



Department of
Environmental
Conservation

INTERIM REMEDIAL MEASURES REPORT

Crusher Road Site
Town of Bedford, New York

NYSDEC Site No. 360127

June 2016

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Crusher Road Site No. 360127



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ACRONYMS AND ABBREVIATIONS

AA	Alternatives analysis
Arcadis	Arcadis CE, Inc.
bgs	Below ground surface
CO ₂	Carbon dioxide
DHS	Department of Homeland Security
DO	Dissolved oxygen
DPW	Department of Public Works
ERP	Environmental restoration program
HASP	Health and safety plan
IRM	Interim remedial measure
ISCO	In-situ chemical oxidation
KMnO ₄	Potassium permanganate
MnO ₂	Manganese dioxide
NaMnO ₄	Sodium permanganate
NYSDEC	New York State Department of Environmental Conservation
ORP	Oxidation/reduction potential
OU	Operable unit
PCE	Tetrachloroethene
PDBs	Passive diffusion bags
%	Percent
PSA	Preliminary site assessment
PSI	Pounds per square inch
RI	Remedial investigation
ROD	Record of Decision
SC	Specific conductivity
SCO	Soil cleanup objectives
µg/L	Micrograms per liter
UIC	Underground injection control
USEPA	United States Environmental Protection Agency
VOCs	Volatile organic compounds

1 INTRODUCTION

Arcadis CE, Inc. (Arcadis) has prepared this report to summarize an in-situ chemical oxidation (ISCO) Interim Remedial Measure (IRM) conducted at the Crusher Road Site (NYSDEC Site No. 360127), in the Town of Bedford, New York (Figure 1). The ISCO IRM was conducted under the New York State Department of Environmental Conservation (NYSDEC) Standby Contract No. D007618-37.

In November 2015, Arcadis performed an ISCO injection event as an IRM in the vicinity of previous sampling locations DPW-L2-C, DPW-L2-D, soil borings B-4 through B-8, and monitoring well CW-1 (Figure 2). The ISCO IRM involved the injection of sodium permanganate to remediate tetrachloroethene (PCE) in soil and groundwater. Monitoring activities were performed before, during, and following the ISCO injection in accordance with the In-Situ Chemical Oxidation Interim Remedial Measure Work Plan (Arcadis, 2015). This report provides a summary of the injection field activities and results.

1.1 Background

The Crusher Road Site (site) is located at the end of Crusher Road in the Town of Bedford, New York. The 11.8 acre site is located approximately ¼ mile southeast of the intersection of Bedford Road and NY State Rte. 22 (Old Post Road). The site, which is owned and used as a maintenance facility by the Town of Bedford Department of Public Works (DPW), contains a DPW garage building, three storage sheds, a salt storage building and other areas used for storage of gravel, sand, piping, etc. The DPW has used the site for more than 50 years and currently uses it for storage and maintenance of town vehicles, fuel distribution, and storage of stone and salt. The site is currently zoned residential (Leggette, Brashears & Graham, Inc., 2012a).

The surrounding parcels include residential property to the west and northeast and undeveloped parcels in the remaining directions. A 102-acre former gravel mine is located to the northeast, east and southeast of the site. The adjacent, undeveloped former gravel mine property is predominantly wooded and contains approximately 20 to 25 acres of man-made ponds.

Environmental investigations were conducted in 1987 and the late 1990s on the adjacent former gravel mine property to the east (Bedford Ponds, Site No. 360049) as part of proposed redevelopment plans. PCE was present in groundwater samples collected from the southwestern portion of the property, but no source area was identified (Leggette, Brashears & Graham, Inc., 2012a). A Preliminary Site Assessment (PSA), which was conducted on the site and adjacent former gravel mine property between 2000 and 2002, indicated that the source of PCE in groundwater was the Crusher Road DPW facility (TAMS Consultants and GZA Environmental, 2002). In 2004, the Town applied for, and was accepted into, the

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NYSDEC Environmental Restoration Program (ERP). The site was divided into two operable units: Operable Unit (OU) 1 is the on-site source area and OU2 consists of the remainder of the PCE groundwater plume.

Leggette, Brashears & Graham, Inc. completed a Remedial Investigation (RI) of the site between 2007 and 2011 (Leggette, Brashears & Graham, Inc., 2012a). The overburden at the site is 40 to 100 feet thick and consists primarily of stratified fine sand with some clay and gravel. The depth to groundwater is between 3 and 23 feet below ground surface (bgs). The direction of groundwater flow is east-southeast toward the Mianus River, located approximately 800 feet east of the site. A small PCE source area was identified during the RI on the eastern boundary of the town property (in the location identified as the in-situ chemical oxidation injection area on Figure 1), although soil sample concentrations did not exceed 6 NYCRR Part 375 unrestricted use soil cleanup objectives (SCOs) or protection of groundwater SCOs. An overburden groundwater contaminant plume of dissolved-phase PCE was found to extend east-southeast onto the adjacent property. The groundwater with the highest PCE concentrations (up to 4,100 micrograms per liter [$\mu\text{g/L}$]) was sampled from a depth of 20 to 60 feet bgs. The groundwater contaminant plume extended approximately 900 feet to the Mianus River, ranged in width from 150 to 450 feet, and extended 40-85 feet bgs (Leggette, Brashears & Graham, Inc., 2012a).

An Alternatives Analysis (AA) Report was prepared by Leggette, Brashears & Graham, Inc. in March 2012. The AA Report evaluated no action, ISCO and bioremediation, ISCO/bioremediation/monitored natural attenuation, source area excavation/ISCO and bioremediation, and source area excavation/groundwater pump and treat system alternatives. The ISCO and bioremediation alternative was the recommended alternative (Leggette, Brashears & Graham, Inc., 2012b). The Record of Decision (ROD), which the NYSDEC issued in March 2012, calls for treatment of the on-site source area via ISCO, followed by in-situ bioremediation in the OU-2 area.

In October 2013, Arcadis performed an ISCO injection pilot test in the vicinity of previous sampling locations DPW-L2-C, DPW-L2-D, soil borings B-4 through B-8, and monitoring well CW-1 (Figure 2; Malcolm Pirnie, 2014). The ISCO pilot test involved the injection of sodium permanganate to remediate PCE in soil and groundwater. Approximately 18,000 gallons of a 3% solution of sodium permanganate was injected during the pilot test. Initial groundwater monitoring results one month after the injection showed an average reduction of 54% in PCE compared to baseline results, and unreacted sodium permanganate was observed in samples from six of the nine sampling points. Groundwater monitoring results three months after the injection showed an average reduction of 75% in PCE compared to baseline results, and unreacted sodium permanganate was observed at the same six sampling points.

1.2 Chemical Oxidation

ISCO has been used since the early 1990s to treat volatile organic compounds (VOCs) in groundwater and soil. ISCO is defined as the delivery and distribution of oxidants and other amendments into the subsurface to transform contaminants of concern into innocuous end products such as carbon dioxide (CO₂), water, and inorganic compounds. Injection locations can be either permanently installed wells or temporary injection points installed using direct-push methods. However, contact between the oxidant and contaminant required to facilitate the reaction is the most important technical limitation of this technology, as it can be difficult to accomplish. Accordingly, this remedial approach generally includes several injections over time accompanied by groundwater sampling and analysis.

The most common oxidants used for ISCO applications are hydrogen peroxide (Fenton's reagent), permanganate, and sodium persulfate, although permanganate is most commonly used for treating PCE. Permanganate, which generally persists in the subsurface for months (ITRC, 2005), is an oxidizing agent with a unique affinity for oxidizing organic compounds with carbon-carbon double bonds (ethenes), aldehyde groups, and/or hydroxyl groups (alcohols). Permanganate turns water bright purple when it is dissolved; this purple color is an indicator of unreacted chemical. Reacted permanganate is black or brown, indicating the presence of a manganese dioxide (MnO₂) byproduct.

There are two forms of permanganate that are used for ISCO, potassium permanganate (KMnO₄) and sodium permanganate (NaMnO₄) (ITRC, 2005). Sodium permanganate has a much higher solubility in water than potassium permanganate (up to 40 percent, allowing it to be used for ISCO at higher concentrations compared to two to five percent for potassium permanganate). The U.S. Department of Homeland Security (DHS), has placed potassium permanganate on a list with other chemical substances determined to be potentially dangerous in quantities (400 lbs.) exceeding the DHS screening threshold. Due to security requirements and the DHS site specific evaluation process with regards to potassium permanganate, sodium permanganate was selected as the oxidant to be used in this IRM.

Given a pH range between 3.5 and 12 standard units, the primary chemical oxidation reaction of PCE with sodium permanganate in water produces carbon dioxide, manganese dioxide, sodium ions, chloride ions, and hydrogen ions. The balanced chemical equation for this reaction is given below (ITRC, 2005).



1.3 Objective

The IRM injection event was conducted to remediate PCE in groundwater and soil in the source area.

2 PRELIMINARY ACTIVITIES

Several activities, including development of a Health and Safety Plan (HASP), execution of an access agreement, and baseline monitoring, were conducted before ISCO injection activities began. These preliminary activities are summarized below.

2.1 Health and Safety Plan

A HASP was updated by Arcadis for use during the IRM. The HASP, which was appended to the ISCO IRM Work Plan (Arcadis, 2015), addressed potential hazards associated with planned field activities at the site, and outlined the procedures necessary to perform the project in compliance with applicable regulations, particularly the OSHA regulations contained in 29 CFR. A copy of the HASP was kept on-site during scheduled field activities.

2.2 Underground Injection Control Program

An Inventory of Injection Wells United States Environmental Protection Agency (USEPA) Form 7520-16 was submitted to the USEPA Underground Injection Control (UIC) Program on October 9, 2015. A copy of the USEPA Form 7520-16 is included as Appendix A. No response was received from the USEPA.

2.3 Access Agreement

An access agreement was executed between the Town of Bedford and the NYSDEC in August 2013. The access agreement, which allowed Arcadis to collect groundwater samples and conduct remediation and monitoring activities, was followed by Arcadis during the IRM implementation. A copy of the access agreement is included in Appendix B. An updated insurance certificate was provided by Arcadis to the Town of Bedford on October 13, 2015. Access agreements were also executed between Old Post Holdings, LLC (the adjacent property owner) and NYSDEC, and between Old Post Holdings, LLC and Arcadis. These access agreements were executed for use during potential future sampling or remediation activities on the adjacent property.

2.4 Baseline Monitoring

Baseline groundwater quality monitoring was performed at IP-8 and PZ-1 through PZ-5. On October 22, 2015, passive diffusion bags (PDBs) were installed at these locations. Prior to initiating the sodium permanganate injections, the PDBs were retrieved on November 9, 2015 and the water in the PDBs was poured into laboratory-supplied pre-preserved bottleware and shipped to Con-Test Analytical Laboratory for volatile organic compound analysis by USEPA Method 8260.

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The PCE concentration in the baseline groundwater samples exceeded the NYSDEC Class GA Groundwater Standard of 5 µg/L and ranged from 14 µg/L at piezometer PZ-2 to 24,000 µg/L at PZ-3. The second highest baseline sampling event PCE result (980 µg/L) was in groundwater samples collected from piezometers PZ-1 and PZ-5. The PCE concentration at PZ-4 has decreased significantly from 43,000 µg/L in October 2013 to 430 µg/L in November 2015. In addition, relatively low concentrations of tertiary butyl alcohol (PZ-2 – 4.4 µg/L and IP-8 – 5.6 µg/L), cis-1,2-dichloroethene (PZ-2 – 0.37 µg/L) and trichloroethene (PZ-2 – 2.3 µg/L and PZ-5 – 9.5 µg/L) were also detected during the baseline sampling event. The laboratory analytical data package is included in Appendix C and the data are summarized in Table 1 and on Figure 3.

3 ISCO INJECTION ACTIVITIES

The ISCO IRM injection event was conducted between November 9, 2015 and November 19, 2015 near previous sampling locations DPW-L2-C, DPW-L2-D and soil borings B-4 through B-8. The injection point network consisted of fifteen points: IP-1 through IP-6 and IP-8 through IP-16. IP-7 was not used during the November 2015 injection event. The injection point locations are shown on Figure 2. Two air compressors, two diaphragm pumps, piping, hosing, totalizers, and storage tanks, were mobilized to the site for the injection event. Approximately 24,700 gallons of a 3 percent (%) solution of pre-mixed sodium permanganate was delivered to the site in tankers in five equal batches. As a tanker was emptied, a tanker full of solution was delivered and swapped out for the empty tanker. The tanker was staged within a 10 x 50 foot secondary containment unit. The solution from the tanker was pumped to two injection manifold assemblies and then simultaneously delivered to the fifteen injection locations. The injection point well heads had a manifold attached with a pressure relief control valve and pressure gauge. Photographs of the injection setup are included in Appendix D.

The start and stop times for each injection batch were recorded, along with the start and stop totalizer and pressure readings at the well head for each injection point. The total injection duration per batch was determined by calculating the difference between the start and stop time subtracting out down time. Based on the total injection duration and totalizer readings, the total volumes of permanganate solution injected and the average flow rates for each injection point were also calculated.

A total of approximately 24,700 gallons of 3% permanganate solution was injected into the subsurface over a two-week period. The flow of solution from an injection point into the subsurface is influenced by the presence (or lack thereof) of relatively higher permeable preferential pathways in the injection interval. As such, the injection points accepted solution at different flow rates. The breakdown of volume distribution to the injection points is summarized in Table 2. The average flow rate at individual injection points ranged from 0.08 to 1.91 gpm (Table 2).

Pressures at the well heads were monitored to confirm that pressures remained within safe limits [no exceedance of 10 pounds per square inch (PSI) at an injection point]. The average pressures observed at the well heads ranged from 0 to 0.75 PSI and the highest pressure observed was 2 PSI. No daylighting of permanganate was observed during injection activities.

During the injection process, piezometers PZ-1 through PZ-5 were monitored for field parameters [pH, oxidation/reduction potential (ORP), temperature, dissolved oxygen (DO), and specific conductivity (SC)]

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and for the characteristic purple color of sodium permanganate. Field monitoring data is included in Table 3. Permanganate was observed in two of the five piezometers (PZ-3 and PZ-4) during the injection activities. The purple color indicative of permanganate was observed at piezometers PZ-3 and PZ-4 within the first day of the injection event, at which time approximately 3,900 gallons of permanganate had been injected. After 6,000 gallons of permanganate were injected, field parameters were not measured at PZ-3 to prevent the need for cleaning and recalibration of the field monitoring equipment between each sample reading. The pH and specific conductivities at monitoring points PZ-1 through PZ-5 remained fairly stable for the duration of the injection event, except the conductivity for PZ-3, the specific conductivity of which started increasing after approximately 15,000 gallons of total solution was injected (Figure 4). Temperature readings from all sampling points remained fairly stable.

4 POST-INJECTION MONITORING

Post-injection sampling events were completed at one month and five months following the ISCO injection activities, respectively, to evaluate the overall effectiveness of the ISCO injections. Groundwater samples were collected using the methods described in Section 2.4 and were analyzed for TCL VOCs by USEPA Method 8260B at the five piezometers PZ-1 through PZ-5 and injection point IP-8. A summary of analytical results is included in Table 1 and on Figure 3. Copies of laboratory reports are included in Appendix C.

4.1 One Month Post-Injection Monitoring

The one month post-injection sampling event was completed on December 17, 2015. PCE was detected in the groundwater samples collected in December 2015 at concentrations exceeding the NYSDEC Class GA Groundwater Standard of 5 µg/L. Similar to the October 2013 results, PCE was the only VOC detected in the groundwater samples from PZ-1, PZ-3, and PZ-4.

The December 2015 groundwater PCE concentrations compared to the baseline results are provided in the table below:

Sampling Point ID	Baseline PCE Concentrations (µg/L)	Baseline Sample Date	December 2015 PCE Concentrations (µg/L)	Difference in Concentration (µg/L)	Percent (%) Reduction in Concentration
PZ-1	5,300	10/4/2013	1,400	-3,900	73.6
PZ-2	15,000	10/4/2013	7.1	-14,933	100.0
PZ-3	17,000	10/4/2013	2,300	-14,700	86.5
PZ-4	43,000	10/4/2013	450	-42,550	99.9
PZ-5	980	11/9/2015	84	-896	91.4
IP-8	47	11/9/2015	<1.0	-47	100.0

The baseline PCE concentrations listed above correspond to the first sampling event at each monitoring location. As shown above, PCE concentrations relative to the baseline concentrations decreased between 73.6 and 100%.

4.2 Five Month Post-Injection Monitoring

Five month post-injection sampling occurred on April 26, 2016. Similar to the baseline and one month post-injection sampling results, PCE was present in most groundwater samples and exceeded the

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NYSDEC Class GA Groundwater Standard (5 µg/L) at PZ-2 through PZ-5 and IP-8. PCE was not detected in groundwater sampled from PZ-1.

The April 2016 groundwater monitoring results compared to the baseline results are provided in the table below:

Sampling Point ID	Baseline PCE Concentrations (µg/L)	Baseline Sample Date	April 2016 PCE Concentrations (µg/L)	Difference in Concentration (µg/L)	Percent (%) Reduction in Concentration
PZ-1	5,300	10/4/2013	<1.0	-5,300	100.0
PZ-2	15,000	10/4/2013	15	-14,985	99.9
PZ-3	17,000	10/4/2013	5,500	-11,500	67.6
PZ-4	43,000	10/4/2013	170	-42,830	99.6
PZ-5	980	11/9/2015	150	-830	84.7
IP-8	47	11/9/2015	92	45	Not applicable

PCE concentrations decreased relative to the baseline concentrations (67.6 to 100%), with the exception of IP-8.

Acetone, benzene, bromodichloromethane, 2-butanone (MEK), chloroform, 1,4-dichlorobenzene, cis-1,2-dichloroethene, and trichloroethene were also detected in groundwater samples collected during the April 2016 sampling event. Acetone was detected in samples collected from sampling point PZ-1 and IP-8 and exceeded the NYSDEC Class GA Groundwater Standard (50 µg/L) at PZ-1. Benzene and cis-1,2-dichloroethene were detected at sampling point PZ-4. Bromodichloromethane, 2-butanone, chloroform, and 1,4-dichlorobenzene were detected in sample PZ-1. 1,4-Dichlorobenzene was also detected at sampling point PZ-4. Trichloroethene was detected at sampling points PZ-2 and PZ-5. None of these compounds exceeded the respective NYSDEC Class GA Groundwater Standard. The reduction in PCE concentrations has resulted in lower laboratory reporting limits which may explain why some of these compounds were not detected during previous sampling events.

During the April 2016 post-injection sampling event, the purple color indicative of permanganate was observed in samples collected from the sampling points PZ-1 and PZ-4. This indicates that unreacted permanganate is still present and capable of facilitating additional PCE degradation.

5 SUMMARY

The selected remedy for the PCE source area at the Crusher Road DPW facility consisted of an in-situ chemical oxidation injection (NYSDEC, 2012). During the IRM conducted in November 2015, approximately 24,700 gallons of a 3% solution of sodium permanganate was injected in the vicinity of previous sampling locations DPW-L2-C, DPW-L2-D, soil borings B-4 through B-8, and monitoring well CW-1 (Figure 2). Groundwater monitoring results five months after the injection show an average reduction of 90% in PCE concentrations at the five piezometers compared to baseline results. Unreacted sodium permanganate was observed at PZ-1 and PZ-4.

Given that unreacted sodium permanganate persists, an additional groundwater sampling event(s) could be conducted to further monitor the effectiveness of the remedial effort at the site. Such sampling would provide additional information on the persistence and efficacy of the permanganate, which would support future decision-making concerning the overall site remedy.

