	10.0	92.3	70-130	5.89	25	
Chloroethane	9.07	2.0	µg/L	10.0	90.7	70-130	5.47	25	
Chloroform	8.62	2.0	µg/L	10.0	86.2	70-130	0.932	25	
Chloromethane	8.10	2.0	µg/L	10.0	81.0	40-160	2.56	25	†
2-Chlorotoluene	9.75	1.0	µg/L	10.0	97.5	70-130	6.45	25	
4-Chlorotoluene	9.55	1.0	µg/L	10.0	95.5	70-130	6.58	25	
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	6.66	5.0	µg/L	10.0	66.6 *	70-130	9.17	25	L-07, V-05
1,2-Dibromoethane (EDB)	9.38	0.50	µg/L	10.0	93.8	70-130	4.99	25	
Dibromomethane	10.2	1.0	µg/L	10.0	102	70-130	2.05	25	
1,2-Dichlorobenzene	9.49	1.0	µg/L	10.0	94.9	70-130	9.53	25	
1,3-Dichlorobenzene	9.38	1.0	µg/L	10.0	93.8	70-130	12.4	25	
1,4-Dichlorobenzene	9.76	1.0	µg/L	10.0	97.6	70-130	8.63	25	
trans-1,4-Dichloro-2-butene	8.63	2.0	µg/L	10.0	86.3	70-130	21.7	25	
Dichlorodifluoromethane (Freon 12)	6.44	2.0	µg/L	10.0	64.4	40-160	18.1	25	†
1,1-Dichloroethane	8.50	1.0	µg/L	10.0	85.0	70-130	11.0	25	
1,2-Dichloroethane	9.46	1.0	µg/L	10.0	94.6	70-130	6.25	25	
1,1-Dichloroethylene	10.3	1.0	µg/L	10.0	103	70-130	11.8	25	
cis-1,2-Dichloroethylene	8.92	1.0	µg/L	10.0	89.2	70-130	4.49	25	
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0	105	70-130	7.54	25	
1,2-Dichloropropane	10.0	1.0	µg/L	10.0	100	70-130	5.73	25	
1,3-Dichloropropane	9.13	0.50	µg/L	10.0	91.3	70-130	7.18	25	
2,2-Dichloropropane	8.58	1.0	µg/L	10.0	85.8	40-130	5.33	25	†
1,1-Dichloropropene	8.81	2.0	µg/L	10.0	88.1	70-130	22.4	25	
cis-1,3-Dichloropropene	9.15	0.50	µg/L	10.0	91.5	70-130	7.37	25	
trans-1,3-Dichloropropene	9.74	0.50	µg/L	10.0	97.4	70-130	9.95	25	
Diethyl Ether	11.1	2.0	µg/L	10.0	111	70-130	1.82	25	
Diisopropyl Ether (DIPE)	9.80	0.50	µg/L	10.0	98.0	70-130	4.59	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 B121175 - SW-846 5030B**

Prepared & Analyzed: 05/07/15										
LCS Dup (B121175-BSD1)										
1,4-Dioxane	165	50	µg/L	100	165	*	40-130	1.92	50	L-02, V-20 † ‡
Ethylbenzene	9.92	1.0	µg/L	10.0	99.2	70-130	6.63	25		
Hexachlorobutadiene	7.95	2.0	µg/L	10.0	79.5	70-130	7.16	25		
2-Hexanone (MBK)	103	10	µg/L	100	103	70-160	18.3	25		†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0	104	70-130	9.55	25		
p-Isopropyltoluene (p-Cymene)	9.78	1.0	µg/L	10.0	97.8	70-130	12.6	25		
Methyl tert-Butyl Ether (MTBE)	10.9	1.0	µg/L	10.0	109	70-130	3.52	25		
Methylene Chloride	11.3	5.0	µg/L	10.0	113	70-130	5.74	25		
4-Methyl-2-pentanone (MIBK)	111	10	µg/L	100	111	70-160	1.08	25		†
Naphthalene	4.26	2.0	µg/L	10.0	42.6	40-130	16.6	25	V-05	†
n-Propylbenzene	9.90	1.0	µg/L	10.0	99.0	70-130	8.51	25		
Styrene	10.0	1.0	µg/L	10.0	100	70-130	8.59	25		
1,1,1,2-Tetrachloroethane	9.83	1.0	µg/L	10.0	98.3	70-130	8.48	25		
1,1,2,2-Tetrachloroethane	8.64	0.50	µg/L	10.0	86.4	70-130	3.19	25		
Tetrachloroethylene	10.2	1.0	µg/L	10.0	102	70-130	14.4	25		
Tetrahydrofuran	10.2	10	µg/L	10.0	102	70-130	32.8 *	25	R-05	
Toluene	9.49	1.0	µg/L	10.0	94.9	70-130	11.5	25		
<b>1,2,3-Trichlorobenzene</b>	<b>4.94</b>	<b>5.0</b>	<b>µg/L</b>	<b>10.0</b>	<b>49.4</b>	<b>*</b>	<b>70-130</b>	<b>7.22</b>	<b>25</b>	<b>L-04, V-05</b>
1,2,4-Trichlorobenzene	9.44	1.0	µg/L	10.0	94.4	70-130	3.95	25		
1,3,5-Trichlorobenzene	7.77	1.0	µg/L	10.0	77.7	70-130	11.6	25		
1,1,1-Trichloroethane	8.32	1.0	µg/L	10.0	83.2	70-130	3.08	25		
1,1,2-Trichloroethane	8.37	1.0	µg/L	10.0	83.7	70-130	6.03	25		
Trichloroethylene	8.85	1.0	µg/L	10.0	88.5	70-130	4.85	25		
Trichlorofluoromethane (Freon 11)	9.71	2.0	µg/L	10.0	97.1	70-130	10.4	25		
1,2,3-Trichloropropane	8.64	2.0	µg/L	10.0	86.4	70-130	0.232	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7	1.0	µg/L	10.0	107	70-130	7.83	25		
1,2,4-Trimethylbenzene	9.02	1.0	µg/L	10.0	90.2	70-130	8.80	25		
1,3,5-Trimethylbenzene	9.80	1.0	µg/L	10.0	98.0	70-130	9.52	25		
Vinyl Chloride	7.46	2.0	µg/L	10.0	74.6	40-160	12.3	25		†
m+p Xylene	19.7	2.0	µg/L	20.0	98.4	70-130	8.37	25		
o-Xylene	9.45	1.0	µg/L	10.0	94.5	70-130	7.14	25		
Surrogate: 1,2-Dichloroethane-d4	23.0		µg/L	25.0	92.0	70-130				
Surrogate: Toluene-d8	24.3		µg/L	25.0	97.3	70-130				
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0	97.8	70-130				

**Batch B121176 - SW-846 5030B**

Prepared: 05/07/15 Analyzed: 05/08/15										
Blank (B121176-BLK1)										
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							

**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 B121176 - SW-846 5030B**

<b>Blank (B121176-BLK1)</b>									Prepared: 05/07/15 Analyzed: 05/08/15
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						L-04
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						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	2.0	µg/L						
2-Hexanone (MBK)	ND	10	µg/L						
Isopropylbenzene (Cumene)	ND	1.0	µg/L						
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L						
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						V-05
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						L-04, V-05
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						L-04, V-05
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
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**Batch B121176 - SW-846 5030B**

<b>Blank (B121176-BLK1)</b>	Prepared: 05/07/15 Analyzed: 05/08/15							
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	20.8		µg/L	25.0	83.1	70-130		
Surrogate: Toluene-d8	23.6		µg/L	25.0	94.2	70-130		
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0	95.8	70-130		
<b>LCS (B121176-BS1)</b>	Prepared: 05/07/15 Analyzed: 05/08/15							
Acetone	110	50	µg/L	100	110	70-160	†	
Acrylonitrile	8.13	5.0	µg/L	10.0	81.3	70-130		
tert-Amyl Methyl Ether (TAME)	8.50	0.50	µg/L	10.0	85.0	70-130		
Benzene	8.72	1.0	µg/L	10.0	87.2	70-130		
Bromobenzene	9.38	1.0	µg/L	10.0	93.8	70-130		
Bromoform	8.90	1.0	µg/L	10.0	89.0	70-130		
Bromochloromethane	9.15	0.50	µg/L	10.0	91.5	70-130		
Bromodichloromethane	7.76	1.0	µg/L	10.0	77.6	70-130		
Bromomethane	6.25	2.0	µg/L	10.0	62.5	40-160	†	
2-Butanone (MEK)	79.5	20	µg/L	100	79.5	40-160	†	
tert-Butyl Alcohol (TBA)	100	20	µg/L	100	100	40-160	†	
n-Butylbenzene	7.06	1.0	µg/L	10.0	70.6	70-130		
sec-Butylbenzene	8.86	1.0	µg/L	10.0	88.6	70-130		
tert-Butylbenzene	8.59	1.0	µg/L	10.0	85.9	70-130		
tert-Butyl Ethyl Ether (TBEE)	9.24	0.50	µg/L	10.0	92.4	70-130		
Carbon Disulfide	8.81	4.0	µg/L	10.0	88.1	70-130		
Carbon Tetrachloride	8.42	5.0	µg/L	10.0	84.2	70-130		
Chlorobenzene	9.99	1.0	µg/L	10.0	99.9	70-130		
Chlorodibromomethane	8.56	0.50	µg/L	10.0	85.6	70-130		
Chloroethane	8.49	2.0	µg/L	10.0	84.9	70-130		
Chloroform	7.77	2.0	µg/L	10.0	77.7	70-130		
Chloromethane	7.38	2.0	µg/L	10.0	73.8	40-160	†	
2-Chlorotoluene	9.91	1.0	µg/L	10.0	99.1	70-130		
4-Chlorotoluene	9.61	1.0	µg/L	10.0	96.1	70-130		
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	6.89	5.0	µg/L	10.0	68.9	*	70-130	L-04
1,2-Dibromoethane (EDB)	8.41	0.50	µg/L	10.0	84.1	70-130		
Dibromomethane	9.23	1.0	µg/L	10.0	92.3	70-130		
1,2-Dichlorobenzene	9.29	1.0	µg/L	10.0	92.9	70-130		
1,3-Dichlorobenzene	9.17	1.0	µg/L	10.0	91.7	70-130		
1,4-Dichlorobenzene	9.38	1.0	µg/L	10.0	93.8	70-130		
trans-1,4-Dichloro-2-butene	8.10	2.0	µg/L	10.0	81.0	70-130		
Dichlorodifluoromethane (Freon 12)	4.69	2.0	µg/L	10.0	46.9	40-160		†
1,1-Dichloroethane	8.24	1.0	µg/L	10.0	82.4	70-130		
1,2-Dichloroethane	9.09	1.0	µg/L	10.0	90.9	70-130		
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0	101	70-130		
cis-1,2-Dichloroethylene	8.01	1.0	µg/L	10.0	80.1	70-130		
trans-1,2-Dichloroethylene	9.92	1.0	µg/L	10.0	99.2	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 B121176 - SW-846 5030B</b>									
<b>LCS (B121176-BS1)</b>									
Prepared: 05/07/15 Analyzed: 05/08/15									
1,2-Dichloropropane	9.93	1.0	µg/L	10.0	99.3	70-130			
1,3-Dichloropropane	9.10	0.50	µg/L	10.0	91.0	70-130			
2,2-Dichloropropane	5.88	1.0	µg/L	10.0	58.8	40-130			V-05 †
1,1-Dichloropropene	8.87	2.0	µg/L	10.0	88.7	70-130			
cis-1,3-Dichloropropene	8.53	0.50	µg/L	10.0	85.3	70-130			
trans-1,3-Dichloropropene	8.84	0.50	µg/L	10.0	88.4	70-130			
Diethyl Ether	9.09	2.0	µg/L	10.0	90.9	70-130			
Diisopropyl Ether (DIPE)	9.03	0.50	µg/L	10.0	90.3	70-130			
1,4-Dioxane	111	50	µg/L	100	111	40-130			†
Ethylbenzene	9.83	1.0	µg/L	10.0	98.3	70-130			
Hexachlorobutadiene	7.74	2.0	µg/L	10.0	77.4	70-130			
2-Hexanone (MBK)	91.8	10	µg/L	100	91.8	70-160			†
Isopropylbenzene (Cumene)	10.0	1.0	µg/L	10.0	100	70-130			
p-Isopropyltoluene (p-Cymene)	9.60	1.0	µg/L	10.0	96.0	70-130			
Methyl tert-Butyl Ether (MTBE)	9.76	1.0	µg/L	10.0	97.6	70-130			
Methylene Chloride	10.1	5.0	µg/L	10.0	101	70-130			
4-Methyl-2-pentanone (MIBK)	98.6	10	µg/L	100	98.6	70-160			†
Naphthalene	4.78	2.0	µg/L	10.0	47.8	40-130			V-05 †
n-Propylbenzene	9.71	1.0	µg/L	10.0	97.1	70-130			
Styrene	9.79	1.0	µg/L	10.0	97.9	70-130			
1,1,1,2-Tetrachloroethane	9.98	1.0	µg/L	10.0	99.8	70-130			
1,1,2,2-Tetrachloroethane	7.36	0.50	µg/L	10.0	73.6	70-130			
Tetrachloroethylene	9.57	1.0	µg/L	10.0	95.7	70-130			
<b>Tetrahydrofuran</b>	5.06	10	µg/L	10.0	<b>50.6</b> *	70-130			L-04, V-05
Toluene	9.28	1.0	µg/L	10.0	92.8	70-130			
<b>1,2,3-Trichlorobenzene</b>	5.38	5.0	µg/L	10.0	<b>53.8</b> *	70-130			L-04, V-05
1,2,4-Trichlorobenzene	9.47	1.0	µg/L	10.0	94.7	70-130			
1,3,5-Trichlorobenzene	7.61	1.0	µg/L	10.0	76.1	70-130			
1,1,1-Trichloroethane	7.52	1.0	µg/L	10.0	75.2	70-130			
1,1,2-Trichloroethane	7.71	1.0	µg/L	10.0	77.1	70-130			
Trichloroethylene	8.11	1.0	µg/L	10.0	81.1	70-130			
Trichlorofluoromethane (Freon 11)	8.93	2.0	µg/L	10.0	89.3	70-130			
1,2,3-Trichloropropane	7.84	2.0	µg/L	10.0	78.4	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.81	1.0	µg/L	10.0	98.1	70-130			
1,2,4-Trimethylbenzene	8.85	1.0	µg/L	10.0	88.5	70-130			
1,3,5-Trimethylbenzene	9.88	1.0	µg/L	10.0	98.8	70-130			
Vinyl Chloride	7.03	2.0	µg/L	10.0	70.3	40-160			†
m+p Xylene	19.2	2.0	µg/L	20.0	96.0	70-130			
o-Xylene	9.33	1.0	µg/L	10.0	93.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.8		µg/L	25.0	83.2	70-130			
Surrogate: Toluene-d8	23.8		µg/L	25.0	95.3	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0	99.4	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 B121176 - SW-846 5030B</b>										
<b>LCS Dup (B121176-BSD1)</b>										
Prepared: 05/07/15 Analyzed: 05/08/15										
Acetone	130	50	µg/L	100	130	70-160	16.5	25		†
Acrylonitrile	9.56	5.0	µg/L	10.0	95.6	70-130	16.2	25		
tert-Amyl Methyl Ether (TAME)	9.38	0.50	µg/L	10.0	93.8	70-130	9.84	25		
Benzene	9.45	1.0	µg/L	10.0	94.5	70-130	8.04	25		
Bromobenzene	9.35	1.0	µg/L	10.0	93.5	70-130	0.320	25		
Bromoform	9.16	1.0	µg/L	10.0	91.6	70-130	2.88	25		
Bromochloromethane	9.15	0.50	µg/L	10.0	91.5	70-130	0.00	25		
Bromodichloromethane	8.30	1.0	µg/L	10.0	83.0	70-130	6.72	25		
Bromomethane	7.20	2.0	µg/L	10.0	72.0	40-160	14.1	25		†
2-Butanone (MEK)	90.1	20	µg/L	100	90.1	40-160	12.5	25		†
tert-Butyl Alcohol (TBA)	111	20	µg/L	100	111	40-160	9.85	25		†
n-Butylbenzene	7.52	1.0	µg/L	10.0	75.2	70-130	6.31	25		
sec-Butylbenzene	9.58	1.0	µg/L	10.0	95.8	70-130	7.81	25		
tert-Butylbenzene	9.08	1.0	µg/L	10.0	90.8	70-130	5.55	25		
tert-Butyl Ethyl Ether (TBEE)	9.69	0.50	µg/L	10.0	96.9	70-130	4.75	25		
Carbon Disulfide	9.43	4.0	µg/L	10.0	94.3	70-130	6.80	25		
Carbon Tetrachloride	9.07	5.0	µg/L	10.0	90.7	70-130	7.43	25		
Chlorobenzene	10.3	1.0	µg/L	10.0	103	70-130	3.25	25		
Chlorodibromomethane	9.63	0.50	µg/L	10.0	96.3	70-130	11.8	25		
Chloroethane	9.22	2.0	µg/L	10.0	92.2	70-130	8.24	25		
Chloroform	8.25	2.0	µg/L	10.0	82.5	70-130	5.99	25		
Chloromethane	8.28	2.0	µg/L	10.0	82.8	40-160	11.5	25		†
2-Chlorotoluene	9.73	1.0	µg/L	10.0	97.3	70-130	1.83	25		
4-Chlorotoluene	9.47	1.0	µg/L	10.0	94.7	70-130	1.47	25		
<b>1,2-Dibromo-3-chloropropane (DBCP)</b>	6.76	5.0	µg/L	10.0	<b>67.6</b> *	70-130	1.90	25	L-04	
1,2-Dibromoethane (EDB)	9.14	0.50	µg/L	10.0	91.4	70-130	8.32	25		
Dibromomethane	10.6	1.0	µg/L	10.0	106	70-130	13.3	25		
1,2-Dichlorobenzene	9.38	1.0	µg/L	10.0	93.8	70-130	0.964	25		
1,3-Dichlorobenzene	9.45	1.0	µg/L	10.0	94.5	70-130	3.01	25		
1,4-Dichlorobenzene	9.74	1.0	µg/L	10.0	97.4	70-130	3.77	25		
trans-1,4-Dichloro-2-butene	8.19	2.0	µg/L	10.0	81.9	70-130	1.10	25		
Dichlorodifluoromethane (Freon 12)	5.90	2.0	µg/L	10.0	59.0	40-160	22.9	25		†
1,1-Dichloroethane	8.81	1.0	µg/L	10.0	88.1	70-130	6.69	25		
1,2-Dichloroethane	9.51	1.0	µg/L	10.0	95.1	70-130	4.52	25		
1,1-Dichloroethylene	11.0	1.0	µg/L	10.0	110	70-130	8.64	25		
cis-1,2-Dichloroethylene	8.45	1.0	µg/L	10.0	84.5	70-130	5.35	25		
trans-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130	4.44	25		
1,2-Dichloropropane	10.4	1.0	µg/L	10.0	104	70-130	4.43	25		
1,3-Dichloropropane	9.29	0.50	µg/L	10.0	92.9	70-130	2.07	25		
2,2-Dichloropropane	6.23	1.0	µg/L	10.0	62.3	40-130	5.78	25	V-05	†
1,1-Dichloropropene	9.97	2.0	µg/L	10.0	99.7	70-130	11.7	25		
cis-1,3-Dichloropropene	9.07	0.50	µg/L	10.0	90.7	70-130	6.14	25		
trans-1,3-Dichloropropene	9.46	0.50	µg/L	10.0	94.6	70-130	6.78	25		
Diethyl Ether	10.6	2.0	µg/L	10.0	106	70-130	15.8	25		
Diisopropyl Ether (DIPE)	9.50	0.50	µg/L	10.0	95.0	70-130	5.07	25		
<b>1,4-Dioxane</b>	144	50	µg/L	100	<b>144</b> *	40-130	25.5	50	L-07	† ‡
Ethylbenzene	10.0	1.0	µg/L	10.0	100	70-130	2.11	25		
Hexachlorobutadiene	7.99	2.0	µg/L	10.0	79.9	70-130	3.18	25		
2-Hexanone (MBK)	102	10	µg/L	100	102	70-160	10.8	25		†
Isopropylbenzene (Cumene)	10.6	1.0	µg/L	10.0	106	70-130	4.95	25		
p-Isopropyltoluene (p-Cymene)	9.88	1.0	µg/L	10.0	98.8	70-130	2.87	25		
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0	102	70-130	4.11	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 B121176 - SW-846 5030B</b>										
<b>LCS Dup (B121176-BSD1)</b>										
Prepared: 05/07/15 Analyzed: 05/08/15										
Methylene Chloride	11.0	5.0	µg/L	10.0	110	70-130	8.55	25		
4-Methyl-2-pentanone (MIBK)	108	10	µg/L	100	108	70-160	9.30	25		†
Naphthalene	5.34	2.0	µg/L	10.0	53.4	40-130	11.1	25	V-05	†
n-Propylbenzene	10.2	1.0	µg/L	10.0	102	70-130	4.82	25		
Styrene	10.1	1.0	µg/L	10.0	101	70-130	3.02	25		
1,1,1,2-Tetrachloroethane	9.73	1.0	µg/L	10.0	97.3	70-130	2.54	25		
1,1,2,2-Tetrachloroethane	8.33	0.50	µg/L	10.0	83.3	70-130	12.4	25		
Tetrachloroethylene	10.3	1.0	µg/L	10.0	103	70-130	7.35	25		
<b>Tetrahydrofuran</b>	4.69	10	µg/L	10.0	<b>46.9</b> *	70-130	7.59	25	L-04, V-05	
Toluene	9.90	1.0	µg/L	10.0	99.0	70-130	6.47	25		
<b>1,2,3-Trichlorobenzene</b>	6.20	5.0	µg/L	10.0	<b>62.0</b> *	70-130	14.2	25	L-04, V-05	
1,2,4-Trichlorobenzene	9.92	1.0	µg/L	10.0	99.2	70-130	4.64	25		
1,3,5-Trichlorobenzene	8.25	1.0	µg/L	10.0	82.5	70-130	8.07	25		
1,1,1-Trichloroethane	8.51	1.0	µg/L	10.0	85.1	70-130	12.4	25		
1,1,2-Trichloroethane	7.65	1.0	µg/L	10.0	76.5	70-130	0.781	25		
Trichloroethylene	9.11	1.0	µg/L	10.0	91.1	70-130	11.6	25		
Trichlorofluoromethane (Freon 11)	9.54	2.0	µg/L	10.0	95.4	70-130	6.61	25		
1,2,3-Trichloropropane	8.44	2.0	µg/L	10.0	84.4	70-130	7.37	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0	103	70-130	5.26	25		
1,2,4-Trimethylbenzene	9.20	1.0	µg/L	10.0	92.0	70-130	3.88	25		
1,3,5-Trimethylbenzene	10.1	1.0	µg/L	10.0	101	70-130	2.00	25		
Vinyl Chloride	7.34	2.0	µg/L	10.0	73.4	40-160	4.31	25		†
m+p Xylene	19.9	2.0	µg/L	20.0	99.3	70-130	3.43	25		
o-Xylene	9.76	1.0	µg/L	10.0	97.6	70-130	4.50	25		
Surrogate: 1,2-Dichloroethane-d4	21.6		µg/L	25.0	86.2	70-130				
Surrogate: Toluene-d8	24.6		µg/L	25.0	98.4	70-130				
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0	98.9	70-130				

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

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.
- 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
<b><i>SW-846 8260C in Water</i></b>	
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



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b>SW-846 8260C in Water</b>	
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	06/30/2015
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	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

**CHAIN OF CUSTODY RECORD**

15D1393

Phone: 413-525-2332  
Fax: 413-525-6405

ANALYTICAL LABORATORY

Email: info@contestlabs.com  
www.contestlabs.com

Company Name: CR&amp;I Environmental

Address: 150 Royal Street

Canton, MA 02021

Attention: Ed VanDoren

Project Location: Textron Providence, RI

Sampled By: *Danielle A. Connery*  
Project Proposal Provided? (for billing purposes)  
proposal date  yes  no

Telephone: 617-589-4030

Project #: 130274

Client PO#: 835493

DATA DELIVERY (check all that apply)

 FAX EMAIL WEBSITE

Fax #: 617-589-1008

Email: [Edward.VanDoren@cbl.com](mailto:Edward.VanDoren@cbl.com)Format:  PDF EXCEL GIS OTHER

GISKey

Collection  "Enhanced Data Package"

Beginning Date/Time

Ending Date/Time

Composite

Grab Code

Matrix Code

Conc Units

Comments

Date

Comments

**ANALYSIS REQUESTED**

H

V

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

AA

BB

CC

DD

EE

FF

GG

HH

II

JJ

KK

LL

MM

NN

OO

PP

QQ

RR

SS

TT

UU

VV

WW

XX

YY

ZZ

AA

BB

CC

DD

EE

FF

GG

HH

II

JJ

Dissolved Metals

 Field Filtered Lab to Filter Cont. Codes Amber glass Glass Plastic Sterile Vial Summa can Tedlar bag Other Reservation 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

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Canc. Code Box:

H: High, M: Medium, L: Low, C: Clean, U: Unknown

A: Air, S: Soil/Solid, SL: Sludge, O: Other

GW: Groundwater, WW: Wastewater, DW: Drinking Water

PWSID # \_\_\_\_\_

NELAC &amp; 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

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.	N/A	
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.	N/A	
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.	N/A	
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	

Who notified of False statements?

Doc #277 Rev. 4 August 2013

Log-In Technician Initials: PB

Date/Time:

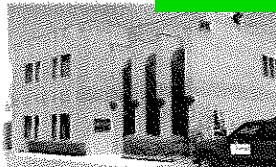
Date/Time: 08 4:28:15

1745

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



Page 1 of 2

**Sample Receipt Checklist**

CLIENT NAME: CB + I

RECEIVED BY: PB

DATE: 4-28-15

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

4.2

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:

Log in

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 \_\_\_\_\_

Time and Date Frozen:

Doc# 277

# Bisulfate \_\_\_\_\_

# DI Water \_\_\_\_\_

Rev. 4 August 2013

# Thiosulfate \_\_\_\_\_

Unpreserved



---

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

May 29, 2015

Edward Van Doren  
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: 15E0664

Enclosed are results of analyses for samples received by the laboratory on May 14, 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 M. Georgantas". The signature is fluid and cursive, with a distinct "J" at the beginning.

James M. Georgantas  
Project Manager

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

REPORT DATE: 5/29/2015

PURCHASE ORDER NUMBER: 835493

PROJECT NUMBER: 130274

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15E0664

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
GZA3	15E0664-01	Ground Water		SW-846 6010C	
				SW-846 8260C	
GZA3 Dup	15E0664-02	Ground Water		SW-846 6010C	
MW109D	15E0664-03	Ground Water		SW-846 6010C	
				SW-846 8260C	
CW-6	15E0664-04	Ground Water		SW-846 8015C	
CW-6 Dup	15E0664-05	Ground Water		SW-846 8015C	
CW-2	15E0664-06	Ground Water		SW-846 8260C	
CW-1	15E0664-07	Ground Water		SW-846 8260C	
MW218D	15E0664-08	Ground Water		SW-846 8260C	
MW218S	15E0664-09	Ground Water		SW-846 8260C	
MW217S	15E0664-10	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.

**SW-846 8015C****Qualifications:****Z-01**

Sample contamination does not match any reference standard. The majority of the contamination exists within C12-C32 of the hydrocarbon range. Chromatogram also shows heavy hydrocarbon peaks within C34-C36 of the hydrocarbon range.

**Analyte & Samples(s) Qualified:****TPH (C9-C36)**

15E0664-04[CW-6], 15E0664-05[CW-6 Dup]

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

B122332-BS1

**RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

15E0664-07[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:****1,2-Dibromo-3-chloropropane (DB)**

15E0664-01[GZA3], 15E0664-03[MW109D], 15E0664-06[CW-2], 15E0664-07[CW-1], 15E0664-08[MW218D], B122332-BLK1, B122332-BS1, B122332-BSD1, S008575-CCV1

**2,2-Dichloropropane**

15E0664-09[MW218S], 15E0664-10[MW217S], B122333-BLK1, B122333-BS1, B122333-BSD1, S008576-CCV1

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

15E0664-09[MW218S], 15E0664-10[MW217S], B122333-BLK1, B122333-BS1, B122333-BSD1, S008576-CCV1

**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:****Chloromethane**

B122332-BS1, B122332-BSD1, B122333-BS1, B122333-BSD1, S008575-CCV1, S008576-CCV1



---

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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".