6 REFERENCES

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TABLES



Table 1
Groundwater Analytical Data
Crusher Road (SITE #360127)
Town Of Bedford, Westchester County, New York

Well ID	CW-1 (20)				CW-1 (30)				CW-1 (50)			CW-1 (70)				PZ-1						
Date Sampled	10/4/13	11/25/13	1/30/14	7/22/15	10/4/13	11/25/13	1/30/14	7/22/15	11/25/13	1/30/14	7/22/15	10/4/13	11/25/13	1/30/14	7/22/15	10/4/13	11/25/13	1/30/14	7/22/15	11/9/15	12/17/15	4/26/16
Acetone	<200	<50	<50	10	<50	<2500	380	18	<2500	370	20	<50	<50	5.1	14	<5000	<5000	<2500	8.3 J	<1000	<1200	88
Acrylonitrile	<20	<5.0	<5.0	NA	<5.0	<250	<250	NA	<250	<250	NA	<5.0	<5.0	<5.0	NA	<500	<500	<250	NA	<100	<120	<5.0
tert-Amyl Methyl Ether (TAME)	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	<0.50
Benzene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
Bromobenzene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
Bromochloromethane	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
Bromodichloromethane	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	0.67
Bromoform	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
Bromomethane	<20	<2.0	<2.0	<1.0	<5.0	<100	<100	<1.0	<100	<100	<1.0	<5.0	<2.0	<2.0	<1.0	<500	<200	<100	<1.0	<40	<50	<2.0
2-Butanone (MEK)	<80	<20	<20	<10	<20	<1000	<1000	<10	<1000	<1000	<10	<20	<20	<20	<10	<2000	<2000	<1000	<10	<400	<500	6.2
tert-Butyl Alcohol (TBA)	<80	<20	<20	NA	<20	<1000	<1000	NA	<1000	<1000	NA	<20	<20	<20	NA	<2000	<2000	<1000	NA	<400	<500	<20
n-Butylbenzene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
sec-Butylbenzene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
tert-Butylbenzene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
tert-Butyl Ethyl Ether (TBEE)	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	<0.50
Carbon Disulfide	<16	<4.0	<4.0	<4.0	<4.0	<200	<200	<4.0	<200	<200	<4.0	<4.0	<4.0	<4.0	<4.0	<400	<400	<200	<4.0	<80	<100	<4.0
Carbon Tetrachloride	<20	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<250	<5.0	<100	<120	<5.0
Chlorobenzene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
Chlorodibromomethane	<2.0	<0.50	<0.50	<0.50	<0.50	<25	<25	<0.50	<25	<25	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	<25	<0.50	<10	<12	<0.50
Chloroethane	<8.0	<2.0	<2.0	NA	<2.0	<100	<100	NA	<100	<100	NA	<2.0	<2.0	<2.0	NA	<200	<200	<100	NA	<40	<50	<2.0
Chloroform	<8.0	<2.0	<2.0	<2.0	<2.0	<100	<100	<2.0	<100	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<200	<100	<2.0	<40	<50	1.8
Chloromethane	<20	<2.0	<2.0	<5.0	<5.0	<100	<100	<5.0	<100	<100	<5.0	<5.0	<2.0	<2.0	<5.0	<500	<200	<100	<5.0	<40	<50	<2.0
2-Chlorotoluene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
4-Chlorotoluene	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	<20	<5.0	<5.0	<5.0	<5.0	<250	<250	<5.0	<250	<250	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<500	<250	<5.0	<100	<120	<5.0
1,2-Dibromoethane (EDB)	<2.0	<0.50	<0.50	<0.50	<0.50	<25	<25	<0.50	<25	<25	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	<25	<0.50	<10	<12	<0.50
Dibromomethane	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
1,2-Dichlorobenzene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
1,3-Dichlorobenzene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
1,4-Dichlorobenzene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	0.19
trans-1,4-Dichloro-2-butene	<8.0	<2.0	<2.0	NA	<2.0	<100	<100	NA	<100	<100	NA	<2.0	<2.0	<2.0	NA	<200	<200	<100	NA	<40	<50	<5.0
Dichlorodifluoromethane (Freon 12)	<8.0	<2.0	<2.0	NA	<2.0	<100	<100	NA	<100	<100	NA	<2.0	<2.0	<2.0	NA	<200	<200	<100	NA	<40	<50	<2.0
1,1-Dichloroethane	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
1,2-Dichloroethane	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
1,1,1-Dichloroethene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
cis-1,2-Dichloroethene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
trans-1,2-Dichloroethene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
1,2-Dichloropropane	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
1,3-Dichloropropane	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	<0.50
2,2-Dichloropropane	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
1,1-Dichloropropene	<8.0	<2.0	<2.0	NA	<2.0	<100	<100	NA	<100	<100	NA	<2.0	<2.0	<2.0	NA	<200	<200	<100	NA	<40	<50	<2.0
cis-1,3-Dichloropropene	<2.0	<0.50	<0.50	<1.0	<0.50	<25	<25	<1.0	<25	<25	<1.0	<0.50	<0.50	<0.50	<1.0	<50	<50	<25	<1.0	<10	<12	<0.50
trans-1,3-Dichloropropene	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	<0.50
Diethyl Ether	<8.0	<2.0	<2.0	NA	<2.0	<100	<100	NA	<100	<100	NA	<2.0	<2.0	<2.0	NA	<200	<200	<100	NA	<40	<50	<2.0
Diisopropyl Ether (DIPE)	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	<0.50
1,4-Dioxane	<200	<50	<50	NA	<50	<2500	<2500	NA	<2500	<2500	NA	<50	<50	<50	NA	<5000	<5000	<2500	NA	<1000	<1200	<100
Ethylbenzene	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
Hexachlorobutadiene	<2.0	<0.50	<0.50	NA	<0.50	<25	<25	NA	<25	<25	NA	<0.50	<0.50	<0.50	NA	<50	<50	<25	NA	<10	<12	<0.50
2-Hexanone (MBK)	<40	<10	<10	<5	<10	<500	<500	<5	<500	<500	<5	<10	<10	<10	<5	<1000	<1000	<500	<5	<200	<250	<10
Isopropylbenzene (Cumene)	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
p-Isopropyltoluene (p-Cymene)	<4.0	<1.0	<1.0	NA	<1.0	<50	<50	NA	<50	<50	NA	<1.0	<1.0	<1.0	NA	<100	<100	<50	NA	<20	<25	<1.0
Methyl tert-Butyl Ether (MTBE)	<4.0	<1.0	<1.0	<1.0	<1.0	<50	<50	<1.0	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<100	<50	<1.0	<20	<25	<1.0
Methylene Chloride	<20	<5.0	<5.0	<1.0	<5.0	<250	<250	<1.0	<250	<250	<1.0	<5.0	<5.0	<5.0	<1.0	<500	<500	<250	<1.0	<100		

Table 1
Groundwater Analytical Data
Crusher Road (SITE #360127)
Town Of Bedford, Westchester County, New York

Well ID	PZ-2						PZ-3						PZ-4						PZ-5			
Date Sampled	10/4/13	11/25/13	1/30/14	11/9/15	12/17/15	4/26/16	10/4/13	11/25/13	1/30/14	11/9/15	12/17/15	4/26/16	10/4/13	11/25/13	1/30/14	1/30 Dup	11/9/15	12/17/15	4/26/16	11/9/15	12/17/15	4/26/16
Acetone	<10000	<12000	<5000	<50	5.4	<50	<10000	<250	150	<20000	<2000	<2500	<25000	<10000	<50000	<12000	<250	<500	<200	<250	<100	<100
Acrylonitrile	<1000	<1200	<500	<5.0	<5.0	<5.0	<1000	<25	<5.0	<2000	<200	<250	<2500	<1000	<5000	<1200	<25	<50	<20	<25	<10	<10
tert-Amyl Methyl Ether (TAME)	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
Benzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	15	2.9	<5.0	<2.0	<2.0
Bromobenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
Bromochloromethane	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
Bromodichloromethane	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	0.33	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
Bromoform	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
Bromomethane	<1000	<500	<200	<2.0	<2.0	<2.0	<1000	<10	<2.0	<800	<80	<100	<2500	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
2-Butanone (MEK)	<4000	<5000	<2000	<20	<20	<20	<4000	<100	3.2	<8000	<800	<1000	<10000	<4000	<20000	<5000	<100	<200	<80	<100	<40	<40
tert-Butyl Alcohol (TBA)	<4000	<5000	<2000	4.4	<20	<20	<4000	<100	<20	<8000	<800	<1000	<10000	<4000	<20000	<5000	<100	<200	<80	<100	<40	<40
n-Butylbenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
sec-Butylbenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
tert-Butylbenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
tert-Butyl Ethyl Ether (TBEE)	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
Carbon Disulfide	<800	<1000	<400	<4.0	2.5	<4.0	<800	<20	<4.0	<1600	<160	<200	<2000	<800	<4000	<1000	<20	<40	<16	<20	<8.0	<8.0
Carbon Tetrachloride	<1000	<1200	<500	<5.0	<5.0	<5.0	<1000	<25	<5.0	<2000	<200	<250	<2500	<1000	<5000	<1200	<25	<50	<20	<25	<10	<10
Chlorobenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	0.37	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
Chlorodibromomethane	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	0.43	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
Chloroethane	<400	<500	<200	<2.0	<2.0	<2.0	<400	<10	<2.0	<800	<80	<100	<1000	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
Chloroform	<400	<500	<200	<2.0	<2.0	<2.0	<400	<10	<2.0	<800	<80	<100	<1000	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
Chloromethane	<1000	<500	<200	<2.0	<2.0	<2.0	<1000	<10	<2.0	<800	<80	<100	<2500	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
2-Chlorotoluene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
4-Chlorotoluene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane (DBCP)	<1000	<1200	<500	<5.0	<5.0	<5.0	<1000	<25	<5.0	<2000	<200	<250	<2500	<1000	<5000	<1200	<25	<50	<20	<25	<10	<10
1,2-Dibromoethane (EDB)	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
Dibromomethane	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,2-Dichlorobenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,3-Dichlorobenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,4-Dichlorobenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	1.6	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	0.76	<5.0	<2.0	<2.0
trans-1,4-Dichloro-2-butene	<400	<500	<200	<2.0	<2.0	<5.0	<400	<10	<2.0	<800	<80	<250	<1000	<400	<2000	<500	<10	<20	<20	<10	<4.0	<10
Dichlorodifluoromethane (Freon 12)	<400	<500	<200	<2.0	<2.0	<2.0	<400	<10	<2.0	<800	<80	<100	<1000	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
1,1-Dichloroethane	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,2-Dichloroethane	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,1,1-Dichloroethene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
cis-1,2-Dichloroethene	<200	<250	<100	0.37	0.92	1.8	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	0.46	<2.0
trans-1,2-Dichloroethene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,2-Dichloropropane	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,3-Dichloropropane	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
2,2-Dichloropropane	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
1,1-Dichloropropene	<400	<500	<200	<2.0	<2.0	<2.0	<400	<10	<2.0	<800	<80	<100	<1000	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
cis-1,3-Dichloropropene	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
trans-1,3-Dichloropropene	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
Diethyl Ether	<400	<500	<200	<2.0	<2.0	<2.0	<400	<10	<2.0	<800	<80	<100	<1000	<400	<2000	<500	<10	<20	<8.0	<10	<4.0	<4.0
Diisopropyl Ether (DIPE)	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
1,4-Dioxane	<10000	<12000	<5000	<50	<50	<100	<10000	<250	<50	<20000	<2000	<5000	<25000	<10000	<50000	<12000	<250	<500	<400	<250	<100	<200
Ethylbenzene	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0
Hexachlorobutadiene	<100	<120	<50	<0.50	<0.50	<0.50	<100	<2.5	<0.50	<200	<20	<25	<250	<100	<500	<120	<2.5	<5.0	<2.0	<2.5	<1.0	<1.0
2-Hexanone (MBK)	<2000	<2500	<1000	<10	<10	<10	<2000	<50	<10	<4000	<400	<500	<5000	<2000	<10000	<2500	<50	<100	<40	<50	<20	<20
Isopropylbenzene (Cumene)	<200	<250	<100	<1.0	<1.0	<1.0	<200	<5.0	<1.0	<400	<40	<50	<500	<200	<1000	<250	<5.0	<10	<4.0	<5.0	<2.0	<2.0

Table 1
Groundwater Analytical Data
Crusher Road (SITE #360127)
Town Of Bedford, Westchester County, New York

Well ID	IP-8			IP-6				Trip Blank					
Date Sampled	11/9/15	12/17/15	4/26/16	10/4/13	11/25/13	11/25 Dup	1/30/14	10/4/13	11/25/13	1/30/14	11/9/15	12/17/15	4/26/16
Acetone	<50	9.1	28	<25000	<250	<250	200	<50	<50	<50	5.8	12	11
Acrylonitrile	<5.0	<5.0	<10	<2500	<25	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
tert-Amyl Methyl Ether (TAME)	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<0.50	0.9	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<2.0	<2.0	<4.0	<2500	<10	<10	<10	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone (MEK)	<20	<20	<40	<10000	<100	<100	<100	<20	<20	<20	<20	<20	<20
tert-Butyl Alcohol (TBA)	5.6	<20	<40	<10000	<100	<100	<100	<20	<20	<20	<20	2.3	<20
n-Butylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butyl Ethyl Ether (TBEE)	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Disulfide	<4.0	<4.0	<8.0	<2000	<20	<20	<20	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Carbon Tetrachloride	<5.0	<5.0	<10	<2500	<25	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorodibromomethane	<0.50	0.45	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroethane	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	<2.0	2.1	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane	<2.0	<2.0	<4.0	<2500	<10	<10	<10	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Chlorotoluene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	<5.0	<5.0	<10	<2500	<25	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane (EDB)	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromomethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,4-Dichloro-2-butene	<2.0	<2.0	<10	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0
Dichlorodifluoromethane (Freon 12)	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropane	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,2-Dichloropropane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloropropene	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,3-Dichloropropene	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,3-Dichloropropene	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Diethyl Ether	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Diisopropyl Ether (DIPE)	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dioxane	<50	<50	<200	<25000	<250	<250	<250	<50	<50	<50	<50	<50	<100
Ethylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-Hexanone (MBK)	<10	<10	<20	<5000	<50	<50	<50	<10	<10	<10	<10	<10	<10
Isopropylbenzene (Cumene)	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene (p-Cymene)	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-Butyl Ether (MTBE)	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	<5.0	<5.0	<10	<2500	<25	<25	16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	<10	<10	<20	<5000	<50	<50	<50	<10	<10	<10	<10	<10	<10
Naphthalene	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
n-Propylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<0.50	<0.50	<1.0	<250	<2.5	<2.5	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	47	<1.0	92	38000	15	5.8	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	<10	<10	<20	<5000	<50	<50	<50	<10	<10	<10	<10	<10	<10
Toluene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	0.24	0.35	0.38
1,2,3-Trichlorobenzene	<5.0	<5.0	<10	<2500	<25	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane (Freon 11)	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
m+p Xylene	<2.0	<2.0	<4.0	<1000	<10	<10	<10	<2.0	<2.0	<2.0	0.28	<2.0	<2.0
o-Xylene	<1.0	<1.0	<2.0	<500	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Comment or Observation	-	PDB Discoloration	Purple-Brown Color	Baseline Sample	Dark Purple Color	Dark Purple Color	Dark Purple Color	NA	NA	NA	NA	NA	NA

Notes:
All results are in units of micrograms per liter (µg/l).
J - Estimated
NA - Not analyzed
PDB - Passive Diffusion Bag

Table 2
Injection Batching Summary
Crusher Road (SITE #360127)
Town Of Bedford, Westchester County, New York

Injection Well ID	Total Well Volume (gallons)	Average Flow Rate (gpm)	Average Head Pressure (psi)
IP-1	2,117	1.32	0.61
IP-2	593	0.25	0.77
IP-3	152	0.08	0.52
IP-4	2,222	0.88	0.72
IP-5	259	0.13	1.52
IP-6	2,928	1.40	0.73
IP-8	494	0.24	0.40
IP-9	1,609	0.78	0.61
IP-10	1,004	0.50	0.56
IP-11	2,385	1.16	0.60
IP-12	2,572	1.38	0.20
IP-13	1,768	0.87	1.32
IP-14	588	0.29	1.25
IP-15	4,356	1.91	0.49
IP-16	1,654	0.76	0.20
Total	24,700		

Notes:

gpm - gallons per minute

psi - pounds per square inch

Table 3
ISCO Field Monitoring Data
Crusher Road (SITE #360127)
Town of Bedford, Westchester County, New York

Date	Time	Total Injected Volume (gal)	PZ-1				PZ-2				PZ-3				PZ-4				PZ-5			
			pH (s.u.)	Cond. (mS/cm)	Color	Water Level (ft bTOC)	pH (s.u.)	Cond. (mS/cm)	Color	Water Level (ft bTOC)	pH (s.u.)	Cond. (mS/cm)	Color	Water Level (ft bTOC)	pH (s.u.)	Cond. (mS/cm)	Color	Water Level (ft bTOC)	pH (s.u.)	Cond. (mS/cm)	Color	Water Level (ft bTOC)
11/10/2015	4:00:00 PM	3861.69	6.53	0.717	clear		7.06	0.307	clear		5.87	1.347	purple		5.82	1.57	purple		5.89	2.801	clear	
11/12/2015	9:00:00 AM	5779.65	7.87	0.753	clear	8.61	7.55	0.272	clear	7.98	5.67	1.545	purple	10.69	5.91	1.431	purple	7.49	5.76	2.946	clear	8.84
11/12/2015	3:30:00 PM	7697.61	7.98	0.734	clear	8.41	7.67	0.287	clear	7.68	5.79	1.379	purple	9.86	6.24	1.43	purple	6.39	6.00	2.84	clear	8.58
11/13/2015	9:30:00 AM	9396.62	6.47	0.871	clear	7.72	7.19	0.327	clear	7.14	5.53	1.739	purple	9.34	5.99	1.771	purple	6.6	5.38	3.328	clear	5.95
11/13/2015	1:00:00 PM	11095.63	6.53	0.841	clear	8.74	6.47	0.324	clear	7.36	5.41	1.827	purple	10.7	5.66	1.715	purple	8.06	5.18	3.188	clear	9.04
11/16/2015	9:30:00 AM	13460.00	7.00	0.741	clear	9.06	7.65	0.308	clear	8.03	6.34	1.410	purple	11.5	6.5	1.696	purple	8.66	5.82	3.044	clear	9.51
11/16/2015	3:00:00 PM	15824.37	7.62	0.81	clear	6.54	7.68	0.298	clear	7.00	6.01	1.444	purple	8.14	6.22	1.716	purple	5.65	5.69	3.112	clear	8.60
11/17/2015	10:00:00 AM	17833.94	5.94	0.797	clear	7.91	6.78	0.294	clear	6.51	5.70	1.736	purple	9.62	6.12	1.653	purple	7.24	5.61	3.091	clear	8.8
11/17/2015	2:45:00 PM	19843.5	7.31	0.900	clear	7.16	7.28	0.276	clear	6.84	5.72	2.041	purple	8.92	6.17	1.781	purple	6.31	5.52	3.135	clear	8.79
11/18/2015	10:00:00 AM	22187.39	7.24	0.748	clear	7.58	7.51	0.263	clear	6.63	5.76	1.945	purple	8.85	6.31	1.724	purple	6.69	5.65	3.106	clear	8.8
11/18/2015	2:00:00 PM	24531.3	6.96	0.838	clear	6.95	7.44	0.259	clear	6.39	5.6	2.531	purple	8.21	6.09	1.705	purple	7.84	5.54	3.089	clear	8.79

Notes

bTOC - below top of casing

Cond. - conductivity

ft - feet

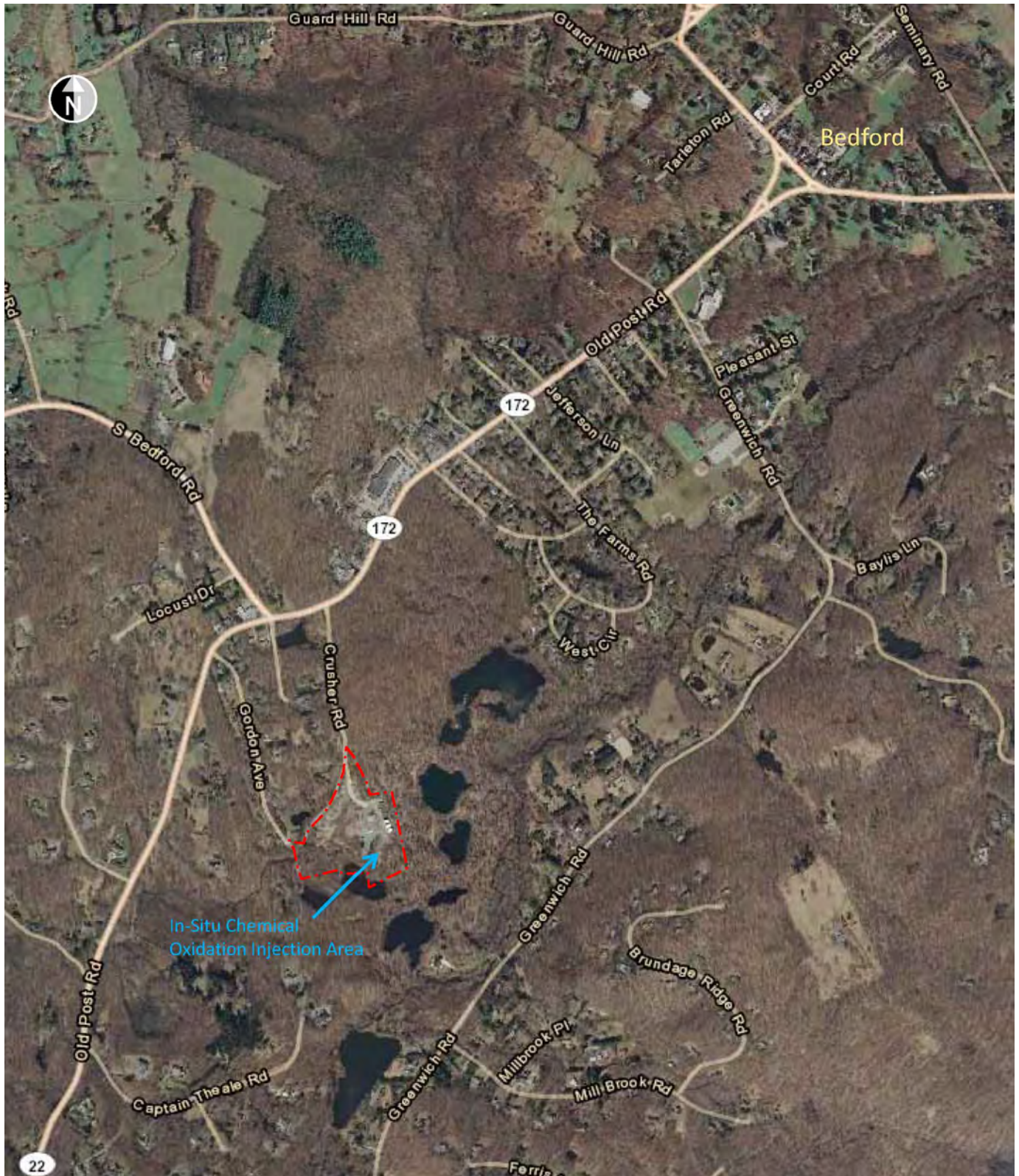
gal - gallons

mS/cm - milliSiemen per centimeter

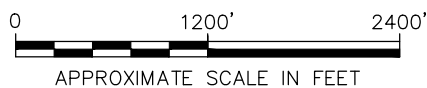
s.u. - standard unit

FIGURES





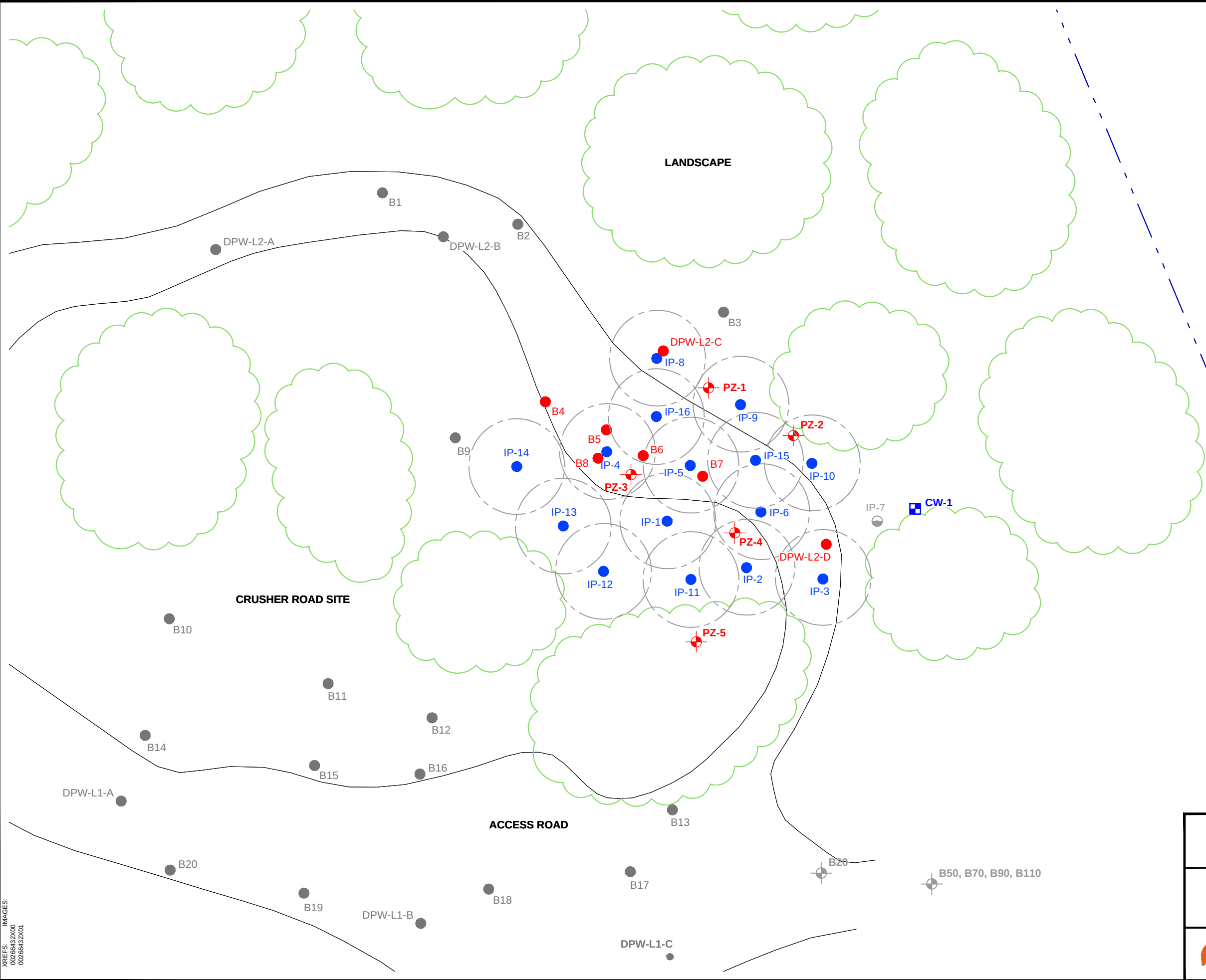
--- APPROXIMATE SITE PROPERTY LINE



NEW YORK STATE
 DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 CRUSHER ROAD, BEDFORD, NEW YORK

SITE LOCATION

CITY:SYRACUSE NY DIV:GROUP:ENV/CAD DRG:G:STEINBERGER LD: PIC: PMM/FLUSCHE TM: LVR(OPTION="OFF"=REF*
G:\ENV\CAD\SYRACUSE\PROJECT\00266432\DWG\00266432C02.dwg LAYOUT: 2. SAVED: 1/8/2016 2:47 PM ACADVER: 19.15 (LMS TECH) PAGES: 2 PLOT: 1/8/2016 2:48 PM BY: DECLERCO, BRIAN



LEGEND

- PROPERTY LINE
- ESTIMATED INJECTION RADIUS OF INFLUENCE
- B20 EXISTING MONITORING WELL
- B7 EXISTING SOURCE AREA SOIL BORING
- B1 EXISTING SOIL BORING
- IP-9 EXISTING INJECTION POINT
- IP-7 EXISTING INJECTION POINT NOT USED FOR NOVEMBER 2015 INJECTION
- PZ-1 EXISTING PIEZOMETER
- CW-1 EXISTING CLUSTER WELL - INSTALLED DECEMBER 2010

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CRUSHER ROAD, BEDFORD, NEW YORK

**PIEZOMETER AND CHEMICAL
OXIDANT INJECTION LOCATIONS**

 **ARCADIS** Design & Consultancy
for natural and
built assets

FIGURE
2

CITY:SYRACUSE,NY DIV:GROUP/ENV/CAAD DB/G:STEINBERGER LD: PIC: PMM-FLUSCHIE TM: Lyr:OPTION="OFF"=REF*
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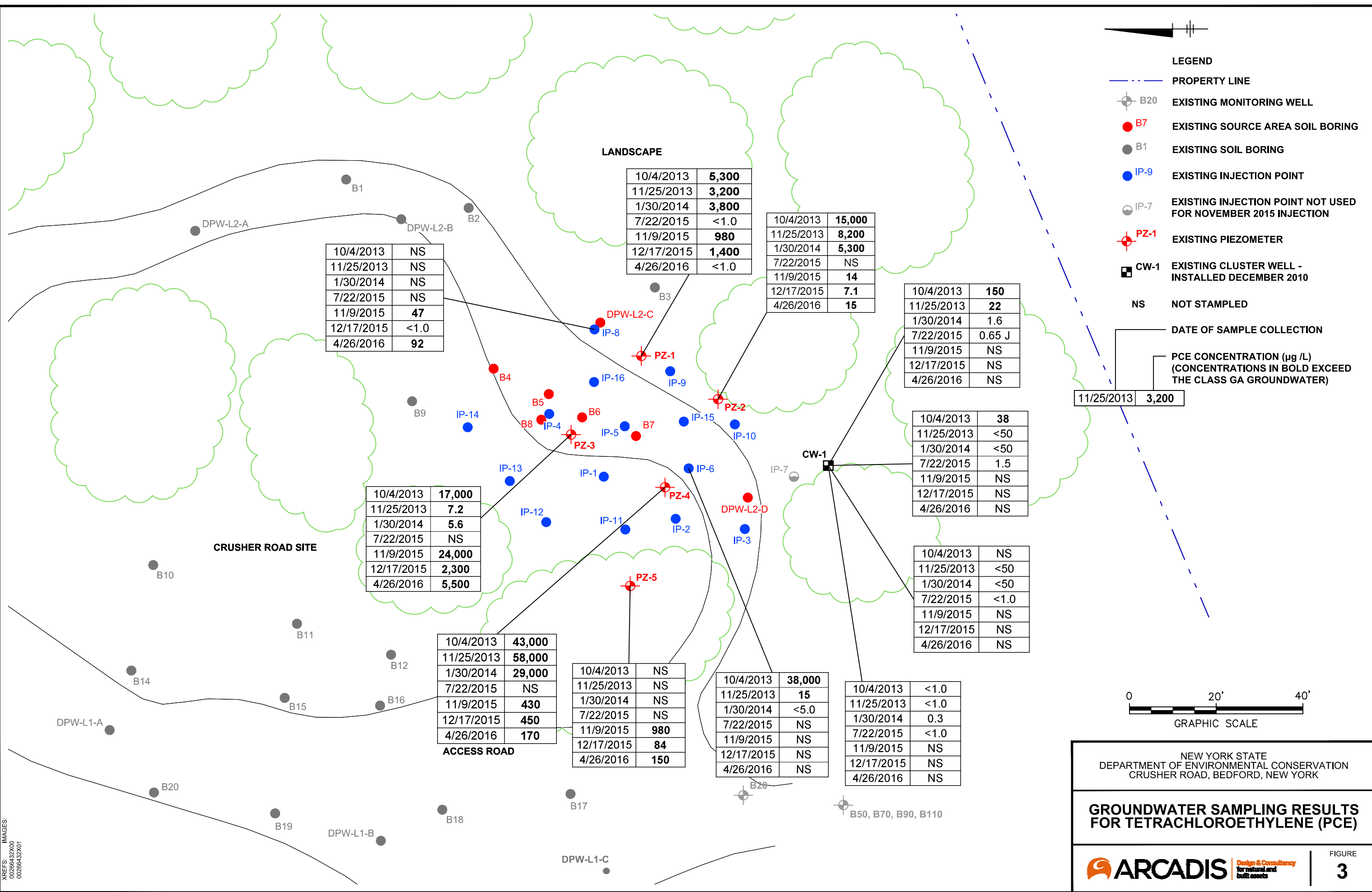
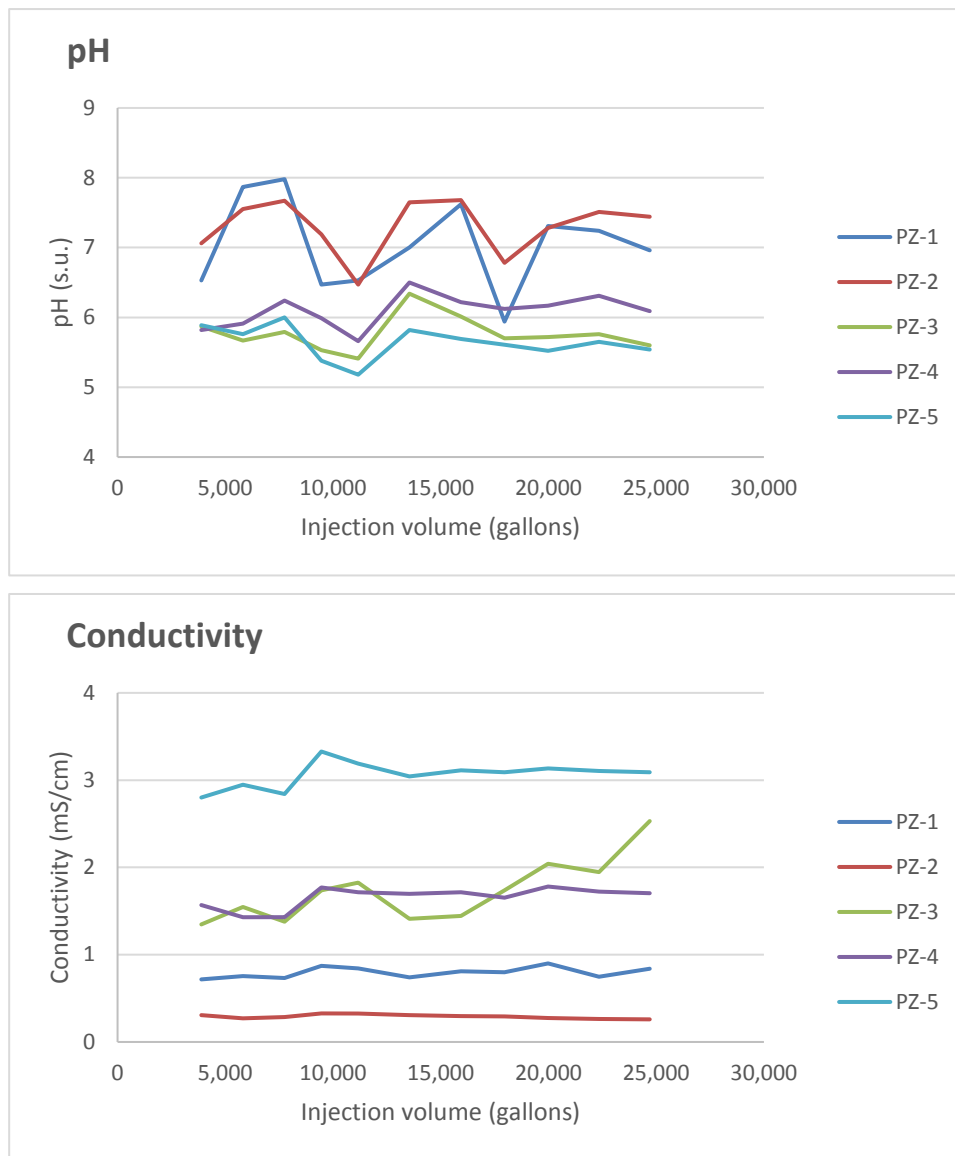


Figure 4
Field Parameter Graphs Compared to Injected Volumes
Crusher Road (SITE #360127)
Town of Bedford, Westchester County, New York



Notes: mS/cm - milliSiemen per centimeter
s.u. - standard unit

APPENDIX A

UIC Permit Application



ARCADIS CE, Inc.
855 Route 146
Suite 210
Clifton Park
New York, 12065
Tel 518.250.7300
Fax 518.250.7301
www.arcadis-us.com

Ms. Nicole Kraft
US EPA Region 2
290 Broadway, 20th Floor
New York, New York 10007-1866

ENVIRONMENT

Subject:
Crusher Road Site (#NYS360127)
Crusher Road, Bedford, New York

Date:
October 9, 2015

Dear Ms. Kraft:

Contact:
Mark Flusche

On behalf of the New York State Department of Environmental Conservation (NYSDEC), ARCADIS of New York, Inc. (ARCADIS) is filing an Inventory of Injection Wells EPA Form 7520-16 for the above referenced facility in Bedford, New York. This project includes injecting sodium permanganate in to the subsurface in an area with a dissolved-phase chlorinated volatile organic compound plume. The NYSDEC Facility ID Number associated with this site is NYS360127.

Phone:
518.250.7322

Email:
Mark.Flusche@arcadis.com

As a Standby Consultant to the NYSDEC, ARCADIS plans to implement an *In-Situ* Chemical Oxidation (ISCO) interim remedial measure using sodium permanganate solution at the above-referenced site. The sodium permanganate solution will be applied to the subsurface using 15 injection points (IP-1 through IP-15) advanced using direct push GeoProbe™ technology (Figure 2; Inventory of Injection Wells provided as Attachment 1). The sodium permanganate solution will be injected at a depth of approximately 10 to 25 feet below ground surface (ft bgs).

Our ref:
00266432.0000

A total of approximately 212,800 pounds of sodium permanganate (3% by weight) will be injected during the event. A 3% sodium permanganate solution will be provided by CARUS Corporation for injection on-site. Material safety data sheets (MSDS) and technical specifications are provided in Attachment 2. ARCADIS plans to conduct one injection event during the weeks of November 9 and 16, 2015, followed by the collection of groundwater samples to assess the ability of ISCO to reduce concentrations of site constituents of concern (COCs).

Imagine the result

If you have any questions or require additional information, please feel free to contact me at mark.flusche@arcadis.com or (518) 250-7322.

Sincerely,

ARCADIS of New York, Inc.

A handwritten signature in black ink that reads "Mark Flusche". The signature is written in a cursive, flowing style.

Mark Flusche, P.HG.
Project Hydrogeologist

Attachments:

Attachment 1 - Inventory of Injection Wells (EPA Form 7520-16)

Attachment 2 - Material Safety Data Sheet: Sodium Permanganate

Copies:

File

Attachment 1

**Inventory of Injection Wells
(EPA Form 7520-16)**

 INVENTORY OF INJECTION WELLS UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF GROUND WATER AND DRINKING WATER (This information is collected under the authority of the Safe Drinking Water Act)					1. DATE PREPARED (Year, Month, Day)		2. FACILITY ID NUMBER															
PAPERWORK REDUCTION ACT NOTICE The public reporting burden for this collection of information is estimated at about 0.5 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, Director, Collection Strategies Division (2822), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC20503.					3. TRANSACTION TYPE (Please mark one of the following) ☐ Deletion ☐ Entry Change ☐ First Time Entry ☐ Replacement																	
4. FACILITY NAME AND LOCATION																						
A. NAME (last, first, and middle initial)			C. LATITUDE <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">DEG</td> <td style="width: 33%;">MIN</td> <td style="width: 33%;">SEC</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td style="text-align: center;">.</td> </tr> </table>		DEG	MIN	SEC			.	E. TOWNSHIP/RANGE <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">TOWNSHIP</td> <td style="width: 25%;">RANGE</td> <td style="width: 25%;">SECT</td> <td style="width: 25%;">1/4 SECT</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> <td></td> </tr> </table>				TOWNSHIP	RANGE	SECT	1/4 SECT				
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5. LEGAL CONTACT:																						
A. TYPE (mark "x") ☐ Owner ☐ Operator		B. NAME (last, first, and middle initial)				C. PHONE (area code and number) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="height: 20px;"></td> </tr> </table>																
D. ORGANIZATION			E. STREET/P.O. BOX			I. OWNERSHIP (mark "x") ☐ PRIVATE ☐ STATE ☐ PUBLIC ☐ FEDERAL ☐ SPECIFY OTHER _____																
F. CITY/TOWN			G. STATE	H. ZIP CODE <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; height: 20px;"></td> <td style="width: 5%; background-color: black;"></td> <td style="width: 55%; height: 20px;"></td> </tr> </table>																		
6. WELL INFORMATION:																						
A. CLASS AND TYPE	B. NUMBER OF WELLS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">COMM</td> <td style="width: 50%;">NON-COMM</td> </tr> </table>		COMM	NON-COMM	C. TOTAL NUMBER OF WELLS	D. WELL OPERATION STATUS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%;">UC</td> <td style="width: 12.5%;">AC</td> <td style="width: 12.5%;">TA</td> <td style="width: 12.5%;">PA</td> <td style="width: 12.5%;">AN</td> </tr> </table>					UC	AC	TA	PA	AN	COMMENTS (Optional): KEY: DEG = Degree MIN = Minute SEC = Second SECT = Section 1/4 SECT = Quarter Section COMM = Commercial NON-COMM = Non-Commercial AC = Active UC = Under Construction TA = Temporarily Abandoned PA = Permanently Abandoned and Approved by State AN = Permanently Abandoned and not Approved by State						
COMM	NON-COMM																					
UC	AC	TA	PA	AN																		

SECTION 1. DATE PREPARED: Enter date in order of year, month, and day.

SECTION 2. FACILITY ID NUMBER: In the first two spaces, insert the appropriate U.S. Postal Service State Code. In the third space, insert one of the following one letter alphabetic identifiers:

- D - DUNS Number,
- G - GSA Number, or
- S - State Facility Number.

In the remaining spaces, insert the appropriate nine digit DUNS, GSA, or State Facility Number. For example, A Federal facility (GSA - 123456789) located in Virginia would be entered as : VAG123456789.

SECTION 3. TRANSACTION TYPE: Place an "x" in the applicable box. See below for further instructions.

Deletion. Fill in the Facility ID Number.

First Time Entry. Fill in all the appropriate information.

Entry Change. Fill in the Facility ID Number and the information that has changed.

Replacement.

SECTION 4. FACILITY NAME AND LOCATION:

- A. Name.** Fill in the facility's official or legal name.
- B. Street Address.** Self Explanatory.
- C. Latitude.** Enter the facility's latitude (all latitudes assume North Except for American Samoa).
- D. Longitude.** Enter the facility's longitude (all longitudes assume West except Guam).
- E. Township/Range.** Fill in the complete township and range. The first 3 spaces are numerical and the fourth is a letter (N,S,E,W) specifying a compass direction. A township is North or South of the baseline, and a range is East or West of the principal meridian (e.g., 132N, 343W).
- F. City/Town.** Self Explanatory.
- G. State.** Insert the U.S. Postal Service State abbreviation.
- H. Zip Code.** Insert the five digit zip code plus any extension.

SECTION 4. FACILITY NAME & LOCATION (CONT'D.):

- I. Numeric County Code.** Insert the numeric county code from the Federal Information Processing Standards Publication (FIPS Pub 6-1) June 15, 1970, U.S. Department of Commerce, National Bureau of Standards. For Alaska, use the Census Division Code developed by the U.S. Census Bureau.
- J. Indian Land.** Mark an "x" in the appropriate box (Yes or No) to indicate if the facility is located on Indian land.

SECTION 5. LEGAL CONTACT:

- A. Type.** Mark an "x" in the appropriate box to indicate the type of legal contact (Owner or Operator). For wells operated by lease, the operator is the legal contact.
- B. Name.** Self Explanatory.
- C. Phone.** Self Explanatory.
- D. Organization.** If the legal contact is an individual, give the name of the business organization to expedite mail distribution.
- E. Street/P.O. Box.** Self Explanatory.
- F. City/Town.** Self Explanatory.
- G. State.** Insert the U.S. Postal Service State abbreviation.
- H. Zip Code.** Insert the five digit zip code plus any extension.
- I. Ownership.** Place an "x" in the appropriate box to indicate ownership status.

SECTION 6. WELL INFORMATION:

- A. Class and Type.** Fill in the Class and Type of injection wells located at the listed facility. Use the most pertinent code (specified below) to accurately describe each type of injection well. For example, 2R for a Class II Enhanced Recovery Well, or 3M for a Class III Solution Mining Well, etc.
- B. Number of Commercial and Non-Commercial Wells.** Enter the total number of commercial and non-commercial wells for each Class/Type, as applicable.
- C. Total Number of Wells.** Enter the total number of injection wells for each specified Class/Type.
- D. Well Operation Status.** Enter the number of wells for each Class/Type under each operation status (see key on other side).

CLASS I Industrial, Municipal, and Radioactive Waste Disposal Wells used to inject waste below the lowermost Underground Source of Drinking Water (USDW).

TYPE	1I	Non-Hazardous Industrial Disposal Well.
	1M	Non-Hazardous Municipal Disposal Well.
	1H	Hazardous Waste Disposal Well injecting below the lowermost USDW.
	1R	Radioactive Waste Disposal Well.
	1X	Other Class I Wells.

CLASS II Oil and Gas Production and Storage Related Injection Wells.

TYPE	2A	Annular Disposal Well.
	2D	Produced Fluid Disposal Well.
	2H	Hydrocarbon Storage Well.
	2R	Enhanced Recovery Well.
	2X	Other Class II Wells.

CLASS III Special Process Injection Wells.

TYPE	3G	<i>In Situ</i> Gasification Well
	3M	Solution Mining Well.

CLASS III (CONT'D.)

TYPE	3S	Sulfur Mining Well by Frasch Process.
	3T	Geothermal Well.
	3U	Uranium Mining Well.
	3X	Other Class III Wells.

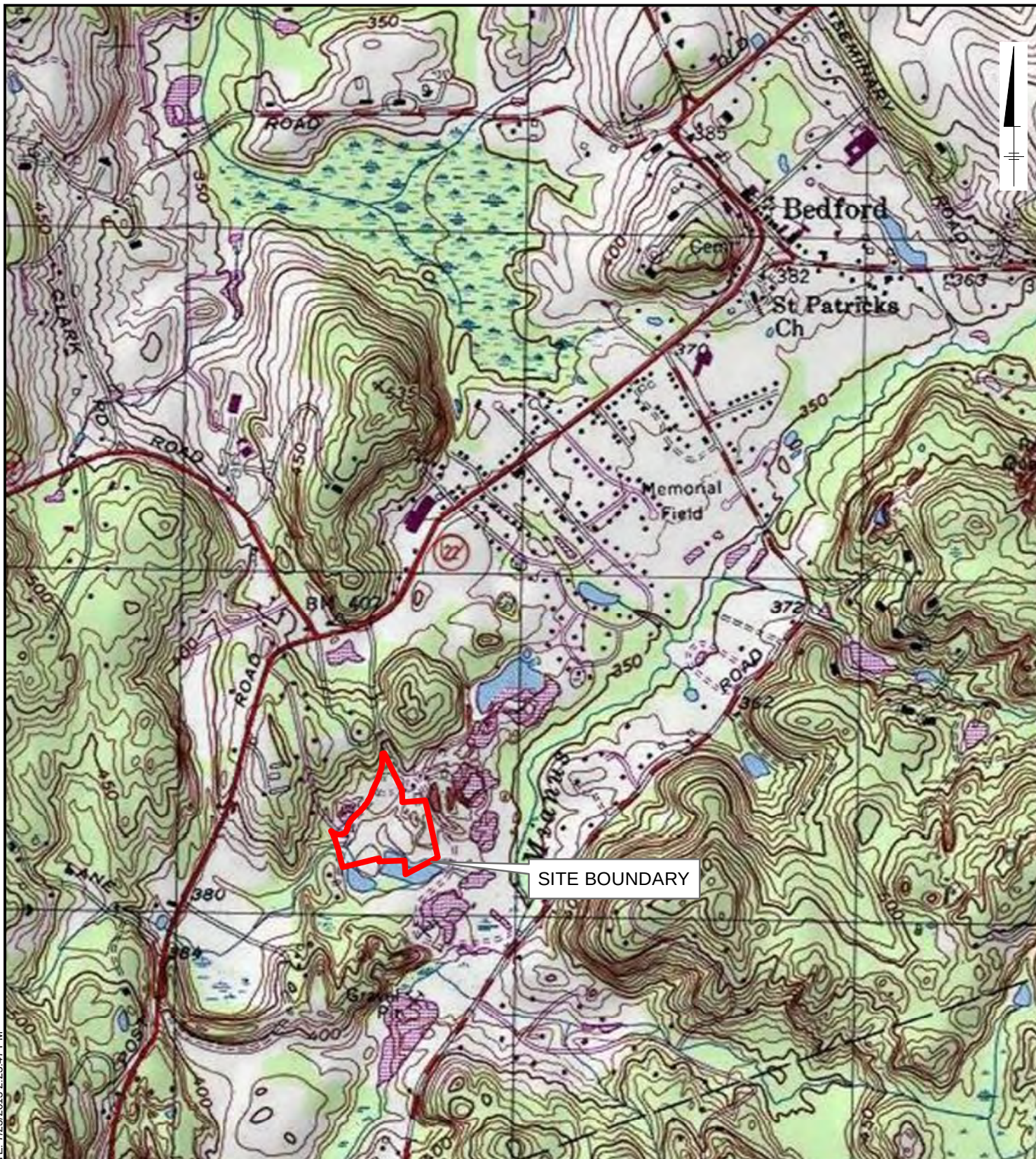
CLASS IV Wells that inject hazardous waste into/above USDWs.