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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** GZA3

Sampled: 5/12/2015 06:30

**Sample ID:** 15E0664-01

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		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
cis-1,2-Dichloroethylene	8.6	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** GZA3

Sampled: 5/12/2015 06:30

**Sample ID:** 15E0664-01

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	5/22/15	5/22/15 18:21	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
Vinyl Chloride	28	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:21	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	96.5	70-130		5/22/15 18:21
Toluene-d8	99.6	70-130		5/22/15 18:21
4-Bromofluorobenzene	98.9	70-130		5/22/15 18:21



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

Sampled: 5/12/2015 06:30

**Field Sample #:** GZA3

**Sample ID:** 15E0664-01

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	5/19/15	5/20/15 16:06	MJH



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

Sampled: 5/12/2015 06:30

**Field Sample #:** GZA3 Dup

**Sample ID:** 15E0664-02

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	5/19/15	5/20/15 16:11	MJH

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW109D

Sampled: 5/12/2015 07:15

**Sample ID:** 15E0664-03

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	5/22/15	5/22/15 18:47	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	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: 15E0664

Date Received: 5/14/2015

Sampled: 5/12/2015 07:15

**Field Sample #:** MW109D**Sample ID:** 15E0664-03**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	5/22/15	5/22/15 18:47	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 18:47	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.6	70-130		5/22/15 18:47
Toluene-d8	100	70-130		5/22/15 18:47
4-Bromofluorobenzene	98.8	70-130		5/22/15 18:47



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

Sampled: 5/12/2015 07:15

**Field Sample #:** MW109D

**Sample ID:** 15E0664-03

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	5/19/15	5/20/15 16:15	MJH



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

Sampled: 5/12/2015 08:00

**Field Sample #:** CW-6

**Sample ID:** 15E0664-04

Sample Matrix: Ground Water

#### Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	5.8	0.20	mg/L	1	Z-01	SW-846 8015C	5/19/15	5/27/15 20:58	SCS
<b>Surrogates</b>									
o-Terphenyl	68.4		40-140					5/27/15 20:58	



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

Sampled: 5/12/2015 08:00

**Field Sample #:** CW-6 Dup

**Sample ID:** 15E0664-05

Sample Matrix: Ground Water

#### Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	6.4	0.20	mg/L	1	Z-01	SW-846 8015C	5/19/15	5/27/15 21:16	SCS
<b>Surrogates</b>									
o-Terphenyl		% Recovery	Recovery Limits		Flag/Qual			5/27/15 21:16	
		65.1	40-140						

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

**Field Sample #:** CW-2

Sampled: 5/12/2015 08:45

**Sample ID:** 15E0664-06

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		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** CW-2

Sampled: 5/12/2015 08:45

**Sample ID:** 15E0664-06**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	5/22/15	5/22/15 19:15	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:15	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.7	70-130		5/22/15 19:15
Toluene-d8	101	70-130		5/22/15 19:15
4-Bromofluorobenzene	100	70-130		5/22/15 19:15

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

**Field Sample #:** CW-1

Sampled: 5/12/2015 09:30

**Sample ID:** 15E0664-07Sample 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	1200	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Acrylonitrile	ND	120	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
tert-Amyl Methyl Ether (TAME)	14	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Benzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Bromobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Bromochloromethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Bromodichloromethane	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Bromoform	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Bromomethane	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
2-Butanone (MEK)	ND	500	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
tert-Butyl Alcohol (TBA)	ND	500	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
n-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
sec-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
tert-Butylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Carbon Disulfide	ND	100	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Carbon Tetrachloride	ND	120	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Chlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Chlorodibromomethane	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Chloroethane	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Chloroform	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Chloromethane	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
2-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
4-Chlorotoluene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	120	µg/L	25	V-05	SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2-Dibromoethane (EDB)	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Dibromomethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,3-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,4-Dichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
trans-1,4-Dichloro-2-butene	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Dichlorodifluoromethane (Freon 12)	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1-Dichloroethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2-Dichloroethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1-Dichloroethylene	37	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
cis-1,2-Dichloroethylene	160	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
trans-1,2-Dichloroethylene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,3-Dichloropropane	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
2,2-Dichloropropane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1-Dichloropropene	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
cis-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
trans-1,3-Dichloropropene	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Diethyl Ether	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** CW-1

Sampled: 5/12/2015 09:30

**Sample ID:** 15E0664-07Sample 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	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,4-Dioxane	ND	1200	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Ethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Hexachlorobutadiene	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
2-Hexanone (MBK)	ND	250	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Isopropylbenzene (Cumene)	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
p-Isopropyltoluene (p-Cymene)	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Methylene Chloride	ND	120	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
4-Methyl-2-pentanone (MIBK)	ND	250	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Naphthalene	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
n-Propylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Styrene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1,1,2-Tetrachloroethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1,2,2-Tetrachloroethane	ND	12	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Tetrachloroethylene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Tetrahydrofuran	ND	250	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Toluene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2,3-Trichlorobenzene	ND	120	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2,4-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,3,5-Trichlorobenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1,1-Trichloroethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1,2-Trichloroethane	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Trichloroethylene	3100	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Trichlorofluoromethane (Freon 11)	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2,3-Trichloropropane	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,2,4-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
1,3,5-Trimethylbenzene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
Vinyl Chloride	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
m+p Xylene	ND	50	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH
o-Xylene	ND	25	µg/L	25		SW-846 8260C	5/22/15	5/22/15 21:02	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.7	70-130		5/22/15 21:02
Toluene-d8	101	70-130		5/22/15 21:02
4-Bromofluorobenzene	101	70-130		5/22/15 21:02

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW218D

Sampled: 5/12/2015 10:15

**Sample ID:** 15E0664-08

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	5/22/15	5/22/15 19:42	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW218D

Sampled: 5/12/2015 10:15

**Sample ID:** 15E0664-08**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	5/22/15	5/22/15 19:42	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Tetrachloroethylene	23	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Trichloroethylene	3.5	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/22/15 19:42	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.6	70-130		5/22/15 19:42
Toluene-d8	102	70-130		5/22/15 19:42
4-Bromofluorobenzene	98.7	70-130		5/22/15 19:42



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW218S

Sampled: 5/12/2015 11:00

**Sample ID:** 15E0664-09

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		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW218S

Sampled: 5/12/2015 11:00

**Sample ID:** 15E0664-09Sample 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	5/22/15	5/23/15 10:22	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Tetrachloroethylene	7.3	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:22	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.4	70-130		5/23/15 10:22
Toluene-d8	99.9	70-130		5/23/15 10:22
4-Bromofluorobenzene	102	70-130		5/23/15 10:22



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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW217S

Sampled: 5/12/2015 11:45

**Sample ID:** 15E0664-10

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		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
cis-1,2-Dichloroethylene	2.0	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	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: 15E0664

Date Received: 5/14/2015

**Field Sample #:** MW217S

Sampled: 5/12/2015 11:45

**Sample ID:** 15E0664-10Sample 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	5/22/15	5/23/15 10:48	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Tetrachloroethylene	2.8	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Trichloroethylene	2.2	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 10:48	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	96.6	70-130		5/23/15 10:48
Toluene-d8	101	70-130		5/23/15 10:48
4-Bromofluorobenzene	98.8	70-130		5/23/15 10:48



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

### Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15E0664-01 [GZA3]	B122031	50.0	50.0	05/19/15
15E0664-02 [GZA3 Dup]	B122031	50.0	50.0	05/19/15
15E0664-03 [MW109D]	B122031	50.0	50.0	05/19/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15E0664-04 [CW-6]	B122018	1000	1.00	05/19/15
15E0664-05 [CW-6 Dup]	B122018	1000	1.00	05/19/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15E0664-01 [GZA3]	B122332	5	5.00	05/22/15
15E0664-03 [MW109D]	B122332	5	5.00	05/22/15
15E0664-06 [CW-2]	B122332	5	5.00	05/22/15
15E0664-07 [CW-1]	B122332	0.2	5.00	05/22/15
15E0664-08 [MW218D]	B122332	5	5.00	05/22/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15E0664-09 [MW218S]	B122333	5	5.00	05/22/15
15E0664-10 [MW217S]	B122333	5	5.00	05/22/15

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B122332 - SW-846 5030B**

<b>Blank (B122332-BLK1)</b>	Prepared & Analyzed: 05/22/15									
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							
Bromoform	ND	0.50	µg/L							
Bromomethane	ND	1.0	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							V-05
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							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B122332 - SW-846 5030B**

<b>Blank (B122332-BLK1)</b>	Prepared & Analyzed: 05/22/15					
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	23.2		µg/L	25.0	93.0	70-130
Surrogate: Toluene-d8	24.7		µg/L	25.0	98.8	70-130
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0	99.6	70-130

<b>LCS (B122332-BS1)</b>	Prepared & Analyzed: 05/22/15					
Acetone	144	50	µg/L	100	144	70-160
Acrylonitrile	9.29	5.0	µg/L	10.0	92.9	70-130
tert-Amyl Methyl Ether (TAME)	9.24	0.50	µg/L	10.0	92.4	70-130
Benzene	10.7	1.0	µg/L	10.0	107	70-130
Bromobenzene	10.2	1.0	µg/L	10.0	102	70-130
Bromoform	10.8	1.0	µg/L	10.0	108	70-130
Bromochloromethane	9.56	0.50	µg/L	10.0	95.6	70-130
Bromodichloromethane	10.2	1.0	µg/L	10.0	102	70-130
Bromomethane	6.26	2.0	µg/L	10.0	62.6	40-160
2-Butanone (MEK)	122	20	µg/L	100	122	40-160
tert-Butyl Alcohol (TBA)	85.5	20	µg/L	100	85.5	40-160
n-Butylbenzene	10.9	1.0	µg/L	10.0	109	70-130
sec-Butylbenzene	11.2	1.0	µg/L	10.0	112	70-130
tert-Butylbenzene	11.1	1.0	µg/L	10.0	111	70-130
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	µg/L	10.0	101	70-130
<b>Carbon Disulfide</b>	13.5	4.0	µg/L	10.0	135 *	70-130
Carbon Tetrachloride	10.5	5.0	µg/L	10.0	105	70-130
Chlorobenzene	10.9	1.0	µg/L	10.0	109	70-130
Chlorodibromomethane	9.43	0.50	µg/L	10.0	94.3	70-130
Chloroethane	10.1	2.0	µg/L	10.0	101	70-130
Chloroform	10.4	2.0	µg/L	10.0	104	70-130
Chloromethane	8.51	2.0	µg/L	10.0	85.1	40-160
2-Chlorotoluene	10.6	1.0	µg/L	10.0	106	70-130

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch B122332 - SW-846 5030B**

<b>LCS (B122332-BS1)</b>	Prepared & Analyzed: 05/22/15								
4-Chlorotoluene	10.4	1.0	µg/L	10.0	104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.54	5.0	µg/L	10.0	85.4	70-130			V-05
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0	104	70-130			
Dibromomethane	10.2	1.0	µg/L	10.0	102	70-130			
1,2-Dichlorobenzene	10.7	1.0	µg/L	10.0	107	70-130			
1,3-Dichlorobenzene	10.8	1.0	µg/L	10.0	108	70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0	104	70-130			
trans-1,4-Dichloro-2-butene	9.32	2.0	µg/L	10.0	93.2	70-130			
Dichlorodifluoromethane (Freon 12)	7.95	2.0	µg/L	10.0	79.5	40-160			†
1,1-Dichloroethane	10.4	1.0	µg/L	10.0	104	70-130			
1,2-Dichloroethane	9.09	1.0	µg/L	10.0	90.9	70-130			
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130			
cis-1,2-Dichloroethylene	9.88	1.0	µg/L	10.0	98.8	70-130			
trans-1,2-Dichloroethylene	9.86	1.0	µg/L	10.0	98.6	70-130			
1,2-Dichloropropane	9.92	1.0	µg/L	10.0	99.2	70-130			
1,3-Dichloropropane	9.68	0.50	µg/L	10.0	96.8	70-130			
2,2-Dichloropropane	9.78	1.0	µg/L	10.0	97.8	40-130			†
1,1-Dichloropropene	11.0	2.0	µg/L	10.0	110	70-130			
cis-1,3-Dichloropropene	9.98	0.50	µg/L	10.0	99.8	70-130			
trans-1,3-Dichloropropene	11.0	0.50	µg/L	10.0	110	70-130			
Diethyl Ether	10.2	2.0	µg/L	10.0	102	70-130			
Diisopropyl Ether (DIPE)	9.83	0.50	µg/L	10.0	98.3	70-130			
1,4-Dioxane	105	50	µg/L	100	105	40-130			†
Ethylbenzene	10.8	1.0	µg/L	10.0	108	70-130			
Hexachlorobutadiene	10.7	0.50	µg/L	10.0	107	70-130			
2-Hexanone (MBK)	114	10	µg/L	100	114	70-160			†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0	108	70-130			
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0	108	70-130			
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0	101	70-130			
Methylene Chloride	9.96	5.0	µg/L	10.0	99.6	70-130			
4-Methyl-2-pentanone (MIBK)	92.3	10	µg/L	100	92.3	70-160			†
Naphthalene	10.2	2.0	µg/L	10.0	102	40-130			†
n-Propylbenzene	11.3	1.0	µg/L	10.0	113	70-130			
Styrene	10.7	1.0	µg/L	10.0	107	70-130			
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0	107	70-130			
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.0	102	70-130			
Tetrachloroethylene	10.2	1.0	µg/L	10.0	102	70-130			
Tetrahydrofuran	8.48	10	µg/L	10.0	84.8	70-130			
Toluene	10.6	1.0	µg/L	10.0	106	70-130			
1,2,3-Trichlorobenzene	10.2	5.0	µg/L	10.0	102	70-130			
1,2,4-Trichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130			
1,3,5-Trichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130			
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.0	104	70-130			
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0	103	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0	104	70-130			
Trichlorofluoromethane (Freon 11)	10.2	2.0	µg/L	10.0	102	70-130			
1,2,3-Trichloropropane	10.3	2.0	µg/L	10.0	103	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	10.9	1.0	µg/L	10.0	109	70-130			
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.0	106	70-130			
Vinyl Chloride	9.55	2.0	µg/L	10.0	95.5	40-160			†

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
<b>Batch B122332 - SW-846 5030B</b>									
<b>LCS (B122332-BS1)</b>									
Prepared & Analyzed: 05/22/15									
m+p Xylene	21.4	2.0	µg/L	20.0	107	70-130			
o-Xylene	10.6	1.0	µg/L	10.0	106	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.8		µg/L	25.0	95.1	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0	100	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0	97.1	70-130			
<b>LCS Dup (B122332-BSD1)</b>									
Prepared & Analyzed: 05/22/15									
Acetone	148	50	µg/L	100	148	70-160	2.60	25	†
Acrylonitrile	9.69	5.0	µg/L	10.0	96.9	70-130	4.21	25	
tert-Amyl Methyl Ether (TAME)	8.96	0.50	µg/L	10.0	89.6	70-130	3.08	25	
Benzene	10.7	1.0	µg/L	10.0	107	70-130	0.654	25	
Bromobenzene	10.2	1.0	µg/L	10.0	102	70-130	0.196	25	
Bromoform	10.9	1.0	µg/L	10.0	109	70-130	1.66	25	
Bromochloromethane	9.53	0.50	µg/L	10.0	95.3	70-130	0.314	25	
Bromoform	10.5	1.0	µg/L	10.0	105	70-130	2.61	25	
Bromomethane	7.02	2.0	µg/L	10.0	70.2	40-160	11.4	25	†
2-Butanone (MEK)	123	20	µg/L	100	123	40-160	1.04	25	†
tert-Butyl Alcohol (TBA)	80.1	20	µg/L	100	80.1	40-160	6.50	25	†
n-Butylbenzene	11.2	1.0	µg/L	10.0	112	70-130	2.17	25	
sec-Butylbenzene	11.5	1.0	µg/L	10.0	115	70-130	2.20	25	
tert-Butylbenzene	11.3	1.0	µg/L	10.0	113	70-130	1.87	25	
tert-Butyl Ethyl Ether (TBEE)	9.95	0.50	µg/L	10.0	99.5	70-130	1.60	25	
Carbon Disulfide	12.9	4.0	µg/L	10.0	129	70-130	4.63	25	
Carbon Tetrachloride	10.7	5.0	µg/L	10.0	107	70-130	1.70	25	
Chlorobenzene	10.8	1.0	µg/L	10.0	108	70-130	1.01	25	
Chlorodibromomethane	9.43	0.50	µg/L	10.0	94.3	70-130	0.00	25	
Chloroethane	10.5	2.0	µg/L	10.0	105	70-130	4.27	25	
Chloroform	10.3	2.0	µg/L	10.0	103	70-130	1.16	25	
Chloromethane	9.30	2.0	µg/L	10.0	93.0	40-160	8.87	25	V-20 †
2-Chlorotoluene	10.6	1.0	µg/L	10.0	106	70-130	0.378	25	
4-Chlorotoluene	10.4	1.0	µg/L	10.0	104	70-130	0.192	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.82	5.0	µg/L	10.0	88.2	70-130	3.23	25	V-05
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0	103	70-130	1.06	25	
Dibromomethane	10.2	1.0	µg/L	10.0	102	70-130	0.0978	25	
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	2.27	25	
1,3-Dichlorobenzene	11.1	1.0	µg/L	10.0	111	70-130	2.29	25	
1,4-Dichlorobenzene	10.8	1.0	µg/L	10.0	108	70-130	3.50	25	
trans-1,4-Dichloro-2-butene	9.11	2.0	µg/L	10.0	91.1	70-130	2.28	25	
Dichlorodifluoromethane (Freon 12)	7.85	2.0	µg/L	10.0	78.5	40-160	1.27	25	†
1,1-Dichloroethane	10.2	1.0	µg/L	10.0	102	70-130	1.26	25	
1,2-Dichloroethane	9.03	1.0	µg/L	10.0	90.3	70-130	0.662	25	
1,1-Dichloroethylene	10.5	1.0	µg/L	10.0	105	70-130	1.24	25	
cis-1,2-Dichloroethylene	9.81	1.0	µg/L	10.0	98.1	70-130	0.711	25	
trans-1,2-Dichloroethylene	9.84	1.0	µg/L	10.0	98.4	70-130	0.203	25	
1,2-Dichloropropane	10.2	1.0	µg/L	10.0	102	70-130	2.39	25	
1,3-Dichloropropane	9.97	0.50	µg/L	10.0	99.7	70-130	2.95	25	
2,2-Dichloropropane	9.09	1.0	µg/L	10.0	90.9	40-130	7.31	25	†
1,1-Dichloropropene	11.2	2.0	µg/L	10.0	112	70-130	1.44	25	
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0	102	70-130	1.89	25	
trans-1,3-Dichloropropene	10.7	0.50	µg/L	10.0	107	70-130	2.22	25	
Diethyl Ether	10.5	2.0	µg/L	10.0	105	70-130	2.90	25	
Diisopropyl Ether (DIPE)	9.65	0.50	µg/L	10.0	96.5	70-130	1.85	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 B122332 - SW-846 5030B**

LCS Dup (B122332-BSD1)										
Prepared & Analyzed: 05/22/15										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dioxane	88.1	50	µg/L	100	88.1	40-130	17.4	50		† ‡
Ethylbenzene	11.1	1.0	µg/L	10.0	111	70-130	2.93	25		
Hexachlorobutadiene	10.7	0.50	µg/L	10.0	107	70-130	0.467	25		
2-Hexanone (MBK)	114	10	µg/L	100	114	70-160	0.194	25		†
Isopropylbenzene (Cumene)	11.0	1.0	µg/L	10.0	110	70-130	1.93	25		
p-Isopropyltoluene (p-Cymene)	11.2	1.0	µg/L	10.0	112	70-130	3.28	25		
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	µg/L	10.0	100	70-130	0.794	25		
Methylene Chloride	10.3	5.0	µg/L	10.0	103	70-130	3.55	25		
4-Methyl-2-pentanone (MIBK)	95.0	10	µg/L	100	95.0	70-160	2.89	25		†
Naphthalene	10.6	2.0	µg/L	10.0	106	40-130	4.41	25		†
n-Propylbenzene	11.3	1.0	µg/L	10.0	113	70-130	0.177	25		
Styrene	10.8	1.0	µg/L	10.0	108	70-130	1.40	25		
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0	107	70-130	0.187	25		
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0	104	70-130	1.46	25		
Tetrachloroethylene	10.2	1.0	µg/L	10.0	102	70-130	0.294	25		
Tetrahydrofuran	8.47	10	µg/L	10.0	84.7	70-130	0.118	25		
Toluene	10.5	1.0	µg/L	10.0	105	70-130	1.42	25		
1,2,3-Trichlorobenzene	10.2	5.0	µg/L	10.0	102	70-130	0.392	25		
1,2,4-Trichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130	1.57	25		
1,3,5-Trichlorobenzene	10.4	1.0	µg/L	10.0	104	70-130	0.872	25		
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0	102	70-130	1.55	25		
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0	103	70-130	0.485	25		
Trichloroethylene	10.2	1.0	µg/L	10.0	102	70-130	1.46	25		
Trichlorofluoromethane (Freon 11)	10.2	2.0	µg/L	10.0	102	70-130	0.491	25		
1,2,3-Trichloropropane	10.3	2.0	µg/L	10.0	103	70-130	0.583	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.0	1.0	µg/L	10.0	110	70-130	1.10	25		
1,2,4-Trimethylbenzene	10.8	1.0	µg/L	10.0	108	70-130	0.277	25		
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	1.62	25		
Vinyl Chloride	10.1	2.0	µg/L	10.0	101	40-160	5.99	25		†
m+p Xylene	21.7	2.0	µg/L	20.0	108	70-130	1.39	25		
o-Xylene	10.6	1.0	µg/L	10.0	106	70-130	0.189	25		
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0	94.4	70-130				
Surrogate: Toluene-d8	24.8		µg/L	25.0	99.2	70-130				
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0	97.4	70-130				

**Batch B122333 - SW-846 5030B**

Blank (B122333-BLK1)										
Prepared: 05/22/15 Analyzed: 05/23/15										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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							

**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 B122333 - SW-846 5030B**

<b>Blank (B122333-BLK1)</b>									Prepared: 05/22/15 Analyzed: 05/23/15
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						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						
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						

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 B122333 - SW-846 5030B**

<b>Blank (B122333-BLK1)</b>	Prepared: 05/22/15 Analyzed: 05/23/15						
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	24.1		µg/L	25.0	96.4	70-130	
Surrogate: Toluene-d8	24.6		µg/L	25.0	98.2	70-130	
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0	100	70-130	

<b>LCS (B122333-BS1)</b>	Prepared: 05/22/15 Analyzed: 05/23/15						
Acetone	93.7	50	µg/L	100	93.7	70-160	†
Acrylonitrile	10.2	5.0	µg/L	10.0	102	70-130	
tert-Amyl Methyl Ether (TAME)	9.49	0.50	µg/L	10.0	94.9	70-130	
Benzene	10.6	1.0	µg/L	10.0	106	70-130	
Bromobenzene	10.2	1.0	µg/L	10.0	102	70-130	
Bromoform	11.2	1.0	µg/L	10.0	112	70-130	
Bromochloromethane	9.48	0.50	µg/L	10.0	94.8	70-130	
Bromodichloromethane	10.5	1.0	µg/L	10.0	105	70-130	
Bromomethane	6.04	2.0	µg/L	10.0	60.4	40-160	†
2-Butanone (MEK)	93.4	20	µg/L	100	93.4	40-160	†
tert-Butyl Alcohol (TBA)	92.8	20	µg/L	100	92.8	40-160	†
n-Butylbenzene	10.6	1.0	µg/L	10.0	106	70-130	
sec-Butylbenzene	11.2	1.0	µg/L	10.0	112	70-130	
tert-Butylbenzene	11.1	1.0	µg/L	10.0	111	70-130	
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	µg/L	10.0	101	70-130	
Carbon Disulfide	12.9	4.0	µg/L	10.0	129	70-130	
Carbon Tetrachloride	10.5	5.0	µg/L	10.0	105	70-130	
Chlorobenzene	10.7	1.0	µg/L	10.0	107	70-130	
Chlorodibromomethane	9.68	0.50	µg/L	10.0	96.8	70-130	
Chloroethane	10.1	2.0	µg/L	10.0	101	70-130	
Chloroform	10.2	2.0	µg/L	10.0	102	70-130	
Chloromethane	7.78	2.0	µg/L	10.0	77.8	40-160	V-20 †
2-Chlorotoluene	10.5	1.0	µg/L	10.0	105	70-130	
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	
1,2-Dibromo-3-chloropropane (DBCP)	9.25	5.0	µg/L	10.0	92.5	70-130	
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0	106	70-130	
Dibromomethane	10.6	1.0	µg/L	10.0	106	70-130	
1,2-Dichlorobenzene	10.9	1.0	µg/L	10.0	109	70-130	
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0	109	70-130	
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130	
trans-1,4-Dichloro-2-butene	8.07	2.0	µg/L	10.0	80.7	70-130	V-05
Dichlorodifluoromethane (Freon 12)	7.66	2.0	µg/L	10.0	76.6	40-160	†
1,1-Dichloroethane	10.5	1.0	µg/L	10.0	105	70-130	
1,2-Dichloroethane	9.09	1.0	µg/L	10.0	90.9	70-130	
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130	
cis-1,2-Dichloroethylene	9.82	1.0	µg/L	10.0	98.2	70-130	
trans-1,2-Dichloroethylene	9.71	1.0	µg/L	10.0	97.1	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 B122333 - SW-846 5030B</b>										
<b>LCS (B122333-BS1)</b>										
Prepared: 05/22/15 Analyzed: 05/23/15										
1,2-Dichloropropane	10.2	1.0	µg/L	10.0	102	70-130				
1,3-Dichloropropane	9.94	0.50	µg/L	10.0	99.4	70-130				
2,2-Dichloropropane	6.30	1.0	µg/L	10.0	63.0	40-130				V-05 †
1,1-Dichloropropene	10.6	2.0	µg/L	10.0	106	70-130				
cis-1,3-Dichloropropene	9.59	0.50	µg/L	10.0	95.9	70-130				
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.0	102	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	103	50	µg/L	100	103	40-130				†
Ethylbenzene	10.7	1.0	µg/L	10.0	107	70-130				
Hexachlorobutadiene	10.3	0.50	µg/L	10.0	103	70-130				
2-Hexanone (MBK)	97.7	10	µg/L	100	97.7	70-160				†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0	108	70-130				
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0	108	70-130				
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	µg/L	10.0	105	70-130				
Methylene Chloride	10.2	5.0	µg/L	10.0	102	70-130				
4-Methyl-2-pentanone (MIBK)	99.6	10	µg/L	100	99.6	70-160				†
Naphthalene	11.0	2.0	µg/L	10.0	110	40-130				†
n-Propylbenzene	11.1	1.0	µg/L	10.0	111	70-130				
Styrene	10.7	1.0	µg/L	10.0	107	70-130				
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0	106	70-130				
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0	106	70-130				
Tetrachloroethylene	9.91	1.0	µg/L	10.0	99.1	70-130				
Tetrahydrofuran	9.01	10	µg/L	10.0	90.1	70-130				
Toluene	10.5	1.0	µg/L	10.0	105	70-130				
1,2,3-Trichlorobenzene	10.7	5.0	µg/L	10.0	107	70-130				
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130				
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130				
1,1,1-Trichloroethane	10.3	1.0	µg/L	10.0	103	70-130				
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0	107	70-130				
Trichloroethylene	10.4	1.0	µg/L	10.0	104	70-130				
Trichlorofluoromethane (Freon 11)	9.84	2.0	µg/L	10.0	98.4	70-130				
1,2,3-Trichloropropane	10.7	2.0	µg/L	10.0	107	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0	103	70-130				
1,2,4-Trimethylbenzene	10.9	1.0	µg/L	10.0	109	70-130				
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.0	106	70-130				
Vinyl Chloride	8.75	2.0	µg/L	10.0	87.5	40-160				†
m+p Xylene	21.0	2.0	µg/L	20.0	105	70-130				
o-Xylene	10.7	1.0	µg/L	10.0	107	70-130				
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0	94.4	70-130				
Surrogate: Toluene-d8	24.9		µg/L	25.0	99.7	70-130				
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0	98.9	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 B122333 - SW-846 5030B</b>										
<b>LCS Dup (B122333-BSD1)</b>										
Prepared: 05/22/15 Analyzed: 05/23/15										
Acetone	94.5	50	µg/L	100	94.5	70-160	0.850	25		†
Acrylonitrile	9.55	5.0	µg/L	10.0	95.5	70-130	6.48	25		
tert-Amyl Methyl Ether (TAME)	9.21	0.50	µg/L	10.0	92.1	70-130	2.99	25		
Benzene	10.5	1.0	µg/L	10.0	105	70-130	1.42	25		
Bromobenzene	10.1	1.0	µg/L	10.0	101	70-130	0.984	25		
Bromoform	11.1	1.0	µg/L	10.0	111	70-130	1.25	25		
Bromochloromethane	9.30	0.50	µg/L	10.0	93.0	70-130	1.92	25		
Bromodichloromethane	10.3	1.0	µg/L	10.0	103	70-130	2.21	25		
Bromomethane	5.79	2.0	µg/L	10.0	57.9	40-160	4.23	25		†
2-Butanone (MEK)	94.1	20	µg/L	100	94.1	40-160	0.821	25		†
tert-Butyl Alcohol (TBA)	91.1	20	µg/L	100	91.1	40-160	1.95	25		†
n-Butylbenzene	9.94	1.0	µg/L	10.0	99.4	70-130	6.90	25		
sec-Butylbenzene	10.6	1.0	µg/L	10.0	106	70-130	5.22	25		
tert-Butylbenzene	10.8	1.0	µg/L	10.0	108	70-130	3.20	25		
tert-Butyl Ethyl Ether (TBEE)	10.0	0.50	µg/L	10.0	100	70-130	0.694	25		
Carbon Disulfide	12.2	4.0	µg/L	10.0	122	70-130	5.33	25		
Carbon Tetrachloride	10.1	5.0	µg/L	10.0	101	70-130	3.80	25		
Chlorobenzene	10.4	1.0	µg/L	10.0	104	70-130	3.13	25		
Chlorodibromomethane	9.13	0.50	µg/L	10.0	91.3	70-130	5.85	25		
Chloroethane	9.75	2.0	µg/L	10.0	97.5	70-130	3.53	25		
Chloroform	10.1	2.0	µg/L	10.0	101	70-130	1.28	25		
Chloromethane	8.74	2.0	µg/L	10.0	87.4	40-160	11.6	25	V-20	†
2-Chlorotoluene	10.4	1.0	µg/L	10.0	104	70-130	0.862	25		
4-Chlorotoluene	10.0	1.0	µg/L	10.0	100	70-130	1.87	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.71	5.0	µg/L	10.0	87.1	70-130	6.01	25		
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0	103	70-130	2.97	25		
Dibromomethane	9.90	1.0	µg/L	10.0	99.0	70-130	6.55	25		
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	3.28	25		
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130	6.04	25		
1,4-Dichlorobenzene	10.2	1.0	µg/L	10.0	102	70-130	4.43	25		
trans-1,4-Dichloro-2-butene	7.66	2.0	µg/L	10.0	76.6	70-130	5.21	25	V-05	
Dichlorodifluoromethane (Freon 12)	7.50	2.0	µg/L	10.0	75.0	40-160	2.11	25		†
1,1-Dichloroethane	10.3	1.0	µg/L	10.0	103	70-130	2.11	25		
1,2-Dichloroethane	8.87	1.0	µg/L	10.0	88.7	70-130	2.45	25		
1,1-Dichloroethylene	10.3	1.0	µg/L	10.0	103	70-130	0.771	25		
cis-1,2-Dichloroethylene	9.77	1.0	µg/L	10.0	97.7	70-130	0.510	25		
trans-1,2-Dichloroethylene	9.17	1.0	µg/L	10.0	91.7	70-130	5.72	25		
1,2-Dichloropropane	9.65	1.0	µg/L	10.0	96.5	70-130	5.05	25		
1,3-Dichloropropane	9.65	0.50	µg/L	10.0	96.5	70-130	2.96	25		
2,2-Dichloropropane	5.96	1.0	µg/L	10.0	59.6	40-130	5.55	25	V-05	†
1,1-Dichloropropene	10.5	2.0	µg/L	10.0	105	70-130	0.757	25		
cis-1,3-Dichloropropene	9.25	0.50	µg/L	10.0	92.5	70-130	3.61	25		
trans-1,3-Dichloropropene	9.72	0.50	µg/L	10.0	97.2	70-130	4.82	25		
Diethyl Ether	10.3	2.0	µg/L	10.0	103	70-130	0.772	25		
Diisopropyl Ether (DIPE)	9.56	0.50	µg/L	10.0	95.6	70-130	6.18	25		
1,4-Dioxane	103	50	µg/L	100	103	40-130	0.146	50		† ‡
Ethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	2.46	25		
Hexachlorobutadiene	9.70	0.50	µg/L	10.0	97.0	70-130	5.81	25		
2-Hexanone (MBK)	91.5	10	µg/L	100	91.5	70-160	6.59	25		†
Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.0	105	70-130	2.63	25		
p-Isopropyltoluene (p-Cymene)	10.3	1.0	µg/L	10.0	103	70-130	4.81	25		
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0	101	70-130	3.21	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 B122333 - SW-846 5030B</b>										
<b>LCS Dup (B122333-BSD1)</b>										
Prepared: 05/22/15 Analyzed: 05/23/15										
Methylene Chloride	10.1	5.0	µg/L	10.0	101	70-130	0.591	25		
4-Methyl-2-pentanone (MIBK)	94.6	10	µg/L	100	94.6	70-160	5.23	25		†
Naphthalene	10.6	2.0	µg/L	10.0	106	40-130	3.14	25		†
n-Propylbenzene	10.6	1.0	µg/L	10.0	106	70-130	4.51	25		
Styrene	10.4	1.0	µg/L	10.0	104	70-130	2.47	25		
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0	104	70-130	2.58	25		
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0	104	70-130	2.29	25		
Tetrachloroethylene	9.22	1.0	µg/L	10.0	92.2	70-130	7.21	25		
Tetrahydrofuran	9.46	10	µg/L	10.0	94.6	70-130	4.87	25		
Toluene	10.1	1.0	µg/L	10.0	101	70-130	3.68	25		
1,2,3-Trichlorobenzene	10.1	5.0	µg/L	10.0	101	70-130	6.54	25		
1,2,4-Trichlorobenzene	9.59	1.0	µg/L	10.0	95.9	70-130	9.44	25		
1,3,5-Trichlorobenzene	9.39	1.0	µg/L	10.0	93.9	70-130	7.68	25		
1,1,1-Trichloroethane	10.0	1.0	µg/L	10.0	100	70-130	2.85	25		
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130	5.69	25		
Trichloroethylene	9.80	1.0	µg/L	10.0	98.0	70-130	5.65	25		
Trichlorofluoromethane (Freon 11)	9.51	2.0	µg/L	10.0	95.1	70-130	3.41	25		
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0	102	70-130	4.97	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.69	1.0	µg/L	10.0	96.9	70-130	6.49	25		
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	4.70	25		
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0	103	70-130	2.78	25		
Vinyl Chloride	8.27	2.0	µg/L	10.0	82.7	40-160	5.64	25		†
m+p Xylene	20.4	2.0	µg/L	20.0	102	70-130	2.80	25		
o-Xylene	10.4	1.0	µg/L	10.0	104	70-130	2.85	25		
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0	94.4	70-130				
Surrogate: Toluene-d8	25.0		µg/L	25.0	99.8	70-130				
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0	100	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	RPD Limit	Notes
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**Batch B122018 - SW-846 3510C**