TYPE	4H	Hazardous Facility Injection Well.
	4R	Remediation Well at RCRA or CERCLA site.

CLASS V Any Underground Injection Well not included in Classes I through IV.

TYPE	5A	Industrial Well.
	5B	Beneficial Use Well.
	5C	Fluid Return Well.
	5D	Sewage Treatment Effluent Well.
	5E	Cesspools (non-domestic).
	5F	Septic Systems.
	5G	Experimental Technology Well.
	5H	Drainage Well.
	5I	Mine Backfill Well.
	5J	Waste Discharge Well.

PAPERWORK REDUCTION ACT The public reporting and record keeping burden for this collection of information is estimated to average 0.5 hours per response. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.



SITE BOUNDARY

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SCALE IN FEET

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CRUSHER ROAD, BEDFORD, NEW YORK

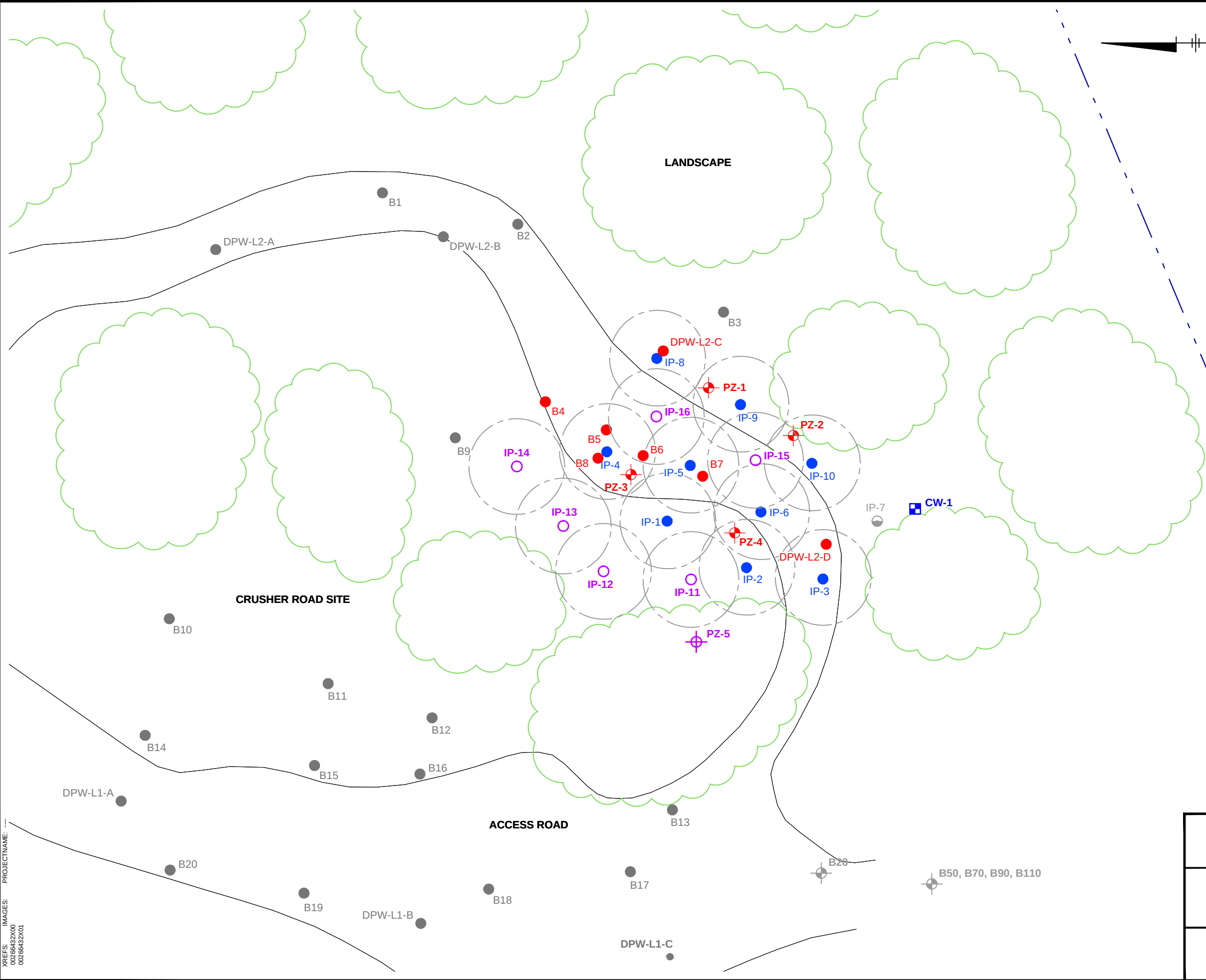
SITE LOCATION



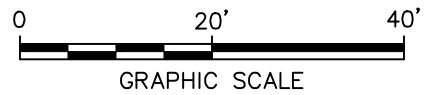
FIGURE

1

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- LEGEND**
- PROPERTY LINE
 - IP-13 PROPOSED INJECTION POINT
 - ⊕ PZ-5 PROPOSED PIEZOMETER
 - ESTIMATED INJECTION RADIUS OF INFLUENCE
 - ⊕ B20 EXISTING MONITORING WELL
 - B7 EXISTING SOURCE AREA SOIL BORING
 - B1 EXISTING SOIL BORING
 - IP-9 EXISTING INJECTION POINT
 - ⊕ IP-7 EXISTING INJECTION POINT NOT BEING USED FOR INJECTIONS THIS EVENT
 - ⊕ PZ-1 EXISTING PIEZOMETER
 - CW-1 EXISTING CLUSTER WELL - INSTALLED DECEMBER 2010



TOWN OF BEDFORD, NEW YORK CRUSHER ROAD SITE	
PROPOSED PIEZOMETER AND CHEMICAL OXIDANT INJECTION LOCATIONS	
	FIGURE 2

Attachment 2

**Material Safety Data Sheet:
Sodium Permanganate
(RemOx®L ISCO Reagent)**



RemOx® L ISCO Reagent

EC- SAFETY DATA SHEET according to Regulation (EC) № 1907/2006 of the European Parliament and of the Council, of 18 December 2006 concerning REACH

Material Safety Data Sheet
Page 1 of 8

Section 1 Chemical Product and Company Identification

PRODUCT NAME: RemOx® L ISCO Reagent	Revision Date: April 2008
TRADE NAME: RemOx® L ISCO Reagent	

USES OF SUBSTANCE: RemOx® L ISCO Reagent is a liquid oxidant recommended for in-situ and ex-situ remediation of sites that require a strong oxidant.

COMPANY NAME (Europe): CARUS NALON S.L.	COMPANY ADDRESS: Carus Nalon S.L. Barrio Nalon, s/n 33100 Trubia-Oviedo Espana, Spain
COMPANY NAME (US): CARUS CORPORATION	INFORMATION: (34) 985-785-513 (34) 985-785-513 www.caruseurope.com (Web) carus@carusnalon.com (Email)
	EMERGENCY TELEPHONE: (34) 985-785-513
	COMPANY ADDRESS: 315 Fifth Street Peru, IL 61354, USA
	INFORMATION: (815)-223-1500 www.caruscorporation.com (Web) salesmkt@caruscorporation.com (Email)
	EMERGENCY TELEPHONE: (800) 435-6856 (USA) (800) 424-9300 (CHEMTREC, USA) (815)-223-1500 (Other countries)

Section 2 Hazards Identification

- Eye Contact**
RemOx® L ISCO Reagent is damaging to eye tissue on contact. It may cause burns that result in damage to the eye.
- Skin Contact**
Momentary contact of solution at room temperature may be irritating to the skin, leaving brown stains. Prolonged contact is damaging to the skin.
- Inhalation**
Acute inhalation toxicity data are not available. However, airborne concentrations of RemOx® L ISCO Reagent in the form of mist may cause irritation to the respiratory tract.
- Ingestion**
RemOx® L ISCO Reagent if swallowed, may cause burns to mucous membranes of the mouth, throat, esophagus, and stomach.



RemOx® L

ISCO Reagent

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Section 3 Hazardous Ingredients

Material or Component	CAS No.	%	Hazard Data
Sodium Permanganate	10101-50-5	40	PEL/C 5 mg Mn per cubic meter of air TLV-TWA 0.2 mg Mn per cubic meter of air
HAZARD SYMBOLS:			
			
RISK PHRASES:			
8 Contact with combustibles may cause fire.			
22 Harmful if swallowed.			
50/53 Very toxic to aquatic organisms, may cause long-term effects in the aquatic environment.			
SAFETY PHRASES:			
17 Keep away from combustible materials.			
24/25 Avoid contact with skin and eyes.			
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice			

Section 4 First Aid Measures

1. Eyes

Immediately flush eyes with large amounts of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Do not attempt to neutralize chemically. Seek medical attention immediately. Note to physician: Decomposition products are alkaline.

2. Skin

Immediately wash contaminated areas with water. Remove contaminated clothing and footwear. (Caution: Solution may ignite certain textiles). Wash clothing and decontaminate footwear before reuse. Seek medical attention immediately if irritation is severe and persistent.

3. Inhalation

Remove person from contaminated area to fresh air. If breathing has stopped, resuscitate and administer oxygen if readily available. Seek medical attention immediately.

4. Ingestion

Never give anything by mouth to an unconscious or convulsing person. If person is conscious, give large quantities of water or milk. Seek medical attention immediately.

Section 5 Fire Fighting Measures

NFPA* HAZARD SIGNS:

Health Hazard 1 = Materials which under fire conditions would give off irritating combustion products. (less than 1 hour exposure) Materials which on the skin could cause irritation.

Flammability Hazard 0 = Materials that will not burn.

Reactivity Hazard 0 = Materials which in themselves are normally stable, even under fire exposure



RemOx® L

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Special Hazard OX = conditions, and which are not reactive with water.
Oxidizer

*National Fire Protection Association 704

FIRST RESPONDERS:

Wear protective gloves, boots, goggles, and respirator. In case of fire, wear positive pressure breathing apparatus. Approach incident with caution. Use 2004 Emergency Response Guidebook (U.S. DOT RSPA, TC and STC). Guide No. 140. (<http://hazmat.dot.gov/pubs/erg2004/erg2004.pdf>).

FLASHPOINT

None

FLAMMABLE OR EXPLOSIVE LIMITS

Lower: Nonflammable Upper: Nonflammable

EXTINGUISHING MEDIA

Use large quantities of water.
Water will turn pink to purple if in contact with RemOx® L ISCO Reagent. Dike to contain.
Do not use dry chemicals, CO₂Halon® or foams.

SPECIAL FIREFIGHTING PROCEDURES

If material is involved in fire, flood with water. Cool all affected containers with large quantities of water. Apply water from as far as a distance as possible. Wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION

Powerful oxidizing material. May decompose spontaneously if exposed to heat (135°C/275°F). May be explosive in contact with certain other chemicals (Section 10). May react violently with finely divided and readily oxidizable substances. Increases burning rate of combustible material. May ignite wood and cloth.

Section 6 Accidental Release Measures

PERSONAL PRECAUTIONS

Personnel should wear protective clothing suitable for the task. Remove all ignition sources and incompatible materials before attempting clean up.

ENVIRONMENTAL PRECAUTIONS:

Do not flush into sanitary sewer system or surface water. If accidental release into the environment occurs, inform the responsible authorities. Keep the product away from drains, sewers, surface and ground water and soil.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Contain spill by collecting the liquid in a pit or holding behind a dam (sand or soil). Dilute to approximately 6% with water, and then reduce with sodium thiosulfate, a bisulfite or ferrous salt solution. The bisulfite or ferrous



RemOx® L

ISCO Reagent

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salt may require some dilute sulfuric acid (10% w/w) to promote reduction. Neutralize with sodium carbonate to neutral pH, if acid was used. Decant or filter and deposit sludge in approved landfill. Where permitted, the sludge may be drained into sewer with large quantities of water. To clean contaminated floors, flush with abundant quantities of water into sewer, if permitted by federal, state, and local regulations. If not, collect water and treat as above.

Section 7 Handling and Storage

WORK/HYGIENIC PRACTICES

Wash hands thoroughly with soap and water after handling RemOx® L ISCO Reagent. Do not eat, drink or smoke when working with RemOx® L ISCO Reagent. Wear proper protective equipment. Remove clothing, if it becomes contaminated.

VENTILATION REQUIREMENTS

Provide sufficient mechanical and/or local exhaust to maintain exposure below the TLV/TWA.

CONDITIONS FOR SAFE STORAGE

Store in accordance with NFPA 430 requirements for Class II oxidizers. Protect containers from physical damage. Store in a cool, dry area in closed containers. Segregate from acids, peroxides, formaldehyde, and all combustible, organic, or easily oxidizable materials including antifreeze and hydraulic fluid.

Section 8 Exposure Controls and Personal Protection

RESPIRATORY PROTECTION

In cases where overexposure to mist may occur, the use of an approved NIOSH-MSHA mist respirator or an air supplied respirator is advised. Engineering or administrative controls should be implemented to control mist.

EYE

Faceshield, goggles, or safety glasses with side shields should be worn. Provide eyewash in working area.

GLOVES

Rubber or plastic gloves should be worn.

OTHER PROTECTIVE EQUIPMENT

Normal work clothing covering arms and legs, and rubber, or plastic apron should be worn. Caution: If clothing becomes contaminated, wash off immediately. Spontaneous ignition may occur with cloth or paper.

Section 9 Physical and Chemical Properties

APPEARANCE AND ODOR	Dark purple solution, odorless
BOILING POINT, 760 mm Hg	105 °C
VAPOR PRESSURE (mm Hg)	760 mm at 105°C
SOLUBILITY IN WATER % BY SOLUTION	Miscible in all proportions
PERCENT VOLATILE BY VOLUME	61% (as water)
EVAPORATION RATE	Same as water
FREEZING POINT	-15.0 °C
SPECIFIC GRAVITY	1.36-1.39



RemOx® L

ISCO Reagent

EC- SAFETY DATA SHEET according to Regulation (EC) № 1907/2006 of the European Parliament and of the Council, of 18 December 2006 concerning REACH

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pH	5-9
OXIDIZING PROPERTIES	Strong oxidizer. May ignite wood and cloth.
EXPLOSIVE PROPERTIES	Explosive in contact with sulfuric acid or peroxides, or readily oxidizable substances.

Section 10 Stability and Reactivity

STABILITY	Under normal conditions, the material is stable.
CONDITIONS TO AVOID could	Contact with incompatible materials or heat (135°C / 275°F) result in violent exothermic chemical reaction.
INCOMPATIBLE MATERIALS	Acids, peroxides, formaldehyde, antifreeze, hydraulic fluids, and all combustible organic or readily oxidizable materials, including metal powders. With hydrochloric acid, toxic chlorine gas is liberated.
HAZARDOUS DECOMPOSITION PRODUCTS	When involved in a fire, liquid permanganate may form corrosive fumes.
CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION	Material is not known to polymerize.

Section 11 Toxicological Information

SODIUM PERMANGANATE: Acute oral LD₅₀ not known.

1. Acute toxicity

Irritating to body tissue with which it comes into contact. No acute toxicity data is available for sodium permanganate. Toxicity is expected to be similar to that of potassium permanganate. The toxicity data for potassium permanganate is given below:

Ingestion:

LD 50 oral rat: 780 mg/kg male (14 days); 525 mg/kg female (14 days).

Harmful if swallowed. ALD: 10g. Ingestion may cause nausea, vomiting, sore throat, stomach-ache and eventually lead to a perforation of the intestine. Liver and kidney injuries may occur.

Skin contact:

LD 50 dermal no data available.

The product may be absorbed into the body through the skin. Major effects of exposure: severe irritation, brown staining of skin.

Inhalation:

LC 50 inhal. no data available.

The product may be absorbed into the body by inhalation. Major effects of exposure: respiratory disorder, cough.

2. Chronic toxicity

No known cases of chronic poisoning due to permanganates have been reported. Prolonged exposure, usually



RemOx® L

ISCO Reagent

EC- SAFETY DATA SHEET according to Regulation (EC) № 1907/2006 of the European Parliament and of the Council, of 18 December 2006 concerning REACH

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over many years, to heavy concentrations of manganese oxides in the form of dust and fumes may lead to chronic manganese poisoning, chiefly involving the central nervous system.

3. Carcinogenicity

Sodium permanganate has not been classified as a carcinogen by ACGIH, NIOSH, OSHA, NTP, or IARC.

4. Medical Conditions Generally Aggravated by Exposure

Sodium permanganate solution will cause further irritation of tissue, open wounds, burns or mucous membranes.

Section 12 Ecological Information

Entry to the Environment

Permanganate has a low estimated lifetime in the environment, being readily converted by oxidizable materials to insoluble MnO_2 .

Bioconcentration Potential

In non-reducing and non-acidic environments MnO_2 is insoluble and has a very low bioaccumulative potential.

Aquatic Toxicity

No data.

Section 13 Disposal Considerations

Waste Disposal

RemOx® L ISCO Reagent, once it becomes a waste, is considered a D001 hazardous (ignitable) waste. For disposal of RemOx® L ISCO Reagent solutions, follow procedures in Section 6 and deactivate the permanganate to insoluble manganese dioxide. Dispose of it in a permitted landfill. Contact Carus Chemical Company for additional recommendations.

Section 14 Transport Information

USA (land, D.O.T.)	Proper Shipping Name: 49 CFR172.101 Permanganates, inorganic, aqueous solution, n.o.s. (contains sodium permanganate) Hazard Class: 49 CFR172.101....Oxidizer ID Number: 49 CFR172.101....UN 3214 Packing Group: 49 CFR172.101....II Division: 49 CFR172.101....5.1
European Labeling in accordance Road/Rail Transport (ADR/RID)	ID Number: UN 3214 ADR/RID Class 5.1 Description of Goods: Permanganates, inorganic, aqueous solution, n.o.s (contains sodium permanganate) Hazard Identification No. 50
European Labeling in accordance with EC directive (Water, I.M.O.)	Proper Shipping Name: Permanganates, inorganic, aqueous solution, n.o.s (contains sodium permanganate) Hazard Class: Oxidizer ID Number: UN 3214



RemOx® L ISCO Reagent

EC- SAFETY DATA SHEET according to Regulation (EC) № 1907/2006 of the European Parliament and of the Council, of 18 December 2006 concerning REACH

Material Safety Data Sheet
Page 7 of 8

	Packing Group: II Division: 5.1 Marine Pollutant: No
European Labeling in accordance with EC directive (Air, I.C.A.O.)	Proper Shipping Name: Permanganates, inorganic, aqueous solution, n.o.s (contains sodium permanganate) Hazard Class: Oxidizer ID Number: UN 3214 Packing Group: II Division: 5.1

Section 15 Regulatory Information (Sodium Permanganate)

TSCA	Listed in the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
CERCLA	Not listed.
RCRA	Oxidizers such as RemOx® L ISCO Reagent solution meet the criteria of ignitable waste. 40 CFR 261.21.
SARA TITLE III Information	
Section 302/303	Extremely hazardous substance: Not listed
Section 311/312	Hazard categories: Fire, acute and chronic toxicity.
Section 313	RemOx® L ISCO Reagent contains 40% manganese compounds as part of the chemical and is subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372.
FOREIGN LIST	Canadian Non-Domestic Substance List , EINECS

Section 16 Other Information

NIOSH	National Institute for Occupational Safety and Health
MSHA	Mine Safety and Health Administration
OSHA	Occupational Safety and Health Administration
NTP	National Toxicology Program
IARC	International Agency for Research on Cancer
PEL	Permissible Exposure Limit
C	Ceiling Exposure Limit
TLV-TWA	Threshold Limit Value-Time Weighted Average
CAS	Chemical Abstract Service
EINECS	Inventory of Existing Chemical Substances (European)

Chithambarathanu Pillai (S.O.F.)
April 2008

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change and, therefore, holders and users should satisfy themselves that they are aware of all current data and regulations relevant to their particular use of product. CARUS CORPORATION DISCLAIMS ALL LIABILITY FOR RELIANCE ON THE COMPLETENESS OR ACCURACY OR THE INFORMATION INCLUDED HEREIN. CARUS CORPORATION MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE OF THE PRODUCT DESCRIBED HEREIN. All conditions relating to storage, handling, and use of the product are beyond the control of Carus Corporation, and shall be the sole responsibility of the holder or user of the product.



RemOx® L

ISCO Reagent

EC- SAFETY DATA SHEET according to Regulation (EC) № 1907/2006 of the European Parliament and of the Council, of 18 December 2006 concerning REACH

Material Safety Data Sheet
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(Carus and Design) is a registered service mark of Carus Corporation. CARUS® is a registered trademark of Carus Corporation. RemOx® is a trademark of Carus Corporation. Responsible Care® is a registered service mark of the American Chemistry Council.



Responsible Care®
Good Chemistry at Work

APPENDIX B

Access Agreement



ACCESS AGREEMENT

This Access Agreement (the "Agreement") is made and entered into this ____ day of August, 2013, by and between the Town of Bedford, a New York municipal corporation ("Bedford"), with offices located at 321 Bedford Road, Bedford Hills, New York, 10507 and New York State Department of Environmental Conservation, ("NYSDEC") with offices located at 625 Broadway, Albany, New York 12233 (each, hereafter, a "Party" and collectively the "Parties").