<b>Blank (B122018-BLK1)</b>		Prepared: 05/19/15 Analyzed: 05/20/15						
Fuel Oil #2	ND	0.20	mg/L					
TPH (C9-C36)	ND	0.20	mg/L					
Surrogate: o-Terphenyl	0.0823		mg/L	0.100		82.3	40-140	
<b>LCS (B122018-BS1)</b>		Prepared: 05/19/15 Analyzed: 05/20/15						
Fuel Oil #2	0.868	0.20	mg/L	1.00		86.8	40-140	
Surrogate: o-Terphenyl	0.0907		mg/L	0.100		90.7	40-140	
<b>LCS Dup (B122018-BSD1)</b>		Prepared: 05/19/15 Analyzed: 05/20/15						
Fuel Oil #2	0.770	0.20	mg/L	1.00		77.0	40-140	12.0
Surrogate: o-Terphenyl	0.0793		mg/L	0.100		79.3	40-140	25



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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
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**Batch B122031 - SW-846 3005A Dissolved**

<b>Blank (B122031-BLK1)</b>		Prepared: 05/19/15 Analyzed: 05/20/15									
Lead	ND	0.010	mg/L								
<b>LCS (B122031-BS1)</b>		Prepared: 05/19/15 Analyzed: 05/20/15									
Lead	0.510	0.010	mg/L	0.500	102	80-120					
<b>LCS Dup (B122031-BSD1)</b>		Prepared: 05/19/15 Analyzed: 05/20/15									
Lead	0.515	0.010	mg/L	0.500	103	80-120	1.07	20			

**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-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.
- Z-01 Sample contamination does not match any reference standard. The majority of the contamination exists within C12-C32 of the hydrocarbon range. Chromatogram also shows heavy hydrocarbon peaks within C34-C36 of the hydrocarbon range.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 6010C in Water</i></b>	
Lead	CT,NH,NY,NC,ME,VA,NJ
<b><i>SW-846 8260C in Water</i></b>	
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



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### CERTIFICATIONS

#### Certified Analyses included in this Report

##### Analyte

##### Certifications

#### *SW-846 8260C in Water*

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
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	06/30/2015
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	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

**CHAIN OF CUSTODY RECORD**Phone: 413-525-2332  
Fax: 413-525-6405ANALYTICAL LABORATORY  
Email: info@contestlabs.com  
www.contestlabs.com

Company Name: CB&amp;I Environmental

Telephone: 617-589-4030

Project # 130274

Client PO# 835493

DATA DELIVERY (check all that apply)

 FAX EMAIL WEBSITE

Fax # 617-589-1008

Email: Edward.Vandoren@cBI.com

Project Proposal Provided? (for billing purposes)  
proposal date  
 yesAddress: 150 Royal Street  
Canton, MA 02021

Attention: Edward Vandoren

Project Location: Textron Providence, RI

Sampled By:

**ANALYSIS REQUESTED**

Dissolved Metals

 Field Filtered Lab to Filter**\*\*\*Cont. Codes:**

A=Amber Glass

G=glass

P=plastic

ST=sterile

V=vial

S=Summa can

T=tetralar bag

O=Other

**\*\*Preservation**

I=iced

H=HCL

M=Methanol

N=Nitric Acid

S=Sulfuric Acid

B=Sodium bisulfate

X=Na hydroxide

T=Na thiosulfite

O=Other

**\*Matrix Codes:**

GW=groundwater

WW=wastewater

DW=drinking water

A=air

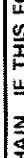
S=soil/solid

SL=sludge

O=other

**Is your project MCP or RCP?**

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

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:  
-----  
----- MCP Form Required RCP Form Required MA State DW Form Required PWSID # \_\_\_\_\_NELAC & AIHA-LAP, LLC  
Accredited**WBE/DBE Certificate**

WBE

DBE

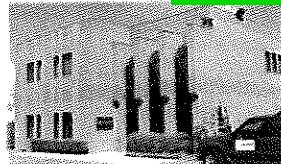
THIS FORM IS NOT FILLED OUT COMPLETELY OR  
INCORRECT TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.  
PLEASE BE CAREFUL, NOT TO CONTAMINATE THIS DOCUMENT

Enriched by: (signature)	Date/Time:	Turnaround	Detection Limit Requirements
	5/22/15	<input type="checkbox"/> 7-Day <input checked="" type="checkbox"/> 10-Day <input type="checkbox"/> Other	Massachusetts:
	11/2	<input checked="" type="checkbox"/> RUSH <input type="checkbox"/> 24-Hr <input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day	Connecticut:
	1/26/15	<input type="checkbox"/> 24-Hr <input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day <input type="checkbox"/> Require lab approval <input type="checkbox"/> Other	Other:
	3/4/15		
	5/14/15		
	5/14/15		

39 Spruce St.  
East Longmeadow, MA. 01028  
P: 413-525-2332  
F: 413-525-6405  
[www.contestlabs.com](http://www.contestlabs.com)



Page 1 of 2

Sample Receipt ChecklistCLIENT NAME: (B&I)RECEIVED BY: RUFDATE: 5/14/151) Was the chain(s) of custody relinquished and signed?  Yes  No  No CoC Included

2) Does the chain agree with the samples?

If not, explain:

3) Are all the samples in good condition?

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/ATemperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun 3.9°C5) 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 \_\_\_\_\_

Permission to subcontract samples? Yes  No 

(Walk-in clients only) if not already approved

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

7) Location where samples are stored: 198) Do all samples have the proper Acid pH:  Yes  No  N/A9) Do all samples have the proper Base pH:  Yes  No  N/A10) 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>4</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	<u>3</u>	Non-ConTest Container	
40 mL Vial - type listed below	<u>21</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl	<u>21</u>	# Methanol	Time and Date Frozen:
Doc# 277	# Bisulfate	# DI Water	
Rev. 4 August 2013	# Thiosulfate	Unpreserved	

**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:

RLT 5/14/15 1700



---

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

May 29, 2015

Edward Van Doren  
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: 15E0666

Enclosed are results of analyses for samples received by the laboratory on May 14, 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 M. Georgantas".

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: Edward Van Doren

REPORT DATE: 5/29/2015

PURCHASE ORDER NUMBER: 835493

PROJECT NUMBER: 130274

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15E0666

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-207S	15E0666-01	Ground Water		SW-846 8260C	
MW-207D	15E0666-02	Ground Water		SW-846 8260C	
MW-202S	15E0666-03	Ground Water		SW-846 8260C	
MW-202D	15E0666-04	Ground Water		SW-846 8260C	
MW-101S	15E0666-05	Ground Water		SW-846 8260C	
MW-101S Dup	15E0666-06	Ground Water		SW-846 8260C	
MW-101D	15E0666-07	Ground Water		SW-846 8260C	
MW-201D	15E0666-08	Ground Water		SW-846 8260C	
MW-209D	15E0666-09	Ground Water		SW-846 8260C	
MW-112	15E0666-10	Ground Water		SW-846 8260C	
MW-116S	15E0666-11	Ground Water		SW-846 8260C	
MW-116D	15E0666-12	Ground Water		SW-846 8260C	
MW-217D	15E0666-13	Ground Water		SW-846 8260C	
MW-216S	15E0666-14	Ground Water		SW-846 8260C	
MW-216D	15E0666-15	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:****RL-11**

Elevated reporting limit due to high concentration of target compounds.

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

15E0666-03[MW-202S], 15E0666-08[MW-201D], 15E0666-10[MW-112], 15E0666-14[MW-216S]

**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-Dibromo-3-chloropropane (DB)**

15E0666-07[MW-101D], 15E0666-09[MW-209D], 15E0666-11[MW-116S], 15E0666-12[MW-116D], B122450-BLK1, B122450-BS1, B122450-BSD1, S008558-CCV1

**2,2-Dichloropropane**

15E0666-01[MW-207S], 15E0666-02[MW-207D], 15E0666-03[MW-202S], 15E0666-04[MW-202D], 15E0666-05[MW-101S], 15E0666-06[MW-101S Dup],  
15E0666-08[MW-201D], 15E0666-10[MW-112], 15E0666-13[MW-217D], 15E0666-14[MW-216S], 15E0666-15[MW-216D], B122333-BLK1, B122333-BS1,  
B122333-BSD1, S008576-CCV1

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

15E0666-01[MW-207S], 15E0666-02[MW-207D], 15E0666-03[MW-202S], 15E0666-04[MW-202D], 15E0666-05[MW-101S], 15E0666-06[MW-101S Dup],  
15E0666-08[MW-201D], 15E0666-10[MW-112], 15E0666-13[MW-217D], 15E0666-14[MW-216S], 15E0666-15[MW-216D], B122333-BLK1, B122333-BS1,  
B122333-BSD1, S008576-CCV1

**V-20**

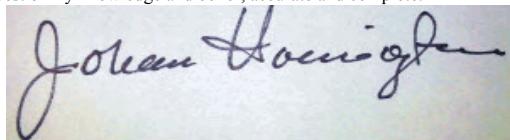
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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

B122333-BS1, B122333-BSD1, B122450-BS1, B122450-BSD1, S008558-CCV1, S008576-CCV1

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.



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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-207S

Sampled: 5/12/2015 06:45

**Sample ID:** 15E0666-01**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		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-207S

Sampled: 5/12/2015 06:45

**Sample ID:** 15E0666-01**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	5/22/15	5/23/15 11:15	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Tetrachloroethylene	8.4	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Trichloroethylene	1.7	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:15	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	94.8	70-130					5/23/15 11:15		
Toluene-d8	100	70-130					5/23/15 11:15		
4-Bromofluorobenzene	99.2	70-130					5/23/15 11:15		

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-207D

Sampled: 5/12/2015 07:15

**Sample ID:** 15E0666-02

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	5/22/15	5/23/15 11:42	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-207D

Sampled: 5/12/2015 07:15

**Sample ID:** 15E0666-02**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	5/22/15	5/23/15 11:42	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Tetrachloroethylene	7.4	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 11:42	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.8	70-130		5/23/15 11:42
Toluene-d8	99.6	70-130		5/23/15 11:42
4-Bromofluorobenzene	98.2	70-130		5/23/15 11:42

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-202S

Sampled: 5/12/2015 07:45

**Sample ID:** 15E0666-03**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	200	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Benzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Bromoform	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Bromomethane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Carbon Disulfide	ND	16	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Chloroform	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Chloromethane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4	V-05	SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-202S

Sampled: 5/12/2015 07:45

**Sample ID:** 15E0666-03Sample 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	5/22/15	5/23/15 15:15	EEH
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Hexachlorobutadiene	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Styrene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Tetrachloroethylene	340	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Toluene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Trichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 15:15	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.5	70-130		5/23/15 15:15
Toluene-d8	98.9	70-130		5/23/15 15:15
4-Bromofluorobenzene	98.8	70-130		5/23/15 15:15

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-202D

Sampled: 5/12/2015 08:15

**Sample ID:** 15E0666-04Sample 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	5/22/15	5/23/15 12:08	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
cis-1,2-Dichloroethylene	5.2	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-202D

Sampled: 5/12/2015 08:15

**Sample ID:** 15E0666-04**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	5/22/15	5/23/15 12:08	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Tetrachloroethylene	130	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Trichloroethylene	8.0	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:08	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.0	70-130		5/23/15 12:08
Toluene-d8	100	70-130		5/23/15 12:08
4-Bromofluorobenzene	100	70-130		5/23/15 12:08

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-101S

Sampled: 5/12/2015 09:00

**Sample ID:** 15E0666-05

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	5/22/15	5/23/15 12:35	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
cis-1,2-Dichloroethylene	67	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-101S

Sampled: 5/12/2015 09:00

**Sample ID:** 15E0666-05

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	5/22/15	5/23/15 12:35	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Tetrachloroethylene	2100	100	µg/L	100		SW-846 8260C	5/22/15	5/26/15 16:51	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Trichloroethylene	18	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 12:35	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	92.5	70-130					5/26/15 16:51		
1,2-Dichloroethane-d4	95.6	70-130					5/23/15 12:35		
Toluene-d8	99.5	70-130					5/26/15 16:51		
Toluene-d8	98.1	70-130					5/23/15 12:35		
4-Bromofluorobenzene	98.0	70-130					5/26/15 16:51		
4-Bromofluorobenzene	99.9	70-130					5/23/15 12:35		

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-101S Dup

Sampled: 5/12/2015 09:00

**Sample ID:** 15E0666-06**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		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
cis-1,2-Dichloroethylene	64	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-101S Dup

Sampled: 5/12/2015 09:00

**Sample ID:** 15E0666-06Sample 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	5/22/15	5/23/15 13:01	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Tetrachloroethylene	1900	100	µg/L	100		SW-846 8260C	5/22/15	5/26/15 19:24	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Trichloroethylene	19	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 13:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.2	70-130		5/26/15 19:24
1,2-Dichloroethane-d4	94.8	70-130		5/23/15 13:01
Toluene-d8	98.7	70-130		5/26/15 19:24
Toluene-d8	97.2	70-130		5/23/15 13:01
4-Bromofluorobenzene	99.6	70-130		5/26/15 19:24
4-Bromofluorobenzene	100	70-130		5/23/15 13:01

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-101D

Sampled: 5/12/2015 09:40

**Sample ID:** 15E0666-07Sample 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	5/26/15	5/26/15 17:22	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-101D

Sampled: 5/12/2015 09:40

**Sample ID:** 15E0666-07**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	5/26/15	5/26/15 17:22	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Tetrachloroethylene	16	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:22	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.8	70-130		5/26/15 17:22
Toluene-d8	101	70-130		5/26/15 17:22
4-Bromofluorobenzene	100	70-130		5/26/15 17:22



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

Project Location: Textron Providence, RI

Date Received: 5/14/2015

**Field Sample #:** MW-201D**Sample ID:** 15E0666-08Sample Matrix: Ground Water

Sample Description:

Work Order: 15E0666

Sampled: 5/12/2015 10:40

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		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Acrylonitrile	ND	500	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
tert-Amyl Methyl Ether (TAME)	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Benzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Bromobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Bromochloromethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Bromodichloromethane	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Bromoform	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Bromomethane	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
2-Butanone (MEK)	ND	2000	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
tert-Butyl Alcohol (TBA)	ND	2000	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
n-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
sec-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
tert-Butylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Carbon Disulfide	ND	400	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Carbon Tetrachloride	ND	500	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Chlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Chlorodibromomethane	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Chloroethane	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Chloroform	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Chloromethane	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
2-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
4-Chlorotoluene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2-Dibromoethane (EDB)	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Dibromomethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,3-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,4-Dichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
trans-1,4-Dichloro-2-butene	ND	200	µg/L	100	V-05	SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2-Dichloroethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
cis-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
trans-1,2-Dichloroethylene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2-Dichloropropane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,3-Dichloropropane	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
2,2-Dichloropropane	ND	100	µg/L	100	V-05	SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1-Dichloropropene	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
cis-1,3-Dichloropropene	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
trans-1,3-Dichloropropene	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Diethyl Ether	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	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: 15E0666

Date Received: 5/14/2015

Sampled: 5/12/2015 10:40

**Field Sample #:** MW-201D**Sample ID:** 15E0666-08Sample 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	5/22/15	5/23/15 16:08	EEH
1,4-Dioxane	ND	5000	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Ethylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Hexachlorobutadiene	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
2-Hexanone (MBK)	ND	1000	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Isopropylbenzene (Cumene)	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Methyl tert-Butyl Ether (MTBE)	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Methylene Chloride	ND	500	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	1000	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Naphthalene	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
n-Propylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Styrene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1,1,2-Tetrachloroethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1,2,2-Tetrachloroethane	ND	50	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Tetrachloroethylene	6100	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Tetrahydrofuran	ND	1000	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Toluene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2,3-Trichlorobenzene	ND	500	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2,4-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,3,5-Trichlorobenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1,1-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1,2-Trichloroethane	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Trichloroethylene	190	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Trichlorofluoromethane (Freon 11)	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2,3-Trichloropropane	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,2,4-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
1,3,5-Trimethylbenzene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
Vinyl Chloride	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
m+p Xylene	ND	200	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH
o-Xylene	ND	100	µg/L	100		SW-846 8260C	5/22/15	5/23/15 16:08	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.7	70-130		5/23/15 16:08
Toluene-d8	98.4	70-130		5/23/15 16:08
4-Bromofluorobenzene	97.6	70-130		5/23/15 16:08

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-209D

Sampled: 5/12/2015 11:10

**Sample ID:** 15E0666-09

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		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
cis-1,2-Dichloroethylene	3.3	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-209D

Sampled: 5/12/2015 11:10

**Sample ID:** 15E0666-09**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	5/26/15	5/26/15 17:52	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Tetrachloroethylene	55	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Trichloroethylene	12	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 17:52	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.1	70-130		5/26/15 17:52
Toluene-d8	99.0	70-130		5/26/15 17:52
4-Bromofluorobenzene	102	70-130		5/26/15 17:52

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-112

Sampled: 5/12/2015 12:00

**Sample ID:** 15E0666-10Sample 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		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Acrylonitrile	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Benzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Bromobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Bromochloromethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Bromodichloromethane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Bromoform	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Bromomethane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
2-Butanone (MEK)	ND	80	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
tert-Butyl Alcohol (TBA)	ND	80	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
n-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
sec-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
tert-Butylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Carbon Disulfide	ND	16	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Carbon Tetrachloride	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Chlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Chlorodibromomethane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Chloroethane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Chloroform	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Chloromethane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
2-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
4-Chlorotoluene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Dibromomethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,3-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,4-Dichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
trans-1,4-Dichloro-2-butene	ND	8.0	µg/L	4	V-05	SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Dichlorodifluoromethane (Freon 12)	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2-Dichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
cis-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
trans-1,2-Dichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2-Dichloropropane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,3-Dichloropropane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
2,2-Dichloropropane	ND	4.0	µg/L	4	V-05	SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1-Dichloropropene	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
cis-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
trans-1,3-Dichloropropene	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Diethyl Ether	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-112

Sampled: 5/12/2015 12:00

**Sample ID:** 15E0666-10Sample 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	5/22/15	5/23/15 17:03	EEH
1,4-Dioxane	ND	200	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Ethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Hexachlorobutadiene	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
2-Hexanone (MBK)	ND	40	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Isopropylbenzene (Cumene)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
p-Isopropyltoluene (p-Cymene)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Methylene Chloride	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
4-Methyl-2-pentanone (MIBK)	ND	40	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Naphthalene	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
n-Propylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Styrene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1,1,2-Tetrachloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Tetrachloroethylene	160	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Tetrahydrofuran	ND	40	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Toluene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2,3-Trichlorobenzene	ND	20	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2,4-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,3,5-Trichlorobenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1,1-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1,2-Trichloroethane	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Trichloroethylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Trichlorofluoromethane (Freon 11)	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2,3-Trichloropropane	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,2,4-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
1,3,5-Trimethylbenzene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
Vinyl Chloride	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
m+p Xylene	ND	8.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH
o-Xylene	ND	4.0	µg/L	4		SW-846 8260C	5/22/15	5/23/15 17:03	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.1	70-130		5/23/15 17:03
Toluene-d8	100	70-130		5/23/15 17:03
4-Bromofluorobenzene	97.1	70-130		5/23/15 17:03

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-116S

Sampled: 5/12/2015 13:00

**Sample ID:** 15E0666-11

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		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-116S

Sampled: 5/12/2015 13:00

**Sample ID:** 15E0666-11Sample 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	5/26/15	5/26/15 18:23	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:23	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.7	70-130		5/26/15 18:23
Toluene-d8	98.8	70-130		5/26/15 18:23
4-Bromofluorobenzene	101	70-130		5/26/15 18:23

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-116D

Sampled: 5/12/2015 13:35

**Sample ID:** 15E0666-12

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	5/26/15	5/26/15 18:56	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Benzene	1.7	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1	V-05	SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-116D

Sampled: 5/12/2015 13:35

**Sample ID:** 15E0666-12

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	5/26/15	5/26/15 18:56	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/26/15	5/26/15 18:56	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.4	70-130		5/26/15 18:56
Toluene-d8	102	70-130		5/26/15 18:56
4-Bromofluorobenzene	103	70-130		5/26/15 18:56

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-217D

Sampled: 5/12/2015 12:30

**Sample ID:** 15E0666-13**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		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
cis-1,2-Dichloroethylene	66	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-217D

Sampled: 5/12/2015 12:30

**Sample ID:** 15E0666-13Sample 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	5/22/15	5/23/15 14:22	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Trichloroethylene	7.2	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:22	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	96.2	70-130		5/23/15 14:22
Toluene-d8	99.3	70-130		5/23/15 14:22
4-Bromofluorobenzene	97.0	70-130		5/23/15 14:22

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-216S

Sampled: 5/12/2015 13:15

**Sample ID:** 15E0666-14Sample 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	5/22/15	5/23/15 17:31	EEH
Acrylonitrile	ND	10	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Benzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Bromobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Bromochloromethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Bromodichloromethane	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Bromoform	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Bromomethane	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
2-Butanone (MEK)	ND	40	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
tert-Butyl Alcohol (TBA)	ND	40	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
n-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
sec-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
tert-Butylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Carbon Disulfide	ND	8.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Carbon Tetrachloride	ND	10	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Chlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Chlorodibromomethane	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Chloroethane	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Chloroform	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Chloromethane	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
2-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
4-Chlorotoluene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Dibromomethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,3-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,4-Dichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	µg/L	2	V-05	SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2-Dichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
cis-1,2-Dichloroethylene	97	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
trans-1,2-Dichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2-Dichloropropane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,3-Dichloropropane	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
2,2-Dichloropropane	ND	2.0	µg/L	2	V-05	SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1-Dichloropropene	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
cis-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
trans-1,3-Dichloropropene	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Diethyl Ether	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-216S

Sampled: 5/12/2015 13:15

**Sample ID:** 15E0666-14Sample 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	5/22/15	5/23/15 17:31	EEH
1,4-Dioxane	ND	100	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Ethylbenzene	2.7	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Hexachlorobutadiene	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
2-Hexanone (MBK)	ND	20	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Isopropylbenzene (Cumene)	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Methylene Chloride	ND	10	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Naphthalene	20	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
n-Propylbenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Styrene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Tetrachloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Tetrahydrofuran	ND	20	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2,3-Trichlorobenzene	ND	10	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2,4-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,3,5-Trichlorobenzene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1,1-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1,2-Trichloroethane	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Trichloroethylene	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2,3-Trichloropropane	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,2,4-Trimethylbenzene	9.8	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
1,3,5-Trimethylbenzene	6.5	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
Vinyl Chloride	ND	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
m+p Xylene	4.8	4.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH
o-Xylene	8.8	2.0	µg/L	2		SW-846 8260C	5/22/15	5/23/15 17:31	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	97.4	70-130		5/23/15 17:31
Toluene-d8	102	70-130		5/23/15 17:31
4-Bromofluorobenzene	102	70-130		5/23/15 17:31

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

Project Location: Textron Providence, RI

Sample Description:

Work Order: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-216D

Sampled: 5/12/2015 14:00

**Sample ID:** 15E0666-15

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	5/22/15	5/23/15 14:48	EEH
Acrylonitrile	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Bromodichloromethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Bromomethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
2-Butanone (MEK)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
tert-Butyl Alcohol (TBA)	ND	20	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Carbon Disulfide	ND	4.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Carbon Tetrachloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Chloromethane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	V-05	SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1-Dichloropropene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
cis-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
trans-1,3-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	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: 15E0666

Date Received: 5/14/2015

**Field Sample #:** MW-216D

Sampled: 5/12/2015 14:00

**Sample ID:** 15E0666-15**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	5/22/15	5/23/15 14:48	EEH
1,4-Dioxane	ND	50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Methylene Chloride	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Naphthalene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Tetrahydrofuran	ND	10	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2,3-Trichlorobenzene	ND	5.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,3,5-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	5/22/15	5/23/15 14:48	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.2	70-130		5/23/15 14:48
Toluene-d8	98.9	70-130		5/23/15 14:48
4-Bromofluorobenzene	101	70-130		5/23/15 14:48

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
15E0666-01 [MW-207S]	B122333	5	5.00	05/22/15
15E0666-02 [MW-207D]	B122333	5	5.00	05/22/15
15E0666-03 [MW-202S]	B122333	1.25	5.00	05/22/15
15E0666-04 [MW-202D]	B122333	5	5.00	05/22/15
15E0666-05 [MW-101S]	B122333	5	5.00	05/22/15
15E0666-06 [MW-101S Dup]	B122333	5	5.00	05/22/15
15E0666-08 [MW-201D]	B122333	0.05	5.00	05/22/15
15E0666-10 [MW-112]	B122333	1.25	5.00	05/22/15
15E0666-13 [MW-217D]	B122333	5	5.00	05/22/15
15E0666-14 [MW-216S]	B122333	2.5	5.00	05/22/15
15E0666-15 [MW-216D]	B122333	5	5.00	05/22/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15E0666-05RE1 [MW-101S]	B122450	0.05	5.00	05/22/15
15E0666-06RE1 [MW-101S Dup]	B122450	0.05	5.00	05/22/15
15E0666-07 [MW-101D]	B122450	5	5.00	05/26/15
15E0666-09 [MW-209D]	B122450	5	5.00	05/26/15
15E0666-11 [MW-116S]	B122450	5	5.00	05/26/15
15E0666-12 [MW-116D]	B122450	5	5.00	05/26/15

**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 B122333 - SW-846 5030B**

<b>Blank (B122333-BLK1)</b>									Prepared: 05/22/15 Analyzed: 05/23/15
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						
Bromoform	ND	0.50	µg/L						
Bromomethane	ND	1.0	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						

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 B122333 - SW-846 5030B**

<b>Blank (B122333-BLK1)</b>									
Prepared: 05/22/15 Analyzed: 05/23/15									
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						
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	24.1		µg/L	25.0	96.4	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0	98.2	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0	100	70-130			