WHEREAS, Bedford is the owner of the Bedford Highway Garage property located on Crusher Road off New York State Route 22, Town of Bedford, County of Westchester, State of New York, denoted on the Town of Bedford Tax Map as Tax Lot Sections 85.18, Block 1, Lots 28, 29 and 30 ("the Crusher Road Site"); and

WHEREAS, the Crusher Road Site is subject to an ongoing Environmental Remediation Project under the auspices of the NYSDEC; and

WHEREAS, NYSDEC has retained Arcadis U.S. Inc. ("Arcadis") with offices located at 855 Route 146 Clifton Park, New York 12065, a professional ground-water and environmental engineering firm, to implement certain remediation at the Crusher Road Site in Bedford; and

WHEREAS, NYSDEC and Arcadis, requires access to the Crusher Road Site for purposes of taking soil and water samples for environmental testing and thereafter, remediation and monitoring; and

WHEREAS, the Parties desire to cooperate with each other and to set forth their

agreement under which NYSDEC and Arcadis, may access the Crusher Road Site.

NOW, THEREFORE, as and for the mutual promises and representations contained herein, the Parties agree as follows:

1. Grant of Access - Bedford hereby grants to NYSDEC, its employees, agents, representatives, contractors, and subcontractors, including Arcadis, the non-exclusive right to enter onto the Crusher Road Site to conduct on such portions of the site as are necessary or reasonable, all activities which in the judgment of NYSDEC, New York State Department of Health ("NYSDOH") and/or the Westchester County Department of Health ("WCDOH") are necessary to perform the work required, to collect and test soil and water samples and thereafter, perform remediation and monitoring (the "Work") on the Crusher Road Site, subject to the conditions set forth in this Agreement. These activities will include sampling of existing wells located on the property.

2. Property Ownership - Bedford represents and warrants that it is the fee title owner of the Crusher Road Site.

3. Notice of Use of Property - NYSDEC agrees to provide Bedford with forty-eight (48) hours prior written notice of the scheduled commencement of Work and entry onto the Crusher Road Site.

4. Restoration of Property - NYSDEC covenants and agrees to restore any portions of the Crusher Road Site that NYSDEC disturbs to a condition comparable to that in which it was found prior to such disturbance.

5. Insurance - (a) NYSDEC, its employees, agents, representatives, contractors and subcontractors, including Arcadis, shall at all times that they are present on the Crusher

Road Site carry appropriate property damage and general liability insurance, and shall cause said policies to name Bedford, as an additional insured. In addition, NYSDEC, its employees, agents, representatives, contractors and subcontractors, including Arcadis, shall carry worker's compensation and statutory disability benefits insurance (as required by law) for all employees present on the Crusher Road Site.

(b) Prior to entry by NYSDEC and each agent, contractor or subcontractor of NYSDEC, including Arcadis, on the Crusher Road Site, NYSDEC shall deliver to Bedford appropriate certificates of insurance.

6. Cooperation - Bedford agrees to cooperate with NYSDEC in obtaining any permits or other approvals necessary to undertake the Work and which require action by Bedford as owner of the Crusher Road Site, provided that Bedford shall not have any obligation to incur any out-of-pocket expense in so cooperating and Bedford shall not incur any liability or responsibility by so cooperating.

7. Reports - NYSDEC shall promptly provide Bedford with copies of all final test results, final reports and approved, plans concerning its environmental testing on the Crusher Road Site.

8. Notice - All communications and notices provided for herein, shall be in writing and shall be deemed to have been given either (i) when delivered in person to the recipient named below, or (ii) on the date of delivery shown on the return receipt, after deposit in the United States Mail in a sealed envelope or other container, either certified or charges pre-paid, addressed to the party intended below, or (iii) on the date of delivery by overnight delivery transmission to the party intended as follows, or by fax transmission with

printed confirmation of transmission, followed by transmission of confirmation copy of the communication by mail to the attorney for each respective Party:

If to the NYSDEC:

David Crosby
NYSDEC
625 Broadway, 11th Floor
Remedial Section B
Albany, New York 12233

If to Arcadis U.S., Inc.

Mark A. Flusche:
855 Route 146
Suite 210
Clifton Park, New York 12065
Telephone No.: (518) 250-7322
Fax No.: (518) 250-7301

If to Bedford:

Supervisor Lee Roberts
321 Bedford Road
Bedford Hills, New York 10507
Telephone No.: (914) 666-6530
Fax No. (914) 666-5249

Commissioner Kevin Winn
321 Bedford Road
Bedford Hills, New York 10507
Telephone No.:
Fax No.:

Joel H. Sachs, Esq.
Keane & Beane, P.C.
445 Hamilton Avenue, 15th Floor
White Plains, New York 10601
Telephone No.: (914) 946-4777
Fax No.: (914) 946-6868

9. No Agency Relationship – This Agreement shall not be construed to create, either expressly or by implication, any agency or partner relationship between Bedford and the NYSDEC. Neither Bedford nor the NYSDEC is authorized to act on behalf of the other in any manner relating to the subject matter of this Agreement.

10. Interpretation - Should any provision of this Agreement require interpretation or construction, it is agreed by the Parties that the entity interpreting or construing this Agreement shall not apply a presumption that the provisions hereof shall be more strictly construed against one Party by reason of the rule of construction that a document is to be construed more strictly against the Party who prepared the Agreement, it being agreed that all Parties have participated in the preparation of all provisions of this Agreement.

11. Entire Agreement - This Agreement represents the complete undertaking between the Parties and supersedes any and all agreements, understandings and discussions whether written or oral, between the Parties. No other promises or agreements shall be binding unless in writing and signed by the Parties.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date first written above.

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL
CONSERVATION

By: David Crosby
David Crosby

TOWN OF BEDFORD, NEW YORK

By: Lee V.A. Roberts

Name: Lee V.A. Roberts

Title: Supervisor

APPENDIX C

Laboratory Analytical Reports



November 19, 2015

Mark Flusche
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Bedford, NY
Client Job Number:
Project Number: 00266432.0000
Laboratory Work Order Number: 15K0386

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

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron L. Benoit", with a long horizontal line extending to the right.

Aaron L. Benoit
Project Manager

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

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Mark Flusche

REPORT DATE: 11/19/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00266432.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15K0386

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

PROJECT LOCATION: Bedford, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PZ-1	15K0386-01	Ground Water		SW-846 8260C	
PZ-2	15K0386-02	Ground Water		SW-846 8260C	
PZ-3	15K0386-03	Ground Water		SW-846 8260C	
PZ-4	15K0386-04	Ground Water		SW-846 8260C	
PZ-5	15K0386-05	Ground Water		SW-846 8260C	
IP-8	15K0386-06	Ground Water		SW-846 8260C	
TB (110915)	15K0386-07	Trip Blank 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:

15K0386-01[PZ-1], 15K0386-03[PZ-3], 15K0386-04[PZ-4], 15K0386-05[PZ-5]

V-20

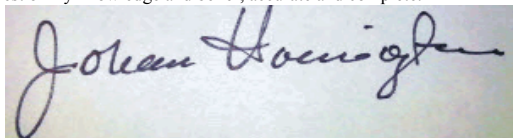
Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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

B135267-BS1, B135267-BSD1, S010022-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: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-1

Sampled: 11/9/2015 15:05

Sample ID: 15K0386-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	97	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Acrylonitrile	ND	100	12	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
tert-Amyl Methyl Ether (TAME)	ND	10	1.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Benzene	ND	20	1.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Bromobenzene	ND	20	3.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Bromochloromethane	ND	20	4.5	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Bromodichloromethane	ND	10	1.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Bromoform	ND	20	4.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Bromomethane	ND	40	19	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
2-Butanone (MEK)	ND	400	47	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
tert-Butyl Alcohol (TBA)	ND	400	43	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
n-Butylbenzene	ND	20	2.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
sec-Butylbenzene	ND	20	2.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
tert-Butylbenzene	ND	20	2.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	10	1.5	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Carbon Disulfide	ND	80	20	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Carbon Tetrachloride	ND	100	2.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Chlorobenzene	ND	20	3.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Chlorodibromomethane	ND	10	2.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Chloroethane	ND	40	5.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Chloroform	ND	40	4.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Chloromethane	ND	40	6.5	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
2-Chlorotoluene	ND	20	2.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
4-Chlorotoluene	ND	20	2.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	6.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2-Dibromoethane (EDB)	ND	10	1.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Dibromomethane	ND	20	3.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2-Dichlorobenzene	ND	20	2.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,3-Dichlorobenzene	ND	20	3.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,4-Dichlorobenzene	ND	20	3.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
trans-1,4-Dichloro-2-butene	ND	40	3.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Dichlorodifluoromethane (Freon 12)	ND	40	3.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1-Dichloroethane	ND	20	3.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2-Dichloroethane	ND	20	3.9	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1-Dichloroethylene	ND	20	4.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
cis-1,2-Dichloroethylene	ND	20	2.9	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
trans-1,2-Dichloroethylene	ND	20	3.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2-Dichloropropane	ND	20	2.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,3-Dichloropropane	ND	10	2.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
2,2-Dichloropropane	ND	20	3.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1-Dichloropropene	ND	40	2.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
cis-1,3-Dichloropropene	ND	10	1.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
trans-1,3-Dichloropropene	ND	10	2.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Diethyl Ether	ND	40	4.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-1

Sampled: 11/9/2015 15:05

Sample ID: 15K0386-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	3.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,4-Dioxane	ND	1000	530	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Ethylbenzene	ND	20	2.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Hexachlorobutadiene	ND	10	3.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
2-Hexanone (MBK)	ND	200	30	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Isopropylbenzene (Cumene)	ND	20	2.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
p-Isopropyltoluene (p-Cymene)	ND	20	2.5	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Methyl tert-Butyl Ether (MTBE)	ND	20	1.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Methylene Chloride	ND	100	64	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
4-Methyl-2-pentanone (MIBK)	ND	200	29	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Naphthalene	ND	40	2.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
n-Propylbenzene	ND	20	2.2	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Styrene	ND	20	3.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1,1,2-Tetrachloroethane	ND	20	2.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1,2,2-Tetrachloroethane	ND	10	2.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Tetrachloroethylene	980	20	3.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Tetrahydrofuran	ND	200	21	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Toluene	ND	20	2.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2,3-Trichlorobenzene	ND	100	2.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2,4-Trichlorobenzene	ND	20	3.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,3,5-Trichlorobenzene	ND	20	3.4	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1,1-Trichloroethane	ND	20	1.9	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1,2-Trichloroethane	ND	20	2.3	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Trichloroethylene	ND	20	4.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Trichlorofluoromethane (Freon 11)	ND	40	2.9	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2,3-Trichloropropane	ND	40	3.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	2.8	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,2,4-Trimethylbenzene	ND	20	3.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
1,3,5-Trimethylbenzene	ND	20	2.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
Vinyl Chloride	ND	40	2.7	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
m+p Xylene	ND	40	5.0	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH
o-Xylene	ND	20	2.6	µg/L	20		SW-846 8260C	11/12/15	11/16/15 18:52	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.4	70-130	11/16/15 18:52
Toluene-d8	99.6	70-130	11/16/15 18:52
4-Bromofluorobenzene	101	70-130	11/16/15 18:52

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-2

Sampled: 11/9/2015 14:50

Sample ID: 15K0386-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
tert-Butyl Alcohol (TBA)	4.4	20	2.2	µg/L	1	J	SW-846 8260C	11/12/15	11/16/15 17:59	EEH
n-Butylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
4-Chlorotoluene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2-Dichlorobenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
cis-1,2-Dichloroethylene	0.37	1.0	0.15	µg/L	1	J	SW-846 8260C	11/12/15	11/16/15 17:59	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-2

Sampled: 11/9/2015 14:50

Sample ID: 15K0386-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Tetrachloroethylene	14	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Toluene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Trichloroethylene	2.3	1.0	0.20	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:59	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.6	70-130	11/16/15 17:59
Toluene-d8	98.6	70-130	11/16/15 17:59
4-Bromofluorobenzene	100	70-130	11/16/15 17:59

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-3

Sampled: 11/9/2015 15:10

Sample ID: 15K0386-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	20000	1900	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Acrylonitrile	ND	2000	230	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
tert-Amyl Methyl Ether (TAME)	ND	200	36	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Benzene	ND	400	32	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Bromobenzene	ND	400	60	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Bromochloromethane	ND	400	89	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Bromodichloromethane	ND	200	35	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Bromoform	ND	400	84	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Bromomethane	ND	800	380	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
2-Butanone (MEK)	ND	8000	950	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
tert-Butyl Alcohol (TBA)	ND	8000	870	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
n-Butylbenzene	ND	400	40	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
sec-Butylbenzene	ND	400	44	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
tert-Butylbenzene	ND	400	44	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	200	30	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Carbon Disulfide	ND	1600	410	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Carbon Tetrachloride	ND	2000	48	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Chlorobenzene	ND	400	64	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Chlorodibromomethane	ND	200	40	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Chloroethane	ND	800	110	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Chloroform	ND	800	88	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Chloromethane	ND	800	130	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
2-Chlorotoluene	ND	400	48	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
4-Chlorotoluene	ND	400	52	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2000	140	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2-Dibromoethane (EDB)	ND	200	36	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Dibromomethane	ND	400	64	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2-Dichlorobenzene	ND	400	40	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,3-Dichlorobenzene	ND	400	68	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,4-Dichlorobenzene	ND	400	60	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
trans-1,4-Dichloro-2-butene	ND	800	68	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Dichlorodifluoromethane (Freon 12)	ND	800	72	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1-Dichloroethane	ND	400	63	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2-Dichloroethane	ND	400	78	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1-Dichloroethylene	ND	400	84	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
cis-1,2-Dichloroethylene	ND	400	59	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
trans-1,2-Dichloroethylene	ND	400	60	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2-Dichloropropane	ND	400	52	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,3-Dichloropropane	ND	200	44	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
2,2-Dichloropropane	ND	400	64	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1-Dichloropropene	ND	800	51	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
cis-1,3-Dichloropropene	ND	200	25	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
trans-1,3-Dichloropropene	ND	200	44	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Diethyl Ether	ND	800	89	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-3

Sampled: 11/9/2015 15:10

Sample ID: 15K0386-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	200	72	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,4-Dioxane	ND	20000	11000	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Ethylbenzene	ND	400	52	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Hexachlorobutadiene	ND	200	68	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
2-Hexanone (MBK)	ND	4000	610	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Isopropylbenzene (Cumene)	ND	400	48	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
p-Isopropyltoluene (p-Cymene)	ND	400	50	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Methyl tert-Butyl Ether (MTBE)	ND	400	36	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Methylene Chloride	ND	2000	1300	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
4-Methyl-2-pentanone (MIBK)	ND	4000	590	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Naphthalene	ND	800	48	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
n-Propylbenzene	ND	400	44	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Styrene	ND	400	60	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1,1,2-Tetrachloroethane	ND	400	48	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1,2,2-Tetrachloroethane	ND	200	52	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Tetrachloroethylene	24000	400	68	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Tetrahydrofuran	ND	4000	430	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Toluene	ND	400	40	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2,3-Trichlorobenzene	ND	2000	56	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2,4-Trichlorobenzene	ND	400	76	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,3,5-Trichlorobenzene	ND	400	68	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1,1-Trichloroethane	ND	400	38	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1,2-Trichloroethane	ND	400	46	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Trichloroethylene	ND	400	80	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Trichlorofluoromethane (Freon 11)	ND	800	59	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2,3-Trichloropropane	ND	800	76	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	400	56	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,2,4-Trimethylbenzene	ND	400	72	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
1,3,5-Trimethylbenzene	ND	400	40	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
Vinyl Chloride	ND	800	53	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
m+p Xylene	ND	800	100	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH
o-Xylene	ND	400	52	µg/L	400		SW-846 8260C	11/12/15	11/16/15 19:18	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.6	70-130	11/16/15 19:18
Toluene-d8	99.1	70-130	11/16/15 19:18
4-Bromofluorobenzene	101	70-130	11/16/15 19:18

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-4

Sampled: 11/9/2015 15:30

Sample ID: 15K0386-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	24	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Acrylonitrile	ND	25	2.9	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.5	0.46	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Benzene	ND	5.0	0.40	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Bromobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Bromochloromethane	ND	5.0	1.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Bromodichloromethane	ND	2.5	0.44	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Bromoform	ND	5.0	1.0	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Bromomethane	ND	10	4.7	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
2-Butanone (MEK)	ND	100	12	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
tert-Butyl Alcohol (TBA)	ND	100	11	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
n-Butylbenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
sec-Butylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
tert-Butylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	0.38	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Carbon Disulfide	ND	20	5.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Carbon Tetrachloride	ND	25	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Chlorobenzene	ND	5.0	0.80	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Chlorodibromomethane	ND	2.5	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Chloroethane	ND	10	1.4	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Chloroform	ND	10	1.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Chloromethane	ND	10	1.6	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
2-Chlorotoluene	ND	5.0	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
4-Chlorotoluene	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	1.7	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2-Dibromoethane (EDB)	ND	2.5	0.44	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Dibromomethane	ND	5.0	0.80	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2-Dichlorobenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,3-Dichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,4-Dichlorobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
trans-1,4-Dichloro-2-butene	ND	10	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Dichlorodifluoromethane (Freon 12)	ND	10	0.90	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1-Dichloroethane	ND	5.0	0.79	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2-Dichloroethane	ND	5.0	0.97	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1-Dichloroethylene	ND	5.0	1.0	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
cis-1,2-Dichloroethylene	ND	5.0	0.74	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
trans-1,2-Dichloroethylene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2-Dichloropropane	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,3-Dichloropropane	ND	2.5	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
2,2-Dichloropropane	ND	5.0	0.80	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1-Dichloropropene	ND	10	0.64	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
cis-1,3-Dichloropropene	ND	2.5	0.31	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
trans-1,3-Dichloropropene	ND	2.5	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Diethyl Ether	ND	10	1.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-4

Sampled: 11/9/2015 15:30

Sample ID: 15K0386-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	0.90	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,4-Dioxane	ND	250	130	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Ethylbenzene	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Hexachlorobutadiene	ND	2.5	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
2-Hexanone (MBK)	ND	50	7.6	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Isopropylbenzene (Cumene)	ND	5.0	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
p-Isopropyltoluene (p-Cymene)	ND	5.0	0.62	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.45	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Methylene Chloride	ND	25	16	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
4-Methyl-2-pentanone (MIBK)	ND	50	7.3	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Naphthalene	ND	10	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
n-Propylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Styrene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1,1,2-Tetrachloroethane	ND	5.0	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1,2,2-Tetrachloroethane	ND	2.5	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Tetrachloroethylene	430	5.0	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Tetrahydrofuran	ND	50	5.4	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Toluene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2,3-Trichlorobenzene	ND	25	0.70	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2,4-Trichlorobenzene	ND	5.0	0.95	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,3,5-Trichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1,1-Trichloroethane	ND	5.0	0.47	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1,2-Trichloroethane	ND	5.0	0.58	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Trichloroethylene	ND	5.0	1.0	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Trichlorofluoromethane (Freon 11)	ND	10	0.74	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2,3-Trichloropropane	ND	10	0.95	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	0.70	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,2,4-Trimethylbenzene	ND	5.0	0.90	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
1,3,5-Trimethylbenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
Vinyl Chloride	ND	10	0.66	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
m+p Xylene	ND	10	1.2	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH
o-Xylene	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 19:45	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	92.4	70-130	11/16/15 19:45
Toluene-d8	99.6	70-130	11/16/15 19:45
4-Bromofluorobenzene	102	70-130	11/16/15 19:45

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-5

Sampled: 11/9/2015 15:15

Sample ID: 15K0386-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	24	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Acrylonitrile	ND	25	2.9	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.5	0.46	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Benzene	ND	5.0	0.40	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Bromobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Bromochloromethane	ND	5.0	1.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Bromodichloromethane	ND	2.5	0.44	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Bromoform	ND	5.0	1.0	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Bromomethane	ND	10	4.7	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
2-Butanone (MEK)	ND	100	12	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
tert-Butyl Alcohol (TBA)	ND	100	11	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
n-Butylbenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
sec-Butylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
tert-Butylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	0.38	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Carbon Disulfide	ND	20	5.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Carbon Tetrachloride	ND	25	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Chlorobenzene	ND	5.0	0.80	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Chlorodibromomethane	ND	2.5	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Chloroethane	ND	10	1.4	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Chloroform	ND	10	1.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Chloromethane	ND	10	1.6	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
2-Chlorotoluene	ND	5.0	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
4-Chlorotoluene	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	1.7	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2-Dibromoethane (EDB)	ND	2.5	0.44	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Dibromomethane	ND	5.0	0.80	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2-Dichlorobenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,3-Dichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,4-Dichlorobenzene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
trans-1,4-Dichloro-2-butene	ND	10	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Dichlorodifluoromethane (Freon 12)	ND	10	0.90	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1-Dichloroethane	ND	5.0	0.79	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2-Dichloroethane	ND	5.0	0.97	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1-Dichloroethylene	ND	5.0	1.0	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
cis-1,2-Dichloroethylene	ND	5.0	0.74	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
trans-1,2-Dichloroethylene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2-Dichloropropane	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,3-Dichloropropane	ND	2.5	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
2,2-Dichloropropane	ND	5.0	0.80	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1-Dichloropropene	ND	10	0.64	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
cis-1,3-Dichloropropene	ND	2.5	0.31	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
trans-1,3-Dichloropropene	ND	2.5	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Diethyl Ether	ND	10	1.1	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: PZ-5

Sampled: 11/9/2015 15:15

Sample ID: 15K0386-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.5	0.90	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,4-Dioxane	ND	250	130	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Ethylbenzene	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Hexachlorobutadiene	ND	2.5	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
2-Hexanone (MBK)	ND	50	7.6	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Isopropylbenzene (Cumene)	ND	5.0	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
p-Isopropyltoluene (p-Cymene)	ND	5.0	0.62	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.45	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Methylene Chloride	ND	25	16	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
4-Methyl-2-pentanone (MIBK)	ND	50	7.3	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Naphthalene	ND	10	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
n-Propylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Styrene	ND	5.0	0.75	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1,1,2-Tetrachloroethane	ND	5.0	0.60	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1,2,2-Tetrachloroethane	ND	2.5	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Tetrachloroethylene	980	200	34	µg/L	200		SW-846 8260C	11/12/15	11/17/15 10:50	EEH
Tetrahydrofuran	ND	50	5.4	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Toluene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2,3-Trichlorobenzene	ND	25	0.70	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2,4-Trichlorobenzene	ND	5.0	0.95	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,3,5-Trichlorobenzene	ND	5.0	0.85	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1,1-Trichloroethane	ND	5.0	0.47	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1,2-Trichloroethane	ND	5.0	0.58	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Trichloroethylene	9.5	5.0	1.0	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Trichlorofluoromethane (Freon 11)	ND	10	0.74	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2,3-Trichloropropane	ND	10	0.95	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	0.70	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,2,4-Trimethylbenzene	ND	5.0	0.90	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
1,3,5-Trimethylbenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
Vinyl Chloride	ND	10	0.66	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
m+p Xylene	ND	10	1.2	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH
o-Xylene	ND	5.0	0.65	µg/L	5		SW-846 8260C	11/12/15	11/16/15 20:12	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	93.6	70-130	
1,2-Dichloroethane-d4	92.5	70-130	
Toluene-d8	99.5	70-130	
Toluene-d8	97.8	70-130	
4-Bromofluorobenzene	98.8	70-130	
4-Bromofluorobenzene	101	70-130	