<b>LCS (B122333-BS1)</b>									
Prepared: 05/22/15 Analyzed: 05/23/15									
Acetone	93.7	50	µg/L	100	93.7	70-160			
Acrylonitrile	10.2	5.0	µg/L	10.0	102	70-130			
tert-Amyl Methyl Ether (TAME)	9.49	0.50	µg/L	10.0	94.9	70-130			
Benzene	10.6	1.0	µg/L	10.0	106	70-130			
Bromobenzene	10.2	1.0	µg/L	10.0	102	70-130			
Bromoform	11.2	1.0	µg/L	10.0	112	70-130			
Bromochloromethane	9.48	0.50	µg/L	10.0	94.8	70-130			
Bromodichloromethane	10.5	1.0	µg/L	10.0	105	70-130			
Bromomethane	6.04	2.0	µg/L	10.0	60.4	40-160			
2-Butanone (MEK)	93.4	20	µg/L	100	93.4	40-160			
tert-Butyl Alcohol (TBA)	92.8	20	µg/L	100	92.8	40-160			
n-Butylbenzene	10.6	1.0	µg/L	10.0	106	70-130			
sec-Butylbenzene	11.2	1.0	µg/L	10.0	112	70-130			
tert-Butylbenzene	11.1	1.0	µg/L	10.0	111	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	µg/L	10.0	101	70-130			
Carbon Disulfide	12.9	4.0	µg/L	10.0	129	70-130			
Carbon Tetrachloride	10.5	5.0	µg/L	10.0	105	70-130			
Chlorobenzene	10.7	1.0	µg/L	10.0	107	70-130			
Chlorodibromomethane	9.68	0.50	µg/L	10.0	96.8	70-130			
Chloroethane	10.1	2.0	µg/L	10.0	101	70-130			
Chloroform	10.2	2.0	µg/L	10.0	102	70-130			
Chloromethane	7.78	2.0	µg/L	10.0	77.8	40-160			
2-Chlorotoluene	10.5	1.0	µg/L	10.0	105	70-130			

V-20 †

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 B122333 - SW-846 5030B**

<b>LCS (B122333-BS1)</b>					Prepared: 05/22/15 Analyzed: 05/23/15				
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.25	5.0	µg/L	10.0	92.5	70-130			
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0	106	70-130			
Dibromomethane	10.6	1.0	µg/L	10.0	106	70-130			
1,2-Dichlorobenzene	10.9	1.0	µg/L	10.0	109	70-130			
1,3-Dichlorobenzene	10.9	1.0	µg/L	10.0	109	70-130			
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130			
trans-1,4-Dichloro-2-butene	8.07	2.0	µg/L	10.0	80.7	70-130			V-05
Dichlorodifluoromethane (Freon 12)	7.66	2.0	µg/L	10.0	76.6	40-160			†
1,1-Dichloroethane	10.5	1.0	µg/L	10.0	105	70-130			
1,2-Dichloroethane	9.09	1.0	µg/L	10.0	90.9	70-130			
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0	104	70-130			
cis-1,2-Dichloroethylene	9.82	1.0	µg/L	10.0	98.2	70-130			
trans-1,2-Dichloroethylene	9.71	1.0	µg/L	10.0	97.1	70-130			
1,2-Dichloropropane	10.2	1.0	µg/L	10.0	102	70-130			
1,3-Dichloropropane	9.94	0.50	µg/L	10.0	99.4	70-130			
2,2-Dichloropropane	6.30	1.0	µg/L	10.0	63.0	40-130			V-05
1,1-Dichloropropene	10.6	2.0	µg/L	10.0	106	70-130			†
cis-1,3-Dichloropropene	9.59	0.50	µg/L	10.0	95.9	70-130			
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.0	102	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	103	50	µg/L	100	103	40-130			†
Ethylbenzene	10.7	1.0	µg/L	10.0	107	70-130			
Hexachlorobutadiene	10.3	0.50	µg/L	10.0	103	70-130			
2-Hexanone (MBK)	97.7	10	µg/L	100	97.7	70-160			†
Isopropylbenzene (Cumene)	10.8	1.0	µg/L	10.0	108	70-130			
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0	108	70-130			
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	µg/L	10.0	105	70-130			
Methylene Chloride	10.2	5.0	µg/L	10.0	102	70-130			
4-Methyl-2-pentanone (MIBK)	99.6	10	µg/L	100	99.6	70-160			†
Naphthalene	11.0	2.0	µg/L	10.0	110	40-130			†
n-Propylbenzene	11.1	1.0	µg/L	10.0	111	70-130			
Styrene	10.7	1.0	µg/L	10.0	107	70-130			
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0	106	70-130			
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0	106	70-130			
Tetrachloroethylene	9.91	1.0	µg/L	10.0	99.1	70-130			
Tetrahydrofuran	9.01	10	µg/L	10.0	90.1	70-130			
Toluene	10.5	1.0	µg/L	10.0	105	70-130			
1,2,3-Trichlorobenzene	10.7	5.0	µg/L	10.0	107	70-130			
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130			
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130			
1,1,1-Trichloroethane	10.3	1.0	µg/L	10.0	103	70-130			
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0	107	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0	104	70-130			
Trichlorofluoromethane (Freon 11)	9.84	2.0	µg/L	10.0	98.4	70-130			
1,2,3-Trichloropropane	10.7	2.0	µg/L	10.0	107	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0	103	70-130			
1,2,4-Trimethylbenzene	10.9	1.0	µg/L	10.0	109	70-130			
1,3,5-Trimethylbenzene	10.6	1.0	µg/L	10.0	106	70-130			
Vinyl Chloride	8.75	2.0	µg/L	10.0	87.5	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
<b>Batch B122333 - SW-846 5030B</b>										
<b>LCS (B122333-BS1)</b>										
Prepared: 05/22/15 Analyzed: 05/23/15										
m+p Xylene	21.0	2.0	µg/L	20.0	105	70-130				
o-Xylene	10.7	1.0	µg/L	10.0	107	70-130				
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0	94.4	70-130				
Surrogate: Toluene-d8	24.9		µg/L	25.0	99.7	70-130				
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0	98.9	70-130				
<b>LCS Dup (B122333-BS1D)</b>										
Prepared: 05/22/15 Analyzed: 05/23/15										
Acetone	94.5	50	µg/L	100	94.5	70-160	0.850	25		†
Acrylonitrile	9.55	5.0	µg/L	10.0	95.5	70-130	6.48	25		
tert-Amyl Methyl Ether (TAME)	9.21	0.50	µg/L	10.0	92.1	70-130	2.99	25		
Benzene	10.5	1.0	µg/L	10.0	105	70-130	1.42	25		
Bromobenzene	10.1	1.0	µg/L	10.0	101	70-130	0.984	25		
Bromoform	11.1	1.0	µg/L	10.0	111	70-130	1.25	25		
Bromodichloromethane	9.30	0.50	µg/L	10.0	93.0	70-130	1.92	25		
Bromoform	10.3	1.0	µg/L	10.0	103	70-130	2.21	25		
Bromomethane	5.79	2.0	µg/L	10.0	57.9	40-160	4.23	25		†
2-Butanone (MEK)	94.1	20	µg/L	100	94.1	40-160	0.821	25		†
tert-Butyl Alcohol (TBA)	91.1	20	µg/L	100	91.1	40-160	1.95	25		†
n-Butylbenzene	9.94	1.0	µg/L	10.0	99.4	70-130	6.90	25		
sec-Butylbenzene	10.6	1.0	µg/L	10.0	106	70-130	5.22	25		
tert-Butylbenzene	10.8	1.0	µg/L	10.0	108	70-130	3.20	25		
tert-Butyl Ethyl Ether (TBEE)	10.0	0.50	µg/L	10.0	100	70-130	0.694	25		
Carbon Disulfide	12.2	4.0	µg/L	10.0	122	70-130	5.33	25		
Carbon Tetrachloride	10.1	5.0	µg/L	10.0	101	70-130	3.80	25		
Chlorobenzene	10.4	1.0	µg/L	10.0	104	70-130	3.13	25		
Chlorodibromomethane	9.13	0.50	µg/L	10.0	91.3	70-130	5.85	25		
Chloroethane	9.75	2.0	µg/L	10.0	97.5	70-130	3.53	25		
Chloroform	10.1	2.0	µg/L	10.0	101	70-130	1.28	25		
Chloromethane	8.74	2.0	µg/L	10.0	87.4	40-160	11.6	25	V-20	†
2-Chlorotoluene	10.4	1.0	µg/L	10.0	104	70-130	0.862	25		
4-Chlorotoluene	10.0	1.0	µg/L	10.0	100	70-130	1.87	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.71	5.0	µg/L	10.0	87.1	70-130	6.01	25		
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0	103	70-130	2.97	25		
Dibromomethane	9.90	1.0	µg/L	10.0	99.0	70-130	6.55	25		
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	3.28	25		
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130	6.04	25		
1,4-Dichlorobenzene	10.2	1.0	µg/L	10.0	102	70-130	4.43	25		
trans-1,4-Dichloro-2-butene	7.66	2.0	µg/L	10.0	76.6	70-130	5.21	25	V-05	
Dichlorodifluoromethane (Freon 12)	7.50	2.0	µg/L	10.0	75.0	40-160	2.11	25		†
1,1-Dichloroethane	10.3	1.0	µg/L	10.0	103	70-130	2.11	25		
1,2-Dichloroethane	8.87	1.0	µg/L	10.0	88.7	70-130	2.45	25		
1,1-Dichloroethylene	10.3	1.0	µg/L	10.0	103	70-130	0.771	25		
cis-1,2-Dichloroethylene	9.77	1.0	µg/L	10.0	97.7	70-130	0.510	25		
trans-1,2-Dichloroethylene	9.17	1.0	µg/L	10.0	91.7	70-130	5.72	25		
1,2-Dichloropropane	9.65	1.0	µg/L	10.0	96.5	70-130	5.05	25		
1,3-Dichloropropane	9.65	0.50	µg/L	10.0	96.5	70-130	2.96	25		
2,2-Dichloropropane	5.96	1.0	µg/L	10.0	59.6	40-130	5.55	25	V-05	†
1,1-Dichloropropene	10.5	2.0	µg/L	10.0	105	70-130	0.757	25		
cis-1,3-Dichloropropene	9.25	0.50	µg/L	10.0	92.5	70-130	3.61	25		
trans-1,3-Dichloropropene	9.72	0.50	µg/L	10.0	97.2	70-130	4.82	25		
Diethyl Ether	10.3	2.0	µg/L	10.0	103	70-130	0.772	25		
Diisopropyl Ether (DIPE)	9.56	0.50	µg/L	10.0	95.6	70-130	6.18	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 B122333 - SW-846 5030B**

LCS Dup (B122333-BSD1)										
Prepared: 05/22/15 Analyzed: 05/23/15										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dioxane	103	50	µg/L	100	103	40-130	0.146	50		† ‡
Ethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	2.46	25		
Hexachlorobutadiene	9.70	0.50	µg/L	10.0	97.0	70-130	5.81	25		
2-Hexanone (MBK)	91.5	10	µg/L	100	91.5	70-160	6.59	25		†
Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.0	105	70-130	2.63	25		
p-Isopropyltoluene (p-Cymene)	10.3	1.0	µg/L	10.0	103	70-130	4.81	25		
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0	101	70-130	3.21	25		
Methylene Chloride	10.1	5.0	µg/L	10.0	101	70-130	0.591	25		
4-Methyl-2-pentanone (MIBK)	94.6	10	µg/L	100	94.6	70-160	5.23	25		†
Naphthalene	10.6	2.0	µg/L	10.0	106	40-130	3.14	25		†
n-Propylbenzene	10.6	1.0	µg/L	10.0	106	70-130	4.51	25		
Styrene	10.4	1.0	µg/L	10.0	104	70-130	2.47	25		
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0	104	70-130	2.58	25		
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0	104	70-130	2.29	25		
Tetrachloroethylene	9.22	1.0	µg/L	10.0	92.2	70-130	7.21	25		
Tetrahydrofuran	9.46	10	µg/L	10.0	94.6	70-130	4.87	25		
Toluene	10.1	1.0	µg/L	10.0	101	70-130	3.68	25		
1,2,3-Trichlorobenzene	10.1	5.0	µg/L	10.0	101	70-130	6.54	25		
1,2,4-Trichlorobenzene	9.59	1.0	µg/L	10.0	95.9	70-130	9.44	25		
1,3,5-Trichlorobenzene	9.39	1.0	µg/L	10.0	93.9	70-130	7.68	25		
1,1,1-Trichloroethane	10.0	1.0	µg/L	10.0	100	70-130	2.85	25		
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130	5.69	25		
Trichloroethylene	9.80	1.0	µg/L	10.0	98.0	70-130	5.65	25		
Trichlorofluoromethane (Freon 11)	9.51	2.0	µg/L	10.0	95.1	70-130	3.41	25		
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0	102	70-130	4.97	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.69	1.0	µg/L	10.0	96.9	70-130	6.49	25		
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0	104	70-130	4.70	25		
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0	103	70-130	2.78	25		
Vinyl Chloride	8.27	2.0	µg/L	10.0	82.7	40-160	5.64	25		†
m+p Xylene	20.4	2.0	µg/L	20.0	102	70-130	2.80	25		
o-Xylene	10.4	1.0	µg/L	10.0	104	70-130	2.85	25		
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0	94.4	70-130				
Surrogate: Toluene-d8	25.0		µg/L	25.0	99.8	70-130				
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0	100	70-130				

**Batch B122450 - SW-846 5030B**

Blank (B122450-BLK1)										
Prepared & Analyzed: 05/26/15										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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							

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B122450 - SW-846 5030B**

<b>Blank (B122450-BLK1)</b>										Prepared & Analyzed: 05/26/15
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							V-05
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							
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
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**Batch B122450 - SW-846 5030B**

<b>Blank (B122450-BLK1)</b>	Prepared & Analyzed: 05/26/15								
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	23.4		µg/L	25.0	93.4	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0	101	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0	101	70-130			
<b>LCS (B122450-BS1)</b>	Prepared & Analyzed: 05/26/15								
Acetone	140	50	µg/L	100	140	70-160			†
Acrylonitrile	9.23	5.0	µg/L	10.0	92.3	70-130			
tert-Amyl Methyl Ether (TAME)	9.12	0.50	µg/L	10.0	91.2	70-130			
Benzene	10.1	1.0	µg/L	10.0	101	70-130			
Bromobenzene	9.85	1.0	µg/L	10.0	98.5	70-130			
Bromoform	10.7	1.0	µg/L	10.0	107	70-130			
Bromochloromethane	9.15	0.50	µg/L	10.0	91.5	70-130			
Bromodichloromethane	10.4	1.0	µg/L	10.0	104	70-130			
Bromomethane	6.88	2.0	µg/L	10.0	68.8	40-160			†
2-Butanone (MEK)	122	20	µg/L	100	122	40-160			†
tert-Butyl Alcohol (TBA)	86.4	20	µg/L	100	86.4	40-160			†
n-Butylbenzene	10.3	1.0	µg/L	10.0	103	70-130			
sec-Butylbenzene	10.4	1.0	µg/L	10.0	104	70-130			
tert-Butylbenzene	10.4	1.0	µg/L	10.0	104	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.93	0.50	µg/L	10.0	99.3	70-130			
Carbon Disulfide	12.0	4.0	µg/L	10.0	120	70-130			
Carbon Tetrachloride	9.84	5.0	µg/L	10.0	98.4	70-130			
Chlorobenzene	10.2	1.0	µg/L	10.0	102	70-130			
Chlorodibromomethane	9.36	0.50	µg/L	10.0	93.6	70-130			
Chloroethane	9.39	2.0	µg/L	10.0	93.9	70-130			
Chloroform	9.59	2.0	µg/L	10.0	95.9	70-130			
Chloromethane	9.40	2.0	µg/L	10.0	94.0	40-160			V-20 †
2-Chlorotoluene	10.0	1.0	µg/L	10.0	100	70-130			
4-Chlorotoluene	10.0	1.0	µg/L	10.0	100	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.06	5.0	µg/L	10.0	80.6	70-130			V-05
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.0	100	70-130			
Dibromomethane	9.81	1.0	µg/L	10.0	98.1	70-130			
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0	102	70-130			
1,3-Dichlorobenzene	10.2	1.0	µg/L	10.0	102	70-130			
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130			
trans-1,4-Dichloro-2-butene	8.86	2.0	µg/L	10.0	88.6	70-130			
Dichlorodifluoromethane (Freon 12)	7.02	2.0	µg/L	10.0	70.2	40-160			†
1,1-Dichloroethane	9.81	1.0	µg/L	10.0	98.1	70-130			
1,2-Dichloroethane	8.55	1.0	µg/L	10.0	85.5	70-130			
1,1-Dichloroethylene	9.61	1.0	µg/L	10.0	96.1	70-130			
cis-1,2-Dichloroethylene	9.34	1.0	µg/L	10.0	93.4	70-130			
trans-1,2-Dichloroethylene	8.93	1.0	µg/L	10.0	89.3	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 B122450 - SW-846 5030B</b>										
<b>LCS (B122450-BS1)</b>										
Prepared & Analyzed: 05/26/15										
1,2-Dichloropropane	9.55	1.0	µg/L	10.0	95.5	70-130				
1,3-Dichloropropane	9.67	0.50	µg/L	10.0	96.7	70-130				
2,2-Dichloropropane	8.91	1.0	µg/L	10.0	89.1	40-130				†
1,1-Dichloropropene	10.4	2.0	µg/L	10.0	104	70-130				
cis-1,3-Dichloropropene	9.95	0.50	µg/L	10.0	99.5	70-130				
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.0	106	70-130				
Diethyl Ether	10.0	2.0	µg/L	10.0	100	70-130				
Diisopropyl Ether (DIPE)	9.55	0.50	µg/L	10.0	95.5	70-130				
1,4-Dioxane	101	50	µg/L	100	101	40-130				†
Ethylbenzene	10.3	1.0	µg/L	10.0	103	70-130				
Hexachlorobutadiene	10.5	0.50	µg/L	10.0	105	70-130				
2-Hexanone (MBK)	109	10	µg/L	100	109	70-160				†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0	104	70-130				
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.0	101	70-130				
Methyl tert-Butyl Ether (MTBE)	9.68	1.0	µg/L	10.0	96.8	70-130				
Methylene Chloride	9.39	5.0	µg/L	10.0	93.9	70-130				
4-Methyl-2-pentanone (MIBK)	91.1	10	µg/L	100	91.1	70-160				†
Naphthalene	9.53	2.0	µg/L	10.0	95.3	40-130				†
n-Propylbenzene	10.7	1.0	µg/L	10.0	107	70-130				
Styrene	10.2	1.0	µg/L	10.0	102	70-130				
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0	104	70-130				
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.0	102	70-130				
Tetrachloroethylene	9.64	1.0	µg/L	10.0	96.4	70-130				
Tetrahydrofuran	8.33	10	µg/L	10.0	83.3	70-130				
Toluene	9.93	1.0	µg/L	10.0	99.3	70-130				
1,2,3-Trichlorobenzene	9.54	5.0	µg/L	10.0	95.4	70-130				
1,2,4-Trichlorobenzene	9.74	1.0	µg/L	10.0	97.4	70-130				
1,3,5-Trichlorobenzene	9.97	1.0	µg/L	10.0	99.7	70-130				
1,1,1-Trichloroethane	9.77	1.0	µg/L	10.0	97.7	70-130				
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130				
Trichloroethylene	9.54	1.0	µg/L	10.0	95.4	70-130				
Trichlorofluoromethane (Freon 11)	9.25	2.0	µg/L	10.0	92.5	70-130				
1,2,3-Trichloropropane	9.92	2.0	µg/L	10.0	99.2	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1	1.0	µg/L	10.0	101	70-130				
1,2,4-Trimethylbenzene	10.0	1.0	µg/L	10.0	100	70-130				
1,3,5-Trimethylbenzene	10.2	1.0	µg/L	10.0	102	70-130				
Vinyl Chloride	8.35	2.0	µg/L	10.0	83.5	40-160				†
m+p Xylene	20.4	2.0	µg/L	20.0	102	70-130				
o-Xylene	10.2	1.0	µg/L	10.0	102	70-130				
Surrogate: 1,2-Dichloroethane-d4	23.3		µg/L	25.0	93.1	70-130				
Surrogate: Toluene-d8	24.7		µg/L	25.0	98.8	70-130				
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0	99.1	70-130				

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B122450 - SW-846 5030B</b>										
<b>LCS Dup (B122450-BSD1)</b>										
Prepared & Analyzed: 05/26/15										
Acetone	141	50	µg/L	100	141	70-160	0.420	25		†
Acrylonitrile	9.44	5.0	µg/L	10.0	94.4	70-130	2.25	25		
tert-Amyl Methyl Ether (TAME)	9.23	0.50	µg/L	10.0	92.3	70-130	1.20	25		
Benzene	10.4	1.0	µg/L	10.0	104	70-130	2.92	25		
Bromobenzene	10.1	1.0	µg/L	10.0	101	70-130	2.21	25		
Bromoform	10.9	1.0	µg/L	10.0	109	70-130	1.58	25		
Bromochloromethane	9.39	0.50	µg/L	10.0	93.9	70-130	2.59	25		
Bromodichloromethane	10.3	1.0	µg/L	10.0	103	70-130	0.579	25		
Bromomethane	6.90	2.0	µg/L	10.0	69.0	40-160	0.290	25		†
2-Butanone (MEK)	123	20	µg/L	100	123	40-160	1.04	25		†
tert-Butyl Alcohol (TBA)	87.6	20	µg/L	100	87.6	40-160	1.33	25		†
n-Butylbenzene	10.7	1.0	µg/L	10.0	107	70-130	4.00	25		
sec-Butylbenzene	10.9	1.0	µg/L	10.0	109	70-130	4.41	25		
tert-Butylbenzene	10.7	1.0	µg/L	10.0	107	70-130	2.84	25		
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	µg/L	10.0	101	70-130	1.60	25		
Carbon Disulfide	12.2	4.0	µg/L	10.0	122	70-130	1.90	25		
Carbon Tetrachloride	10.2	5.0	µg/L	10.0	102	70-130	3.30	25		
Chlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	2.71	25		
Chlorodibromomethane	9.38	0.50	µg/L	10.0	93.8	70-130	0.213	25		
Chloroethane	9.70	2.0	µg/L	10.0	97.0	70-130	3.25	25		
Chloroform	9.91	2.0	µg/L	10.0	99.1	70-130	3.28	25		
Chloromethane	10.9	2.0	µg/L	10.0	109	40-160	14.7	25	V-20	†
2-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	1.78	25		
4-Chlorotoluene	10.2	1.0	µg/L	10.0	102	70-130	2.17	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.35	5.0	µg/L	10.0	83.5	70-130	3.53	25	V-05	
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0	103	70-130	2.85	25		
Dibromomethane	10.1	1.0	µg/L	10.0	101	70-130	2.62	25		
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0	104	70-130	2.91	25		
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	2.70	25		
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0	105	70-130	4.27	25		
trans-1,4-Dichloro-2-butene	8.98	2.0	µg/L	10.0	89.8	70-130	1.35	25		
Dichlorodifluoromethane (Freon 12)	7.42	2.0	µg/L	10.0	74.2	40-160	5.54	25		†
1,1-Dichloroethane	10.1	1.0	µg/L	10.0	101	70-130	2.91	25		
1,2-Dichloroethane	8.79	1.0	µg/L	10.0	87.9	70-130	2.77	25		
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0	101	70-130	5.37	25		
cis-1,2-Dichloroethylene	9.46	1.0	µg/L	10.0	94.6	70-130	1.28	25		
trans-1,2-Dichloroethylene	9.53	1.0	µg/L	10.0	95.3	70-130	6.50	25		
1,2-Dichloropropane	9.72	1.0	µg/L	10.0	97.2	70-130	1.76	25		
1,3-Dichloropropane	9.53	0.50	µg/L	10.0	95.3	70-130	1.46	25		
2,2-Dichloropropane	9.11	1.0	µg/L	10.0	91.1	40-130	2.22	25		†
1,1-Dichloropropene	10.6	2.0	µg/L	10.0	106	70-130	1.53	25		
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0	101	70-130	1.20	25		
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0	108	70-130	2.06	25		
Diethyl Ether	10.1	2.0	µg/L	10.0	101	70-130	0.894	25		
Diisopropyl Ether (DIPE)	9.66	0.50	µg/L	10.0	96.6	70-130	1.15	25		
1,4-Dioxane	103	50	µg/L	100	103	40-130	1.95	50		† ‡
Ethylbenzene	10.5	1.0	µg/L	10.0	105	70-130	2.50	25		
Hexachlorobutadiene	11.2	0.50	µg/L	10.0	112	70-130	6.65	25		
2-Hexanone (MBK)	111	10	µg/L	100	111	70-160	1.70	25		†
Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.0	105	70-130	1.05	25		
p-Isopropyltoluene (p-Cymene)	10.6	1.0	µg/L	10.0	106	70-130	5.10	25		
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0	101	70-130	4.25	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 B122450 - SW-846 5030B</b>										
<b>LCS Dup (B122450-BSD1)</b>										
Prepared & Analyzed: 05/26/15										
Methylene Chloride	9.89	5.0	µg/L	10.0	98.9	70-130	5.19	25		
4-Methyl-2-pentanone (MIBK)	91.0	10	µg/L	100	91.0	70-160	0.0878	25		†
Naphthalene	10.1	2.0	µg/L	10.0	101	40-130	5.81	25		†
n-Propylbenzene	10.8	1.0	µg/L	10.0	108	70-130	1.58	25		
Styrene	10.4	1.0	µg/L	10.0	104	70-130	1.26	25		
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0	106	70-130	1.52	25		
1,1,2,2-Tetrachloroethane	10.1	0.50	µg/L	10.0	101	70-130	0.885	25		
Tetrachloroethylene	9.85	1.0	µg/L	10.0	98.5	70-130	2.15	25		
Tetrahydrofuran	8.72	10	µg/L	10.0	87.2	70-130	4.57	25		
Toluene	10.2	1.0	µg/L	10.0	102	70-130	2.19	25		
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0	103	70-130	7.27	25		
1,2,4-Trichlorobenzene	9.99	1.0	µg/L	10.0	99.9	70-130	2.53	25		
1,3,5-Trichlorobenzene	10.1	1.0	µg/L	10.0	101	70-130	1.30	25		
1,1,1-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130	3.62	25		
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0	101	70-130	0.0989	25		
Trichloroethylene	9.81	1.0	µg/L	10.0	98.1	70-130	2.79	25		
Trichlorofluoromethane (Freon 11)	9.40	2.0	µg/L	10.0	94.0	70-130	1.61	25		
1,2,3-Trichloropropane	9.99	2.0	µg/L	10.0	99.9	70-130	0.703	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0	108	70-130	6.80	25		
1,2,4-Trimethylbenzene	10.2	1.0	µg/L	10.0	102	70-130	1.87	25		
1,3,5-Trimethylbenzene	10.2	1.0	µg/L	10.0	102	70-130	0.785	25		
Vinyl Chloride	8.52	2.0	µg/L	10.0	85.2	40-160	2.02	25		†
m+p Xylene	20.2	2.0	µg/L	20.0	101	70-130	0.986	25		
o-Xylene	10.4	1.0	µg/L	10.0	104	70-130	1.75	25		
Surrogate: 1,2-Dichloroethane-d4	23.6		µg/L	25.0	94.3	70-130				
Surrogate: Toluene-d8	25.1		µg/L	25.0	100	70-130				
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0	100	70-130				

**FLAG/QUALIFIER SUMMARY**

\* QC result is outside of established limits.

† Wide recovery limits established for difficult compound.

‡ Wide RPD limits established for difficult compound.

# Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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.



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

#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b><i>SW-846 8260C in Water</i></b>	
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



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b>SW-846 8260C in Water</b>	
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	06/30/2015
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	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015



# CHAIN OF CUSTODY RECORD

Phone: 413-525-2332  
Fax: 413-525-6405

Email: info@contestlabs.com

ANALYTICAL LABORATORY

www.contestlabs.com

Company Name: CB&I Environmental

Telephone: 617-589-4030

Project # 130274

Client PO# 835493

**DATA DELIVERY** (check all that apply)

FAX

EMAIL

WEBSITE

Fax # 617-589-1008

Email: Edward.Vandoren@CBI.com

Format:  PDF  EXCEL  GIS

OTHER  GISKey

Collection:  "Enhanced Data Package"

VOC's by EPA 8260B

**ANALYSIS REQUESTED**

Address: 150 Royal Street

Canton, MA 02021

Attention: Edward Vandoren

Project Location: Textron Providence, RI

Sampled By: Dan Levy

Project Proposal Provided? (for billing purposes)

Yes \_\_\_\_\_ proposal date \_\_\_\_\_

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

Turnaround Time: \_\_\_\_\_

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

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

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

Turnaround Time: \_\_\_\_\_

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

Turnaround Time: \_\_\_\_\_

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

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

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

# of Containers

\*\* Preservation

\*\*\*Container Code

Dissolved Metals

Field Filtered

Lab to Filter

\*\*\*Cont. Code:

Amber glass

Green glass

Plastic

sterile

vial

summa can

tarellar bag

Other

\*Preservation

I = iced

H = HCl

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium bisulfate

X = Na hydroxide

T = Na thiosulfate

O = Other

GW = groundwater

WW = wastewater

DW = drinking water

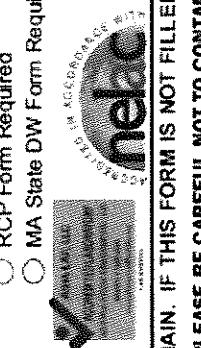
A = air

S = soil/solid

SL = sludge

O = other

39 Spruce Street  
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Rev 04.05.12  
15E0666



WBE/DBE Certificate

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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.

## Is your project MCP or RCP?

MCP Form Required

RCP Form Required

MA State DW Form Required

PWSID # \_\_\_\_\_

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

124-Hr  148-Hr

172-Hr  14-Day

Require lab approval

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



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



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**Sample Receipt Checklist**

CLIENT NAME: CB &amp; I

RECEIVED BY: RLF

DATE: 5/4/15

- 1) Was the chain(s) of custody relinquished and signed?  Yes  No      No CoC Included
- 2) Does the chain agree with the samples?  
If not, explain:
- 3) Are all the samples in good condition?  
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 3.2°C

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

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

- 6) Are there any RUSH or SHORT HOLDING TIME samples?  Yes  No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

- 7) Location where samples are stored: 19

Permission to subcontract samples? Yes  No

(Walk-in clients only) if not already approved

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

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

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

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

**Containers received at Con-Test**

	# of containers		# of containers
1 Liter Amber		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	45	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl	45	# Methanol	Time and Date Frozen:
Doc# 277	# Bisulfate	# DI Water	
Rev. 4 August 2013	# Thiosulfate	Unpreserved	

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.	T	
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	

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials:

Date/Time:

RLF 5/14/15 1700