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: IP-8

Sampled: 11/9/2015 14:40

Sample ID: 15K0386-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
tert-Butyl Alcohol (TBA)	5.6	20	2.2	µg/L	1	J	SW-846 8260C	11/12/15	11/16/15 18:25	EEH
n-Butylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
4-Chlorotoluene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2-Dichlorobenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: IP-8

Sampled: 11/9/2015 14:40

Sample ID: 15K0386-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Tetrachloroethylene	47	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Toluene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 18:25	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	91.7	70-130	11/16/15 18:25
Toluene-d8	99.4	70-130	11/16/15 18:25
4-Bromofluorobenzene	98.5	70-130	11/16/15 18:25

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: TB (110915)

Sampled: 11/9/2015 00:00

Sample ID: 15K0386-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	5.8	50	4.9	µg/L	1	J	SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
n-Butylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
4-Chlorotoluene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2-Dichlorobenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,3-Dichloropropane	ND	0.50	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 15K0386

Date Received: 11/10/2015

Field Sample #: TB (110915)

Sampled: 11/9/2015 00:00

Sample ID: 15K0386-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Toluene	0.24	1.0	0.10	µg/L	1	J	SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH
m+p Xylene	0.28	2.0	0.25	µg/L	1	J	SW-846 8260C	11/12/15	11/16/15 17:32	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	11/12/15	11/16/15 17:32	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	90.3	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	97.6	70-130	

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
15K0386-01 [PZ-1]	B135267	0.25	5.00	11/12/15
15K0386-02 [PZ-2]	B135267	5	5.00	11/12/15
15K0386-03 [PZ-3]	B135267	0.0125	5.00	11/12/15
15K0386-04 [PZ-4]	B135267	1	5.00	11/12/15
15K0386-05 [PZ-5]	B135267	1	5.00	11/12/15
15K0386-06 [IP-8]	B135267	5	5.00	11/12/15
15K0386-07 [TB (110915)]	B135267	5	5.00	11/12/15

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15K0386-05RE1 [PZ-5]	B135624	0.025	5.00	11/12/15

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B135267 - SW-846 5030B
Blank (B135267-BLK1)

Prepared: 11/12/15 Analyzed: 11/16/15

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

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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 B135267 - SW-846 5030B

Blank (B135267-BLK1)

Prepared: 11/12/15 Analyzed: 11/16/15

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	22.1		µg/L	25.0		88.4	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.5	70-130			

LCS (B135267-BS1)

Prepared: 11/12/15 Analyzed: 11/16/15

Acetone	77.6	50	µg/L	100		77.6	70-160			†
Acrylonitrile	10.9	5.0	µg/L	10.0		109	70-130			
tert-Amyl Methyl Ether (TAME)	9.68	0.50	µg/L	10.0		96.8	70-130			
Benzene	9.97	1.0	µg/L	10.0		99.7	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	10.9	1.0	µg/L	10.0		109	70-130			
Bromodichloromethane	9.39	0.50	µg/L	10.0		93.9	70-130			
Bromoform	10.7	1.0	µg/L	10.0		107	70-130			
Bromomethane	6.75	2.0	µg/L	10.0		67.5	40-160		V-20	†
2-Butanone (MEK)	96.6	20	µg/L	100		96.6	40-160			†
tert-Butyl Alcohol (TBA)	94.6	20	µg/L	100		94.6	40-160			†
n-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
sec-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
tert-Butylbenzene	9.92	1.0	µg/L	10.0		99.2	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.90	0.50	µg/L	10.0		99.0	70-130			
Carbon Disulfide	9.72	4.0	µg/L	10.0		97.2	70-130			
Carbon Tetrachloride	9.88	5.0	µg/L	10.0		98.8	70-130			
Chlorobenzene	9.99	1.0	µg/L	10.0		99.9	70-130			
Chlorodibromomethane	9.71	0.50	µg/L	10.0		97.1	70-130			
Chloroethane	11.0	2.0	µg/L	10.0		110	70-130			
Chloroform	9.48	2.0	µg/L	10.0		94.8	70-130			
Chloromethane	8.29	2.0	µg/L	10.0		82.9	40-160			†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	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
Batch B135267 - SW-846 5030B										
LCS (B135267-BS1)				Prepared: 11/12/15 Analyzed: 11/16/15						
4-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.0	5.0	µg/L	10.0		100	70-130			
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130			
Dibromomethane	9.70	1.0	µg/L	10.0		97.0	70-130			
1,2-Dichlorobenzene	9.67	1.0	µg/L	10.0		96.7	70-130			
1,3-Dichlorobenzene	9.82	1.0	µg/L	10.0		98.2	70-130			
1,4-Dichlorobenzene	9.79	1.0	µg/L	10.0		97.9	70-130			
trans-1,4-Dichloro-2-butene	9.74	2.0	µg/L	10.0		97.4	70-130			
Dichlorodifluoromethane (Freon 12)	6.93	2.0	µg/L	10.0		69.3	40-160			†
1,1-Dichloroethane	9.92	1.0	µg/L	10.0		99.2	70-130			
1,2-Dichloroethane	8.70	1.0	µg/L	10.0		87.0	70-130			
1,1-Dichloroethylene	9.44	1.0	µg/L	10.0		94.4	70-130			
cis-1,2-Dichloroethylene	9.64	1.0	µg/L	10.0		96.4	70-130			
trans-1,2-Dichloroethylene	9.58	1.0	µg/L	10.0		95.8	70-130			
1,2-Dichloropropane	9.85	1.0	µg/L	10.0		98.5	70-130			
1,3-Dichloropropane	9.73	0.50	µg/L	10.0		97.3	70-130			
2,2-Dichloropropane	9.61	1.0	µg/L	10.0		96.1	40-130			†
1,1-Dichloropropene	10.1	2.0	µg/L	10.0		101	70-130			
cis-1,3-Dichloropropene	9.22	0.50	µg/L	10.0		92.2	70-130			
trans-1,3-Dichloropropene	10.0	0.50	µg/L	10.0		100	70-130			
Diethyl Ether	10.5	2.0	µg/L	10.0		105	70-130			
Diisopropyl Ether (DIPE)	9.33	0.50	µg/L	10.0		93.3	70-130			
1,4-Dioxane	94.8	50	µg/L	100		94.8	40-130			†
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
Hexachlorobutadiene	10.2	0.50	µg/L	10.0		102	70-130			
2-Hexanone (MBK)	97.2	10	µg/L	100		97.2	70-160			†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0		103	70-130			
p-Isopropyltoluene (p-Cymene)	11.2	1.0	µg/L	10.0		112	70-130			
Methyl tert-Butyl Ether (MTBE)	9.40	1.0	µg/L	10.0		94.0	70-130			
Methylene Chloride	9.27	5.0	µg/L	10.0		92.7	70-130			
4-Methyl-2-pentanone (MIBK)	100	10	µg/L	100		100	70-160			†
Naphthalene	11.1	2.0	µg/L	10.0		111	40-130			†
n-Propylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Styrene	10.7	1.0	µg/L	10.0		107	70-130			
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110	70-130			
Tetrachloroethylene	9.91	1.0	µg/L	10.0		99.1	70-130			
Tetrahydrofuran	9.64	10	µg/L	10.0		96.4	70-130			J
Toluene	9.74	1.0	µg/L	10.0		97.4	70-130			
1,2,3-Trichlorobenzene	10.5	5.0	µg/L	10.0		105	70-130			
1,2,4-Trichlorobenzene	11.0	1.0	µg/L	10.0		110	70-130			
1,3,5-Trichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1-Trichloroethane	9.17	1.0	µg/L	10.0		91.7	70-130			
1,1,2-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
Trichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
Trichlorofluoromethane (Freon 11)	8.93	2.0	µg/L	10.0		89.3	70-130			
1,2,3-Trichloropropane	10.9	2.0	µg/L	10.0		109	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.82	1.0	µg/L	10.0		98.2	70-130			
1,2,4-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,3,5-Trimethylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
Vinyl Chloride	8.44	2.0	µg/L	10.0		84.4	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
Batch B135267 - SW-846 5030B										
LCS (B135267-BS1)										
					Prepared: 11/12/15 Analyzed: 11/16/15					
m+p Xylene	20.7	2.0	µg/L	20.0		103	70-130			
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.3		µg/L	25.0		93.1	70-130			
Surrogate: Toluene-d8	24.6		µg/L	25.0		98.3	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0		102	70-130			
LCS Dup (B135267-BSD1)										
					Prepared: 11/12/15 Analyzed: 11/16/15					
Acetone	73.0	50	µg/L	100		73.0	70-160	6.18	25	†
Acrylonitrile	10.6	5.0	µg/L	10.0		106	70-130	2.41	25	
tert-Amyl Methyl Ether (TAME)	9.59	0.50	µg/L	10.0		95.9	70-130	0.934	25	
Benzene	10.0	1.0	µg/L	10.0		100	70-130	0.600	25	
Bromobenzene	10.7	1.0	µg/L	10.0		107	70-130	1.22	25	
Bromochloromethane	11.4	1.0	µg/L	10.0		114	70-130	4.85	25	
Bromodichloromethane	9.85	0.50	µg/L	10.0		98.5	70-130	4.78	25	
Bromoform	10.6	1.0	µg/L	10.0		106	70-130	0.845	25	
Bromomethane	7.34	2.0	µg/L	10.0		73.4	40-160	8.37	25	V-20 †
2-Butanone (MEK)	89.9	20	µg/L	100		89.9	40-160	7.21	25	†
tert-Butyl Alcohol (TBA)	87.4	20	µg/L	100		87.4	40-160	7.90	25	†
n-Butylbenzene	10.4	1.0	µg/L	10.0		104	70-130	1.91	25	
sec-Butylbenzene	10.3	1.0	µg/L	10.0		103	70-130	0.389	25	
tert-Butylbenzene	9.89	1.0	µg/L	10.0		98.9	70-130	0.303	25	
tert-Butyl Ethyl Ether (TBEE)	9.88	0.50	µg/L	10.0		98.8	70-130	0.202	25	
Carbon Disulfide	9.38	4.0	µg/L	10.0		93.8	70-130	3.56	25	
Carbon Tetrachloride	9.90	5.0	µg/L	10.0		99.0	70-130	0.202	25	
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	1.19	25	
Chlorodibromomethane	9.43	0.50	µg/L	10.0		94.3	70-130	2.93	25	
Chloroethane	11.9	2.0	µg/L	10.0		119	70-130	8.01	25	
Chloroform	9.78	2.0	µg/L	10.0		97.8	70-130	3.12	25	
Chloromethane	8.65	2.0	µg/L	10.0		86.5	40-160	4.25	25	†
2-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130	0.777	25	
4-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130	0.0974	25	
1,2-Dibromo-3-chloropropane (DBCP)	9.96	5.0	µg/L	10.0		99.6	70-130	0.700	25	
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130	0.785	25	
Dibromomethane	9.84	1.0	µg/L	10.0		98.4	70-130	1.43	25	
1,2-Dichlorobenzene	9.56	1.0	µg/L	10.0		95.6	70-130	1.14	25	
1,3-Dichlorobenzene	9.90	1.0	µg/L	10.0		99.0	70-130	0.811	25	
1,4-Dichlorobenzene	9.65	1.0	µg/L	10.0		96.5	70-130	1.44	25	
trans-1,4-Dichloro-2-butene	9.08	2.0	µg/L	10.0		90.8	70-130	7.01	25	
Dichlorodifluoromethane (Freon 12)	6.94	2.0	µg/L	10.0		69.4	40-160	0.144	25	†
1,1-Dichloroethane	10.2	1.0	µg/L	10.0		102	70-130	2.49	25	
1,2-Dichloroethane	8.75	1.0	µg/L	10.0		87.5	70-130	0.573	25	
1,1-Dichloroethylene	9.58	1.0	µg/L	10.0		95.8	70-130	1.47	25	
cis-1,2-Dichloroethylene	9.66	1.0	µg/L	10.0		96.6	70-130	0.207	25	
trans-1,2-Dichloroethylene	9.59	1.0	µg/L	10.0		95.9	70-130	0.104	25	
1,2-Dichloropropane	10.1	1.0	µg/L	10.0		101	70-130	2.11	25	
1,3-Dichloropropane	10.0	0.50	µg/L	10.0		100	70-130	3.04	25	
2,2-Dichloropropane	9.55	1.0	µg/L	10.0		95.5	40-130	0.626	25	†
1,1-Dichloropropene	9.87	2.0	µg/L	10.0		98.7	70-130	2.60	25	
cis-1,3-Dichloropropene	9.42	0.50	µg/L	10.0		94.2	70-130	2.15	25	
trans-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130	2.56	25	
Diethyl Ether	10.3	2.0	µg/L	10.0		103	70-130	2.03	25	
Diisopropyl Ether (DIPE)	9.27	0.50	µg/L	10.0		92.7	70-130	0.645	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B135267 - SW-846 5030B

LCS Dup (B135267-BSD1)

Prepared: 11/12/15 Analyzed: 11/16/15

1,4-Dioxane	93.7	50	µg/L	100		93.7	40-130	1.19	50	† ‡
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	2.40	25	
Hexachlorobutadiene	10.3	0.50	µg/L	10.0		103	70-130	0.487	25	
2-Hexanone (MBK)	92.7	10	µg/L	100		92.7	70-160	4.76	25	†
Isopropylbenzene (Cumene)	10.5	1.0	µg/L	10.0		105	70-130	1.83	25	
p-Isopropyltoluene (p-Cymene)	11.2	1.0	µg/L	10.0		112	70-130	0.447	25	
Methyl tert-Butyl Ether (MTBE)	9.33	1.0	µg/L	10.0		93.3	70-130	0.747	25	
Methylene Chloride	9.20	5.0	µg/L	10.0		92.0	70-130	0.758	25	
4-Methyl-2-pentanone (MIBK)	97.1	10	µg/L	100		97.1	70-160	3.32	25	†
Naphthalene	10.6	2.0	µg/L	10.0		106	40-130	4.33	25	†
n-Propylbenzene	10.6	1.0	µg/L	10.0		106	70-130	1.71	25	
Styrene	10.8	1.0	µg/L	10.0		108	70-130	0.927	25	
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0		106	70-130	2.68	25	
1,1,2,2-Tetrachloroethane	10.7	0.50	µg/L	10.0		107	70-130	2.40	25	
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	3.08	25	
Tetrahydrofuran	9.01	10	µg/L	10.0		90.1	70-130	6.76	25	J
Toluene	10.1	1.0	µg/L	10.0		101	70-130	3.23	25	
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130	2.02	25	
1,2,4-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	5.29	25	
1,3,5-Trichlorobenzene	9.73	1.0	µg/L	10.0		97.3	70-130	5.11	25	
1,1,1-Trichloroethane	9.39	1.0	µg/L	10.0		93.9	70-130	2.37	25	
1,1,2-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	0.491	25	
Trichloroethylene	10.2	1.0	µg/L	10.0		102	70-130	0.392	25	
Trichlorofluoromethane (Freon 11)	9.04	2.0	µg/L	10.0		90.4	70-130	1.22	25	
1,2,3-Trichloropropane	10.5	2.0	µg/L	10.0		105	70-130	4.03	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.65	1.0	µg/L	10.0		96.5	70-130	1.75	25	
1,2,4-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	0.0969	25	
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.0		112	70-130	0.629	25	
Vinyl Chloride	8.63	2.0	µg/L	10.0		86.3	40-160	2.23	25	†
m+p Xylene	21.1	2.0	µg/L	20.0		105	70-130	1.87	25	
o-Xylene	10.3	1.0	µg/L	10.0		103	70-130	1.37	25	
Surrogate: 1,2-Dichloroethane-d4	23.2		µg/L	25.0		92.7	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	25.4		µg/L	25.0		102	70-130			

Batch B135624 - SW-846 5030B

Blank (B135624-BLK1)

Prepared: 11/16/15 Analyzed: 11/17/15

Tetrachloroethylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.4		µg/L	25.0		93.6	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	25.2		µg/L	25.0		101	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
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch B135624 - SW-846 5030B
LCS (B135624-BS1)

Prepared: 11/16/15 Analyzed: 11/17/15

Tetrachloroethylene	9.75	1.0	µg/L	10.0		97.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	23.7		µg/L	25.0		94.9	70-130			
Surrogate: Toluene-d8	24.4		µg/L	25.0		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.8	70-130			

LCS Dup (B135624-BSD1)

Prepared: 11/16/15 Analyzed: 11/17/15

Tetrachloroethylene	9.65	1.0	µg/L	10.0		96.5	70-130	1.03	25	
Surrogate: 1,2-Dichloroethane-d4	23.9		µg/L	25.0		95.6	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.2	70-130			
Surrogate: 4-Bromofluorobenzene	25.1		µg/L	25.0		101	70-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS

Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



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www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Company Name: AVCABIS

Telephone: 518.250.7322

Address: 855 Route 146, Suite 210

Project # 00260432.0000

Clifton Park, NY 12065

Client PO#

Attention: Mark A. Flusche

DATA DELIVERY (check all that apply)

Project Location: Peabody, NY

Fax # 15K0386

Sampled By: K. Lipkowski

Email: MARK.FLUSCH@AVCABIS.COM

☐ Project Proposal Provided? (for billing purposes)

Format: ☐ PDF ☐ EXCEL ☒ GIS ☐ OTHER

☐ "Enhanced Data Package"

Collection

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code
01	P7-1	11/4/15	1505	-	X	GW	10
02	P7-2		1450	-	X	GW	10
03	P7-3		1510	-	X	GW	10
04	P7-4		1530	-	X	GW	10
05	*P7-5		1515	-	X	GW	10
06	IP-8		1440	-	X	GW	10
07	TB(110915)		-	-	X	TB	10

Comments:

* Reduced Volume, Only 2 VOA vials

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

Relinquished by: (signature)	Date/Time: 11/9/15 1710	Relinquished by:	Date/Time:
Received by: (signature)	Date/Time: 11/05/15 10:25	Received by:	Date/Time:
Relinquished by: (signature)	Date/Time:	Relinquished by:	Date/Time:
Received by: (signature)	Date/Time:	Received by:	Date/Time:

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Program Information/Regulatory

☐ NY TOGS ☐ NY Restricted Use
☐ AWQ STDS ☐ NY Unrestricted Use
☐ NYC Sewer Discharge
☐ Part 360 GW (Landfill)
☒ Deliverables
☐ ASP-A ☐ Equis (1 file)
☐ ASP-B ☐ Equis (4 file)

Turnaround

☐ 5-Day
☐ 7 Day
☒ 10-Day or STD
☒ RUSH
24 hr ☐ 48 hr ☐
72 hr ☐ 4 day ☐
* Require lab approval

ANALYSIS REQUESTED

Dissolved Metals
☐ Field Filtered
☐ Lab to Filter

***Cont. Code:

A=amber glass
G=glass
P=plastic
ST=sterile
V=vial
S=Summa can
T=tetrad bag
O=Other
***Preservation
I=Iced
H=HCL
M=Methanol
N=Nitric Acid
S=Sulfuric Acid
B=Sodium bisulfate
X=Na hydroxide
T=Na thiosulfate
O=Other

*Matrix Code:

GW=groundwater
WW=wastewater
DW=drinking water
A=air
S=soil/solid
SL=sludge
O=other

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

ASK
MARK FLUSCH

11/10/2015

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FedEx® Tracking

802638714743

Ship date:

Mon 11/09/2015

EDI US

**Delivered**

Signed for by: P.BLAKE

Actual delivery:

Tue 11/10/2015 10:25 am

MA US

Travel History

▲ Date/Time	Activity	Location
11/10/2015 - Tuesday		
10:25 am	Delivered	MA
7:19 am	On FedEx vehicle for delivery	WINDSOR LOCKS, CT
7:14 am	At local FedEx facility	WINDSOR LOCKS, CT
3:15 am	Departed FedEx location	NEWARK, NJ
11/09/2015 - Monday		
9:53 pm	Arrived at FedEx location	NEWARK, NJ
8:45 pm	Left FedEx origin facility	ELMSFORD, NY
5:57 pm	Picked up	ELMSFORD, NY

Shipment Facts

Tracking number	802638714743	Service	FedEx Priority Overnight
Dimensions	15x13x2 in.	Delivered To	Shipping/Receiving
Total pieces	1	Packaging	Your Packaging
Special handling section	Deliver Weekday		

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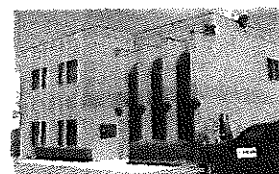
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Sample Receipt Checklist

CLIENT NAME: Arcades RECEIVED BY: KKM DATE: 11/10/15

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank 2.0 Temperature °C by Temp gun _____

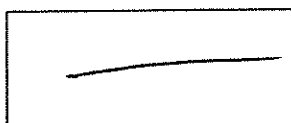
5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

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

Who was notified _____ Date _____ Time _____

7) Location where samples are stored:



Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

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

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

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

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	<u>20</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

one vial for PZ-5 with only small volume inside - only 2 vials able to be analyzed

40 mL vials: # HCl 20 # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Doc# 277

Rev. 4 August 2013

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

Any False statement will be brought to the attention of Client		
Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	see pg. 1 regarding PZ-5
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	see pg. 1 regarding PZ-5
21) Samples do not require splitting or compositing.	T	

Who notified of False statements?	Date/Time:
-----------------------------------	------------

Doc #277 Rev. 4 August 2013

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

Date/Time:
Date/Time:

11/10/15
10:25

December 28, 2015

Mark Flusche
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Crusher Rd.
Client Job Number:
Project Number: 00266432.0000
Laboratory Work Order Number: 15L1015

Enclosed are results of analyses for samples received by the laboratory on December 18, 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 "Aaron L. Benoit", with a horizontal line extending to the right.

Aaron L. Benoit
Project Manager

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

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Mark Flusche

REPORT DATE: 12/28/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00266432.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15L1015

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

PROJECT LOCATION: Crusher Rd.

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PZ 1	15L1015-01	Water		SW-846 8260C	
PZ 2	15L1015-02	Water		SW-846 8260C	
PZ 3	15L1015-03	Water		SW-846 8260C	
PZ 4	15L1015-04	Water		SW-846 8260C	
PZ 5	15L1015-05	Water		SW-846 8260C	
IP 8	15L1015-06	Water		SW-846 8260C	
Trip Blank	15L1015-07	Trip Blank Water		SW-846 8260C	

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CASE NARRATIVE SUMMARY

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

SW-846 8260C**Qualifications:**

L-02

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

Analyte & Samples(s) Qualified:**Methylene Chloride**B138479-BS1, B138479-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:**Bromochloromethane**B138479-BSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:15L1015-01[PZ 1], 15L1015-03[PZ 3], 15L1015-04[PZ 4], 15L1015-05[PZ 5]

V-05

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

Analyte & Samples(s) Qualified:**Acetone**15L1015-01[PZ 1], 15L1015-02[PZ 2], 15L1015-03[PZ 3], 15L1015-04[PZ 4], 15L1015-05[PZ 5], 15L1015-06[IP 8], 15L1015-07[Trip Blank], B138479-BLK1, B138479-BS1, B138479-BSD1

V-20

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

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

B138479-BS1, B138479-BSD1

Bromomethane

B138479-BS1, B138479-BSD1

Methylene Chloride

B138479-BS1, B138479-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, reading "Tod Kopyscinski". The signature is written in a cursive style with a large, stylized "T" and "K".

Tod E. Kopyscinski
Laboratory Director

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 1

Sampled: 12/17/2015 12:15

Sample ID: 15L1015-01

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1200	120	µg/L	25	V-05	SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Acrylonitrile	ND	120	14	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
tert-Amyl Methyl Ether (TAME)	ND	12	2.3	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Benzene	ND	25	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Bromobenzene	ND	25	3.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Bromochloromethane	ND	25	5.6	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Bromodichloromethane	ND	12	2.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Bromoform	ND	25	5.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Bromomethane	ND	50	24	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
2-Butanone (MEK)	ND	500	59	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
tert-Butyl Alcohol (TBA)	ND	500	54	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
n-Butylbenzene	ND	25	3.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
sec-Butylbenzene	ND	25	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
tert-Butylbenzene	ND	25	2.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	12	2.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Carbon Disulfide	ND	100	26	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Carbon Tetrachloride	ND	120	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Chlorobenzene	ND	25	4.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Chlorodibromomethane	ND	12	2.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Chloroethane	ND	50	7.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Chloroform	ND	50	5.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Chloromethane	ND	50	8.1	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
2-Chlorotoluene	ND	25	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
4-Chlorotoluene	ND	25	3.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	120	8.4	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2-Dibromoethane (EDB)	ND	12	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Dibromomethane	ND	25	4.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2-Dichlorobenzene	ND	25	4.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,3-Dichlorobenzene	ND	25	4.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,4-Dichlorobenzene	ND	25	3.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
trans-1,4-Dichloro-2-butene	ND	50	7.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Dichlorodifluoromethane (Freon 12)	ND	50	4.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1-Dichloroethane	ND	25	4.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2-Dichloroethane	ND	25	4.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1-Dichloroethylene	ND	25	5.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
cis-1,2-Dichloroethylene	ND	25	3.7	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
trans-1,2-Dichloroethylene	ND	25	3.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2-Dichloropropane	ND	25	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,3-Dichloropropane	ND	12	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
2,2-Dichloropropane	ND	25	4.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1-Dichloropropene	ND	50	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
cis-1,3-Dichloropropene	ND	12	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
trans-1,3-Dichloropropene	ND	12	2.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Diethyl Ether	ND	50	5.6	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH

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Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 1

Sampled: 12/17/2015 12:15

Sample ID: 15L1015-01

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	12	4.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,4-Dioxane	ND	1200	660	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Ethylbenzene	ND	25	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Hexachlorobutadiene	ND	12	4.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
2-Hexanone (MBK)	ND	250	38	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Isopropylbenzene (Cumene)	ND	25	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
p-Isopropyltoluene (p-Cymene)	ND	25	3.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Methyl tert-Butyl Ether (MTBE)	ND	25	2.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Methylene Chloride	ND	120	80	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
4-Methyl-2-pentanone (MIBK)	ND	250	37	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Naphthalene	ND	50	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
n-Propylbenzene	ND	25	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Styrene	ND	25	3.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1,1,2-Tetrachloroethane	ND	25	3.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1,2,2-Tetrachloroethane	ND	12	4.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Tetrachloroethylene	1400	25	4.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Tetrahydrofuran	ND	250	27	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Toluene	ND	25	4.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2,3-Trichlorobenzene	ND	120	3.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2,4-Trichlorobenzene	ND	25	4.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,3,5-Trichlorobenzene	ND	25	4.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1,1-Trichloroethane	ND	25	2.4	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1,2-Trichloroethane	ND	25	2.9	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Trichloroethylene	ND	25	5.0	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Trichlorofluoromethane (Freon 11)	ND	50	3.7	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2,3-Trichloropropane	ND	50	4.8	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	25	3.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,2,4-Trimethylbenzene	ND	25	4.5	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
1,3,5-Trimethylbenzene	ND	25	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
Vinyl Chloride	ND	50	3.3	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
m+p Xylene	ND	50	6.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH
o-Xylene	ND	25	3.2	µg/L	25		SW-846 8260C	12/24/15	12/24/15 13:45	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.4	70-130	12/24/15 13:45
Toluene-d8	98.5	70-130	12/24/15 13:45
4-Bromofluorobenzene	97.9	70-130	12/24/15 13:45

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Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 2

Sampled: 12/17/2015 13:05

Sample ID: 15L1015-02

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	5.4	50	4.9	µg/L	1	V-05, J	SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.080	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Carbon Disulfide	2.5	4.0	1.0	µg/L	1	J	SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
cis-1,2-Dichloroethylene	0.92	1.0	0.15	µg/L	1	J	SW-846 8260C	12/24/15	12/24/15 12:52	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 2

Sampled: 12/17/2015 13:05

Sample ID: 15L1015-02

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Tetrachloroethylene	7.1	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Trichloroethylene	2.8	1.0	0.20	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:52	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.4	70-130	12/24/15 12:52
Toluene-d8	100	70-130	12/24/15 12:52
4-Bromofluorobenzene	99.1	70-130	12/24/15 12:52

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 3

Sampled: 12/17/2015 13:35

Sample ID: 15L1015-03

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2000	190	µg/L	40	V-05	SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Acrylonitrile	ND	200	23	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
tert-Amyl Methyl Ether (TAME)	ND	20	3.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Benzene	ND	40	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Bromobenzene	ND	40	6.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Bromochloromethane	ND	40	8.9	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Bromodichloromethane	ND	20	3.5	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Bromoform	ND	40	8.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Bromomethane	ND	80	38	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
2-Butanone (MEK)	ND	800	95	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
tert-Butyl Alcohol (TBA)	ND	800	87	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
n-Butylbenzene	ND	40	6.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
sec-Butylbenzene	ND	40	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
tert-Butylbenzene	ND	40	4.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	20	3.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Carbon Disulfide	ND	160	41	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Carbon Tetrachloride	ND	200	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Chlorobenzene	ND	40	6.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Chlorodibromomethane	ND	20	4.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Chloroethane	ND	80	11	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Chloroform	ND	80	8.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Chloromethane	ND	80	13	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
2-Chlorotoluene	ND	40	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
4-Chlorotoluene	ND	40	5.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	200	14	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2-Dibromoethane (EDB)	ND	20	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Dibromomethane	ND	40	6.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2-Dichlorobenzene	ND	40	6.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,3-Dichlorobenzene	ND	40	6.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,4-Dichlorobenzene	ND	40	6.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
trans-1,4-Dichloro-2-butene	ND	80	12	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Dichlorodifluoromethane (Freon 12)	ND	80	7.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1-Dichloroethane	ND	40	6.3	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2-Dichloroethane	ND	40	7.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1-Dichloroethylene	ND	40	8.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
cis-1,2-Dichloroethylene	ND	40	5.9	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
trans-1,2-Dichloroethylene	ND	40	6.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2-Dichloropropane	ND	40	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,3-Dichloropropane	ND	20	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
2,2-Dichloropropane	ND	40	6.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1-Dichloropropene	ND	80	5.1	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
cis-1,3-Dichloropropene	ND	20	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
trans-1,3-Dichloropropene	ND	20	4.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Diethyl Ether	ND	80	8.9	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 3

Sampled: 12/17/2015 13:35

Sample ID: 15L1015-03

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	20	7.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,4-Dioxane	ND	2000	1100	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Ethylbenzene	ND	40	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Hexachlorobutadiene	ND	20	6.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
2-Hexanone (MBK)	ND	400	61	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Isopropylbenzene (Cumene)	ND	40	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
p-Isopropyltoluene (p-Cymene)	ND	40	6.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Methyl tert-Butyl Ether (MTBE)	ND	40	3.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Methylene Chloride	ND	200	130	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
4-Methyl-2-pentanone (MIBK)	ND	400	59	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Naphthalene	ND	80	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
n-Propylbenzene	ND	40	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Styrene	ND	40	6.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1,1,2-Tetrachloroethane	ND	40	4.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1,2,2-Tetrachloroethane	ND	20	6.4	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Tetrachloroethylene	2300	40	6.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Tetrahydrofuran	ND	400	43	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Toluene	ND	40	6.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2,3-Trichlorobenzene	ND	200	5.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2,4-Trichlorobenzene	ND	40	7.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,3,5-Trichlorobenzene	ND	40	6.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1,1-Trichloroethane	ND	40	3.8	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1,2-Trichloroethane	ND	40	4.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Trichloroethylene	ND	40	8.0	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Trichlorofluoromethane (Freon 11)	ND	80	5.9	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2,3-Trichloropropane	ND	80	7.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	40	5.6	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,2,4-Trimethylbenzene	ND	40	7.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
1,3,5-Trimethylbenzene	ND	40	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
Vinyl Chloride	ND	80	5.3	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
m+p Xylene	ND	80	10	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH
o-Xylene	ND	40	5.2	µg/L	40		SW-846 8260C	12/24/15	12/24/15 14:12	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.0	70-130	12/24/15 14:12
Toluene-d8	99.9	70-130	12/24/15 14:12
4-Bromofluorobenzene	97.4	70-130	12/24/15 14:12

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 4

Sampled: 12/17/2015 14:00

Sample ID: 15L1015-04

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	49	µg/L	10	V-05	SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Acrylonitrile	ND	50	5.8	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.91	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Benzene	15	10	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Bromobenzene	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Bromochloromethane	ND	10	2.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Bromodichloromethane	ND	5.0	0.88	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Bromoform	ND	10	2.1	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Bromomethane	ND	20	9.4	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
2-Butanone (MEK)	ND	200	24	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
tert-Butyl Alcohol (TBA)	ND	200	22	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
n-Butylbenzene	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
sec-Butylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
tert-Butylbenzene	ND	10	1.1	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	0.80	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Carbon Disulfide	ND	40	10	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Carbon Tetrachloride	ND	50	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Chlorobenzene	ND	10	1.6	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Chlorodibromomethane	ND	5.0	1.0	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Chloroethane	ND	20	2.8	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Chloroform	ND	20	2.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Chloromethane	ND	20	3.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
2-Chlorotoluene	ND	10	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
4-Chlorotoluene	ND	10	1.4	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	3.4	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2-Dibromoethane (EDB)	ND	5.0	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Dibromomethane	ND	10	1.6	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,3-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,4-Dichlorobenzene	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
trans-1,4-Dichloro-2-butene	ND	20	3.1	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	1.8	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1-Dichloroethane	ND	10	1.6	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2-Dichloroethane	ND	10	1.9	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1-Dichloroethylene	ND	10	2.1	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
cis-1,2-Dichloroethylene	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
trans-1,2-Dichloroethylene	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2-Dichloropropane	ND	10	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,3-Dichloropropane	ND	5.0	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
2,2-Dichloropropane	ND	10	1.6	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1-Dichloropropene	ND	20	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
cis-1,3-Dichloropropene	ND	5.0	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
trans-1,3-Dichloropropene	ND	5.0	1.1	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Diethyl Ether	ND	20	2.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 4

Sampled: 12/17/2015 14:00

Sample ID: 15L1015-04

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	5.0	1.8	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,4-Dioxane	ND	500	260	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Ethylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Hexachlorobutadiene	ND	5.0	1.7	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
2-Hexanone (MBK)	ND	100	15	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Isopropylbenzene (Cumene)	ND	10	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	0.90	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Methylene Chloride	ND	50	32	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	15	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Naphthalene	ND	20	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
n-Propylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Styrene	ND	10	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1,1,2-Tetrachloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1,2,2-Tetrachloroethane	ND	5.0	1.6	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Tetrachloroethylene	450	10	1.7	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Tetrahydrofuran	ND	100	11	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Toluene	ND	10	1.7	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2,3-Trichlorobenzene	ND	50	1.4	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2,4-Trichlorobenzene	ND	10	1.9	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,3,5-Trichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1,1-Trichloroethane	ND	10	0.94	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1,2-Trichloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Trichloroethylene	ND	10	2.0	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Trichlorofluoromethane (Freon 11)	ND	20	1.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2,3-Trichloropropane	ND	20	1.9	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	1.4	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,2,4-Trimethylbenzene	ND	10	1.8	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
1,3,5-Trimethylbenzene	ND	10	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
Vinyl Chloride	ND	20	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
m+p Xylene	ND	20	2.5	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH
o-Xylene	ND	10	1.3	µg/L	10		SW-846 8260C	12/24/15	12/24/15 14:39	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.8	70-130	12/24/15 14:39
Toluene-d8	101	70-130	12/24/15 14:39
4-Bromofluorobenzene	99.1	70-130	12/24/15 14:39

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 5

Sampled: 12/17/2015 14:20

Sample ID: 15L1015-05

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	9.7	µg/L	2	V-05	SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Acrylonitrile	ND	10	1.2	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.18	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Benzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Bromobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Bromochloromethane	ND	2.0	0.45	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Bromodichloromethane	ND	1.0	0.18	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Bromoform	ND	2.0	0.42	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Bromomethane	ND	4.0	1.9	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
2-Butanone (MEK)	ND	40	4.7	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
tert-Butyl Alcohol (TBA)	ND	40	4.3	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
n-Butylbenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
sec-Butylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
tert-Butylbenzene	ND	2.0	0.22	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.16	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Carbon Disulfide	ND	8.0	2.0	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Carbon Tetrachloride	ND	10	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Chlorobenzene	ND	2.0	0.32	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Chlorodibromomethane	ND	1.0	0.20	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Chloroethane	ND	4.0	0.56	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Chloroform	ND	4.0	0.44	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Chloromethane	ND	4.0	0.65	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
2-Chlorotoluene	ND	2.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
4-Chlorotoluene	ND	2.0	0.28	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	0.68	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Dibromomethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2-Dichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,3-Dichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,4-Dichlorobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	0.62	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.36	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1-Dichloroethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2-Dichloroethane	ND	2.0	0.39	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1-Dichloroethylene	ND	2.0	0.42	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
cis-1,2-Dichloroethylene	0.46	2.0	0.29	µg/L	2	J	SW-846 8260C	12/24/15	12/24/15 15:05	EEH
trans-1,2-Dichloroethylene	ND	2.0	0.30	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2-Dichloropropane	ND	2.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,3-Dichloropropane	ND	1.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
2,2-Dichloropropane	ND	2.0	0.32	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1-Dichloropropene	ND	4.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
cis-1,3-Dichloropropene	ND	1.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
trans-1,3-Dichloropropene	ND	1.0	0.22	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Diethyl Ether	ND	4.0	0.44	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH

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Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: PZ 5

Sampled: 12/17/2015 14:20

Sample ID: 15L1015-05

Sample Matrix: Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	0.36	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,4-Dioxane	ND	100	53	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Ethylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Hexachlorobutadiene	ND	1.0	0.34	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
2-Hexanone (MBK)	ND	20	3.0	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	0.30	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.18	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Methylene Chloride	ND	10	6.4	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.9	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Naphthalene	ND	4.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
n-Propylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Styrene	ND	2.0	0.30	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	0.24	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.32	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Tetrachloroethylene	84	2.0	0.34	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Tetrahydrofuran	ND	20	2.1	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Toluene	ND	2.0	0.34	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2,3-Trichlorobenzene	ND	10	0.28	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.38	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,3,5-Trichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1,1-Trichloroethane	ND	2.0	0.19	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1,2-Trichloroethane	ND	2.0	0.23	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Trichloroethylene	0.52	2.0	0.40	µg/L	2	J	SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.29	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2,3-Trichloropropane	ND	4.0	0.38	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.28	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,2,4-Trimethylbenzene	ND	2.0	0.36	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
1,3,5-Trimethylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
Vinyl Chloride	ND	4.0	0.27	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
m+p Xylene	ND	4.0	0.50	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH
o-Xylene	ND	2.0	0.26	µg/L	2		SW-846 8260C	12/24/15	12/24/15 15:05	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	102	70-130	12/24/15 15:05
Toluene-d8	99.4	70-130	12/24/15 15:05
4-Bromofluorobenzene	100	70-130	12/24/15 15:05

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Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: IP 8

Sampled: 12/17/2015 14:30

Sample ID: 15L1015-06

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	9.1	50	4.9	µg/L	1	V-05, J	SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Bromodichloromethane	0.90	0.50	0.088	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.080	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Chlorodibromomethane	0.45	0.50	0.10	µg/L	1	J	SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Chloroform	2.1	2.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: IP 8

Sampled: 12/17/2015 14:30

Sample ID: 15L1015-06

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 13:19	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	99.7	70-130	12/24/15 13:19
Toluene-d8	100	70-130	12/24/15 13:19
4-Bromofluorobenzene	98.8	70-130	12/24/15 13:19

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: Trip Blank

Sampled: 12/17/2015 00:00

Sample ID: 15L1015-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	12	50	4.9	µg/L	1	V-05, J	SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
tert-Butyl Alcohol (TBA)	2.3	20	2.2	µg/L	1	J	SW-846 8260C	12/24/15	12/24/15 12:26	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.080	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.31	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH

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

Project Location: Crusher Rd.

Sample Description:

Work Order: 15L1015

Date Received: 12/18/2015

Field Sample #: Trip Blank

Sampled: 12/17/2015 00:00

Sample ID: 15L1015-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,4-Dioxane	ND	50	26	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Toluene	0.35	1.0	0.17	µg/L	1	J	SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	12/24/15	12/24/15 12:26	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
1,2-Dichloroethane-d4	98.6	70-130	
Toluene-d8	101	70-130	
4-Bromofluorobenzene	99.0	70-130	

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
15L1015-01 [PZ 1]	B138479	0.2	5.00	12/24/15
15L1015-02 [PZ 2]	B138479	5	5.00	12/24/15
15L1015-03 [PZ 3]	B138479	0.125	5.00	12/24/15
15L1015-04 [PZ 4]	B138479	0.5	5.00	12/24/15
15L1015-05 [PZ 5]	B138479	2.5	5.00	12/24/15
15L1015-06 [IP 8]	B138479	5	5.00	12/24/15
15L1015-07 [Trip Blank]	B138479	5	5.00	12/24/15

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

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B138479 - SW-846 5030B
Blank (B138479-BLK1)

Prepared & Analyzed: 12/24/15

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

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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 B138479 - SW-846 5030B

Blank (B138479-BLK1)

Prepared & Analyzed: 12/24/15

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		96.8	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.3		µg/L	25.0		97.0	70-130			

LCS (B138479-BS1)

Prepared & Analyzed: 12/24/15

Acetone	75.8	50	µg/L	100		75.8	70-160			V-05	†
Acrylonitrile	10.6	5.0	µg/L	10.0		106	70-130				
tert-Amyl Methyl Ether (TAME)	10.1	0.50	µg/L	10.0		101	70-130				
Benzene	10.9	1.0	µg/L	10.0		109	70-130				
Bromobenzene	10.7	1.0	µg/L	10.0		107	70-130				
Bromochloromethane	12.8	1.0	µg/L	10.0		128	70-130			V-20	
Bromodichloromethane	10.1	0.50	µg/L	10.0		101	70-130				
Bromoform	9.42	1.0	µg/L	10.0		94.2	70-130				
Bromomethane	7.81	2.0	µg/L	10.0		78.1	40-160			V-20	†
2-Butanone (MEK)	93.2	20	µg/L	100		93.2	40-160				†
tert-Butyl Alcohol (TBA)	89.1	20	µg/L	100		89.1	40-160				†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130				
sec-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130				
tert-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130				
tert-Butyl Ethyl Ether (TBEE)	10.6	0.50	µg/L	10.0		106	70-130				
Carbon Disulfide	10.1	4.0	µg/L	10.0		101	70-130				
Carbon Tetrachloride	10.3	5.0	µg/L	10.0		103	70-130				
Chlorobenzene	10.1	1.0	µg/L	10.0		101	70-130				
Chlorodibromomethane	9.39	0.50	µg/L	10.0		93.9	70-130				
Chloroethane	11.6	2.0	µg/L	10.0		116	70-130				
Chloroform	10.5	2.0	µg/L	10.0		105	70-130				
Chloromethane	9.34	2.0	µg/L	10.0		93.4	40-160				†
2-Chlorotoluene	10.4	1.0	µg/L	10.0		104	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
Batch B138479 - SW-846 5030B										
LCS (B138479-BS1)				Prepared & Analyzed: 12/24/15						
4-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.26	5.0	µg/L	10.0		92.6	70-130			
1,2-Dibromoethane (EDB)	10.9	0.50	µg/L	10.0		109	70-130			
Dibromomethane	11.0	1.0	µg/L	10.0		110	70-130			
1,2-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,4-Dichlorobenzene	9.68	1.0	µg/L	10.0		96.8	70-130			
trans-1,4-Dichloro-2-butene	8.70	2.0	µg/L	10.0		87.0	70-130			
Dichlorodifluoromethane (Freon 12)	4.94	2.0	µg/L	10.0		49.4	40-160			†
1,1-Dichloroethane	11.2	1.0	µg/L	10.0		112	70-130			
1,2-Dichloroethane	9.78	1.0	µg/L	10.0		97.8	70-130			
1,1-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
cis-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130			
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	70-130			
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130			
2,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	40-130			†
1,1-Dichloropropene	10.7	2.0	µg/L	10.0		107	70-130			
cis-1,3-Dichloropropene	9.88	0.50	µg/L	10.0		98.8	70-130			
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130			
Diethyl Ether	11.0	2.0	µg/L	10.0		110	70-130			
Diisopropyl Ether (DIPE)	10.3	0.50	µg/L	10.0		103	70-130			
1,4-Dioxane	83.5	50	µg/L	100		83.5	40-130			†
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Hexachlorobutadiene	10.2	0.50	µg/L	10.0		102	70-130			
2-Hexanone (MBK)	96.4	10	µg/L	100		96.4	70-160			†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0		103	70-130			
p-Isopropyltoluene (p-Cymene)	11.2	1.0	µg/L	10.0		112	70-130			
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130			
Methylene Chloride	14.0	5.0	µg/L	10.0		140 *	70-130			L-02, V-20
4-Methyl-2-pentanone (MIBK)	101	10	µg/L	100		101	70-160			†
Naphthalene	10.1	2.0	µg/L	10.0		101	40-130			†
n-Propylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
Styrene	10.6	1.0	µg/L	10.0		106	70-130			
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110	70-130			
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130			
Tetrahydrofuran	9.25	10	µg/L	10.0		92.5	70-130			J
Toluene	10.7	1.0	µg/L	10.0		107	70-130			
1,2,3-Trichlorobenzene	10.5	5.0	µg/L	10.0		105	70-130			
1,2,4-Trichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			
1,3,5-Trichlorobenzene	9.61	1.0	µg/L	10.0		96.1	70-130			
1,1,1-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130			
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Trichlorofluoromethane (Freon 11)	8.95	2.0	µg/L	10.0		89.5	70-130			
1,2,3-Trichloropropane	10.6	2.0	µg/L	10.0		106	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	10.6	1.0	µg/L	10.0		106	70-130			
1,3,5-Trimethylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
Vinyl Chloride	7.94	2.0	µg/L	10.0		79.4	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
Batch B138479 - SW-846 5030B										
LCS (B138479-BS1)				Prepared & Analyzed: 12/24/15						
m+p Xylene	20.9	2.0	µg/L	20.0		105	70-130			
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0		97.8	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		100	70-130			
LCS Dup (B138479-BSD1)				Prepared & Analyzed: 12/24/15						
Acetone	70.2	50	µg/L	100		70.2	70-160	7.72	25	V-05 †
Acrylonitrile	10.3	5.0	µg/L	10.0		103	70-130	3.35	25	
tert-Amyl Methyl Ether (TAME)	9.94	0.50	µg/L	10.0		99.4	70-130	1.79	25	
Benzene	11.2	1.0	µg/L	10.0		112	70-130	2.35	25	
Bromobenzene	11.1	1.0	µg/L	10.0		111	70-130	3.31	25	
Bromochloromethane	13.3	1.0	µg/L	10.0		133 *	70-130	4.00	25	L-07, V-20
Bromodichloromethane	9.82	0.50	µg/L	10.0		98.2	70-130	2.41	25	
Bromoform	9.22	1.0	µg/L	10.0		92.2	70-130	2.15	25	
Bromomethane	8.78	2.0	µg/L	10.0		87.8	40-160	11.7	25	V-20 †
2-Butanone (MEK)	85.7	20	µg/L	100		85.7	40-160	8.42	25	†
tert-Butyl Alcohol (TBA)	77.6	20	µg/L	100		77.6	40-160	13.8	25	†
n-Butylbenzene	10.6	1.0	µg/L	10.0		106	70-130	1.41	25	
sec-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	1.39	25	
tert-Butylbenzene	10.1	1.0	µg/L	10.0		101	70-130	0.397	25	
tert-Butyl Ethyl Ether (TBEE)	10.5	0.50	µg/L	10.0		105	70-130	1.42	25	
Carbon Disulfide	9.97	4.0	µg/L	10.0		99.7	70-130	0.998	25	
Carbon Tetrachloride	10.5	5.0	µg/L	10.0		105	70-130	1.92	25	
Chlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	4.85	25	
Chlorodibromomethane	9.76	0.50	µg/L	10.0		97.6	70-130	3.86	25	
Chloroethane	12.5	2.0	µg/L	10.0		125	70-130	7.53	25	
Chloroform	10.7	2.0	µg/L	10.0		107	70-130	1.89	25	
Chloromethane	10.4	2.0	µg/L	10.0		104	40-160	10.8	25	†
2-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130	0.580	25	
4-Chlorotoluene	10.7	1.0	µg/L	10.0		107	70-130	2.85	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.17	5.0	µg/L	10.0		81.7	70-130	12.5	25	
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107	70-130	2.41	25	
Dibromomethane	11.0	1.0	µg/L	10.0		110	70-130	0.454	25	
1,2-Dichlorobenzene	9.76	1.0	µg/L	10.0		97.6	70-130	2.53	25	
1,3-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130	2.75	25	
1,4-Dichlorobenzene	9.82	1.0	µg/L	10.0		98.2	70-130	1.44	25	
trans-1,4-Dichloro-2-butene	8.10	2.0	µg/L	10.0		81.0	70-130	7.14	25	
Dichlorodifluoromethane (Freon 12)	5.12	2.0	µg/L	10.0		51.2	40-160	3.58	25	†
1,1-Dichloroethane	11.5	1.0	µg/L	10.0		115	70-130	2.64	25	
1,2-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130	2.22	25	
1,1-Dichloroethylene	10.7	1.0	µg/L	10.0		107	70-130	1.89	25	
cis-1,2-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	4.48	25	
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	6.55	25	
1,2-Dichloropropane	11.6	1.0	µg/L	10.0		116	70-130	8.45	25	
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130	1.86	25	
2,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	40-130	1.60	25	†
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130	1.30	25	
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130	2.60	25	
trans-1,3-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130	0.474	25	
Diethyl Ether	11.0	2.0	µg/L	10.0		110	70-130	0.0908	25	
Diisopropyl Ether (DIPE)	10.3	0.50	µg/L	10.0		103	70-130	0.00	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
Batch B138479 - SW-846 5030B										
LCS Dup (B138479-BSD1)				Prepared & Analyzed: 12/24/15						
1,4-Dioxane	83.5	50	µg/L	100		83.5	40-130	0.00	50	† ‡
Ethylbenzene	10.8	1.0	µg/L	10.0		108	70-130	3.29	25	
Hexachlorobutadiene	10.2	0.50	µg/L	10.0		102	70-130	0.588	25	
2-Hexanone (MBK)	84.6	10	µg/L	100		84.6	70-160	13.1	25	†
Isopropylbenzene (Cumene)	10.6	1.0	µg/L	10.0		106	70-130	3.35	25	
p-Isopropyltoluene (p-Cymene)	11.2	1.0	µg/L	10.0		112	70-130	0.445	25	
Methyl tert-Butyl Ether (MTBE)	9.84	1.0	µg/L	10.0		98.4	70-130	3.10	25	
Methylene Chloride	14.4	5.0	µg/L	10.0		144 *	70-130	2.60	25	L-02, V-20
4-Methyl-2-pentanone (MIBK)	96.0	10	µg/L	100		96.0	70-160	4.72	25	†
Naphthalene	9.19	2.0	µg/L	10.0		91.9	40-130	9.73	25	†
n-Propylbenzene	10.8	1.0	µg/L	10.0		108	70-130	2.43	25	
Styrene	10.9	1.0	µg/L	10.0		109	70-130	3.17	25	
1,1,1,2-Tetrachloroethane	10.6	1.0	µg/L	10.0		106	70-130	2.49	25	
1,1,2,2-Tetrachloroethane	10.5	0.50	µg/L	10.0		105	70-130	4.67	25	
Tetrachloroethylene	10.7	1.0	µg/L	10.0		107	70-130	3.63	25	
Tetrahydrofuran	8.43	10	µg/L	10.0		84.3	70-130	9.28	25	J
Toluene	11.0	1.0	µg/L	10.0		110	70-130	3.04	25	
1,2,3-Trichlorobenzene	9.84	5.0	µg/L	10.0		98.4	70-130	6.11	25	
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.75	25	
1,3,5-Trichlorobenzene	9.20	1.0	µg/L	10.0		92.0	70-130	4.36	25	
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130	3.63	25	
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.01	25	
Trichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	2.11	25	
Trichlorofluoromethane (Freon 11)	8.99	2.0	µg/L	10.0		89.9	70-130	0.446	25	
1,2,3-Trichloropropane	10.4	2.0	µg/L	10.0		104	70-130	2.00	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7	1.0	µg/L	10.0		107	70-130	6.54	25	
1,2,4-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130	1.33	25	
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.0		112	70-130	2.80	25	
Vinyl Chloride	8.36	2.0	µg/L	10.0		83.6	40-160	5.15	25	†
m+p Xylene	21.4	2.0	µg/L	20.0		107	70-130	2.41	25	
o-Xylene	10.6	1.0	µg/L	10.0		106	70-130	1.14	25	
Surrogate: 1,2-Dichloroethane-d4	24.5		µg/L	25.0		98.0	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.5	70-130			

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

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant 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.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS
Certified Analyses included in this Report

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

CERTIFICATIONS
Certified Analyses included in this Report

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

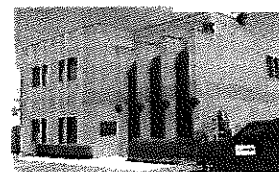
The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

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



Page 1 of 2



Sample Receipt Checklist

CLIENT NAME: Accadis RECEIVED BY: JUL DATE: 12/18/15

1) Was the chain(s) of custody relinquished and signed?

Yes ☒ No ☐ No CoC Included

2) Does the chain agree with the samples?

Yes ☒ No ☐

If not, explain:

3) Are all the samples in good condition?

Yes ☒ No ☐

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes ☒ No ☐ N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.1

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	<u>for 19 20</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

Rec'd 2 TBs not on CoC RM

40 mL vials: # HCl 20 # Methanol _____

Doc# 277 # Bisulfate _____ # DI Water _____

Rev. 4 August 2013 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	F	
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	

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials:

ADL

Date/Time:

Date/Time:

12/18/15 1550

May 11, 2016

Mark Flusche
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Bedford, NY
Client Job Number:
Project Number: 00266432.0.2
Laboratory Work Order Number: 16D1234

Enclosed are results of analyses for samples received by the laboratory on April 27, 2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron L. Benoit", with a long horizontal line extending to the right.

Aaron L. Benoit
Project Manager

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

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Mark Flusche

REPORT DATE: 5/11/2016

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00266432.0.2

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 16D1234

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

PROJECT LOCATION: Bedford, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PZ-1	16D1234-01	Ground Water		SW-846 8260C	
PZ-2	16D1234-02	Ground Water		SW-846 8260C	
PZ-3	16D1234-03	Ground Water		SW-846 8260C	
PZ-4	16D1234-04	Ground Water		SW-846 8260C	
PZ-5	16D1234-05	Ground Water		SW-846 8260C	
IP-8	16D1234-06	Ground Water		SW-846 8260C	
TB (042616)	16D1234-07	Trip Blank Water		SW-846 8260C	

CASE NARRATIVE SUMMARY

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

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

Qualifications:**L-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:**Methyl Acetate**

16D1234-01[PZ-1], 16D1234-02[PZ-2], 16D1234-03[PZ-3], 16D1234-04[PZ-4], 16D1234-05[PZ-5], 16D1234-06[IP-8], 16D1234-07[TB (042616)], B148551-BLK1, B148551-BS1, B148551-BSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

16D1234-03[PZ-3], 16D1234-04[PZ-4], 16D1234-05[PZ-5]

Tetrachloroethylene

16D1234-06[IP-8]

V-05

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

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

16D1234-01[PZ-1], 16D1234-02[PZ-2], 16D1234-03[PZ-3], 16D1234-04[PZ-4], 16D1234-05[PZ-5], 16D1234-06[IP-8], 16D1234-07[TB (042616)], B148551-BLK1, B148551-BS1, B148551-BSD1

trans-1,3-Dichloropropene

16D1234-01[PZ-1], 16D1234-02[PZ-2], 16D1234-03[PZ-3], 16D1234-04[PZ-4], 16D1234-05[PZ-5], 16D1234-06[IP-8], 16D1234-07[TB (042616)], B148551-BLK1, B148551-BS1, B148551-BSD1

V-06

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

Analyte & Samples(s) Qualified:**2-Butanone (MEK)**

16D1234-01[PZ-1], B148551-BS1, B148551-BSD1

V-16

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

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

16D1234-01[PZ-1], 16D1234-02[PZ-2], 16D1234-03[PZ-3], 16D1234-04[PZ-4], 16D1234-05[PZ-5], 16D1234-06[IP-8], 16D1234-07[TB (042616)], B148551-BLK1, B148551-BS1, B148551-BSD1

tert-Butyl Alcohol (TBA)

16D1234-01[PZ-1], 16D1234-02[PZ-2], 16D1234-03[PZ-3], 16D1234-04[PZ-4], 16D1234-05[PZ-5], 16D1234-06[IP-8], 16D1234-07[TB (042616)], B148551-BLK1, B148551-BS1, B148551-BSD1

V-20

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

Analyte & Samples(s) Qualified:**2-Hexanone (MBK)**

B148551-BS1, B148551-BSD1

4-Methyl-2-pentanone (MIBK)

B148551-BS1, B148551-BSD1

tert-Butyl Alcohol (TBA)

B148551-BS1, B148551-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 "Lisa Worthington", is written over a light pink rectangular background.

Lisa A. Worthington
Project Manager

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-1

Sampled: 4/26/2016 11:00

Sample ID: 16D1234-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	88	50	4.9	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Bromodichloromethane	0.67	0.50	0.088	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
2-Butanone (MEK)	6.2	20	2.4	µg/L	1	V-06, J	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.080	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Chloroform	1.8	2.0	0.22	µg/L	1	J	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,4-Dichlorobenzene	0.19	1.0	0.15	µg/L	1	J	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	0.31	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1	V-05	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1	V-05	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-1

Sampled: 4/26/2016 11:00

Sample ID: 16D1234-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,4-Dioxane	ND	100	26	µg/L	1	V-16	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	L-04	SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:03	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	102		70-130				5/7/16 14:03			
Toluene-d8	98.9		70-130				5/7/16 14:03			
4-Bromofluorobenzene	99.4		70-130				5/7/16 14:03			

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-2

Sampled: 4/26/2016 10:55

Sample ID: 16D1234-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.9	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	5/6/16	5/7/16 14:30	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.080	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	0.31	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
cis-1,2-Dichloroethylene	1.8	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1	V-05	SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1	V-05	SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-2

Sampled: 4/26/2016 10:55

Sample ID: 16D1234-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,4-Dioxane	ND	100	26	µg/L	1	V-16	SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	L-04	SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Tetrachloroethylene	15	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Toluene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Trichloroethylene	2.1	1.0	0.20	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 14:30	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	103		70-130				5/7/16 14:30			
Toluene-d8	99.0		70-130				5/7/16 14:30			
4-Bromofluorobenzene	101		70-130				5/7/16 14:30			

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-3

Sampled: 4/26/2016 10:15

Sample ID: 16D1234-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	240	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Acrylonitrile	ND	250	29	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	4.6	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Benzene	ND	50	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Bromobenzene	ND	50	7.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Bromochloromethane	ND	50	11	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Bromodichloromethane	ND	25	4.4	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Bromoform	ND	50	10	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Bromomethane	ND	100	47	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
2-Butanone (MEK)	ND	1000	120	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
tert-Butyl Alcohol (TBA)	ND	1000	110	µg/L	50	V-16	SW-846 8260C	5/6/16	5/7/16 14:57	EEH
n-Butylbenzene	ND	50	7.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
sec-Butylbenzene	ND	50	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
tert-Butylbenzene	ND	50	5.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	4.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Carbon Disulfide	ND	200	51	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Carbon Tetrachloride	ND	250	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Chlorobenzene	ND	50	8.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Chlorodibromomethane	ND	25	5.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Chloroethane	ND	100	14	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Chloroform	ND	100	11	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Chloromethane	ND	100	16	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
2-Chlorotoluene	ND	50	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
4-Chlorotoluene	ND	50	7.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	17	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2-Dibromoethane (EDB)	ND	25	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Dibromomethane	ND	50	8.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2-Dichlorobenzene	ND	50	8.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,3-Dichlorobenzene	ND	50	8.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,4-Dichlorobenzene	ND	50	7.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
trans-1,4-Dichloro-2-butene	ND	250	16	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	9.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1-Dichloroethane	ND	50	7.9	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2-Dichloroethane	ND	50	9.7	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1-Dichloroethylene	ND	50	10	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
cis-1,2-Dichloroethylene	ND	50	7.4	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
trans-1,2-Dichloroethylene	ND	50	7.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2-Dichloropropane	ND	50	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,3-Dichloropropane	ND	25	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
2,2-Dichloropropane	ND	50	8.0	µg/L	50	V-05	SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1-Dichloropropene	ND	100	6.4	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
cis-1,3-Dichloropropene	ND	25	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
trans-1,3-Dichloropropene	ND	25	5.5	µg/L	50	V-05	SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Diethyl Ether	ND	100	11	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-3

Sampled: 4/26/2016 10:15

Sample ID: 16D1234-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	9.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,4-Dioxane	ND	5000	1300	µg/L	50	V-16	SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Ethylbenzene	ND	50	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Hexachlorobutadiene	ND	25	8.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
2-Hexanone (MBK)	ND	500	76	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Isopropylbenzene (Cumene)	ND	50	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	7.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Methyl Acetate	ND	50	21	µg/L	50	L-04	SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	4.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Methyl Cyclohexane	ND	50	32	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Methylene Chloride	ND	250	160	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	73	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Naphthalene	ND	100	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
n-Propylbenzene	ND	50	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Styrene	ND	50	7.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1,1,2-Tetrachloroethane	ND	50	6.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1,2,2-Tetrachloroethane	ND	25	8.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Tetrachloroethylene	5500	50	8.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Tetrahydrofuran	ND	500	54	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Toluene	ND	50	8.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2,3-Trichlorobenzene	ND	250	7.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2,4-Trichlorobenzene	ND	50	9.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,3,5-Trichlorobenzene	ND	50	8.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1,1-Trichloroethane	ND	50	4.7	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1,2-Trichloroethane	ND	50	5.8	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Trichloroethylene	ND	50	10	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Trichlorofluoromethane (Freon 11)	ND	100	7.4	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2,3-Trichloropropane	ND	100	9.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	7.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,2,4-Trimethylbenzene	ND	50	9.0	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
1,3,5-Trimethylbenzene	ND	50	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Vinyl Chloride	ND	100	6.6	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
m+p Xylene	ND	100	12	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
o-Xylene	ND	50	6.5	µg/L	50		SW-846 8260C	5/6/16	5/7/16 14:57	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual							
1,2-Dichloroethane-d4	103	70-130							5/7/16 14:57	
Toluene-d8	98.4	70-130							5/7/16 14:57	
4-Bromofluorobenzene	98.7	70-130							5/7/16 14:57	

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-4

Sampled: 4/26/2016 10:35

Sample ID: 16D1234-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	19	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Acrylonitrile	ND	20	2.3	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.0	0.36	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Benzene	2.9	4.0	0.48	µg/L	4	J	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Bromobenzene	ND	4.0	0.60	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Bromochloromethane	ND	4.0	0.89	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Bromodichloromethane	ND	2.0	0.35	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Bromoform	ND	4.0	0.84	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Bromomethane	ND	8.0	3.8	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
2-Butanone (MEK)	ND	80	9.5	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
tert-Butyl Alcohol (TBA)	ND	80	8.7	µg/L	4	V-16	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
n-Butylbenzene	ND	4.0	0.60	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
sec-Butylbenzene	ND	4.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
tert-Butylbenzene	ND	4.0	0.44	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.0	0.32	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Carbon Disulfide	ND	16	4.1	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Carbon Tetrachloride	ND	20	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Chlorobenzene	ND	4.0	0.64	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Chlorodibromomethane	ND	2.0	0.40	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Chloroethane	ND	8.0	1.1	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Chloroform	ND	8.0	0.88	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Chloromethane	ND	8.0	1.3	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
2-Chlorotoluene	ND	4.0	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
4-Chlorotoluene	ND	4.0	0.56	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	1.4	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2-Dibromoethane (EDB)	ND	2.0	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Dibromomethane	ND	4.0	0.64	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2-Dichlorobenzene	ND	4.0	0.68	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,3-Dichlorobenzene	ND	4.0	0.68	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,4-Dichlorobenzene	0.76	4.0	0.60	µg/L	4	J	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
trans-1,4-Dichloro-2-butene	ND	20	1.2	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Dichlorodifluoromethane (Freon 12)	ND	8.0	0.72	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1-Dichloroethane	ND	4.0	0.63	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2-Dichloroethane	ND	4.0	0.78	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1-Dichloroethylene	ND	4.0	0.84	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
cis-1,2-Dichloroethylene	ND	4.0	0.59	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
trans-1,2-Dichloroethylene	ND	4.0	0.60	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2-Dichloropropane	ND	4.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,3-Dichloropropane	ND	2.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
2,2-Dichloropropane	ND	4.0	0.64	µg/L	4	V-05	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1-Dichloropropene	ND	8.0	0.51	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
cis-1,3-Dichloropropene	ND	2.0	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
trans-1,3-Dichloropropene	ND	2.0	0.44	µg/L	4	V-05	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Diethyl Ether	ND	8.0	0.89	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-4

Sampled: 4/26/2016 10:35

Sample ID: 16D1234-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	2.0	0.72	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,4-Dioxane	ND	400	110	µg/L	4	V-16	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Ethylbenzene	ND	4.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Hexachlorobutadiene	ND	2.0	0.68	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
2-Hexanone (MBK)	ND	40	6.1	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Isopropylbenzene (Cumene)	ND	4.0	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
p-Isopropyltoluene (p-Cymene)	ND	4.0	0.60	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Methyl Acetate	ND	4.0	1.7	µg/L	4	L-04	SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Methyl tert-Butyl Ether (MTBE)	ND	4.0	0.36	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Methyl Cyclohexane	ND	4.0	2.5	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Methylene Chloride	ND	20	13	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
4-Methyl-2-pentanone (MIBK)	ND	40	5.9	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Naphthalene	ND	8.0	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
n-Propylbenzene	ND	4.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Styrene	ND	4.0	0.60	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1,1,2-Tetrachloroethane	ND	4.0	0.48	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1,2,2-Tetrachloroethane	ND	2.0	0.64	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Tetrachloroethylene	170	4.0	0.68	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Tetrahydrofuran	ND	40	4.3	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Toluene	ND	4.0	0.68	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2,3-Trichlorobenzene	ND	20	0.56	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2,4-Trichlorobenzene	ND	4.0	0.76	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,3,5-Trichlorobenzene	ND	4.0	0.68	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1,1-Trichloroethane	ND	4.0	0.38	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1,2-Trichloroethane	ND	4.0	0.46	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Trichloroethylene	ND	4.0	0.80	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Trichlorofluoromethane (Freon 11)	ND	8.0	0.59	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2,3-Trichloropropane	ND	8.0	0.76	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	0.56	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,2,4-Trimethylbenzene	ND	4.0	0.72	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
1,3,5-Trimethylbenzene	ND	4.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Vinyl Chloride	ND	8.0	0.53	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
m+p Xylene	ND	8.0	1.0	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
o-Xylene	ND	4.0	0.52	µg/L	4		SW-846 8260C	5/6/16	5/7/16 15:24	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	101		70-130				5/7/16 15:24			
Toluene-d8	99.4		70-130				5/7/16 15:24			
4-Bromofluorobenzene	98.6		70-130				5/7/16 15:24			

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Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-5

Sampled: 4/26/2016 10:45

Sample ID: 16D1234-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	9.7	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Acrylonitrile	ND	10	1.2	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.18	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Benzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Bromobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Bromochloromethane	ND	2.0	0.45	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Bromodichloromethane	ND	1.0	0.18	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Bromoform	ND	2.0	0.42	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Bromomethane	ND	4.0	1.9	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
2-Butanone (MEK)	ND	40	4.7	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
tert-Butyl Alcohol (TBA)	ND	40	4.3	µg/L	2	V-16	SW-846 8260C	5/6/16	5/7/16 15:51	EEH
n-Butylbenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
sec-Butylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
tert-Butylbenzene	ND	2.0	0.22	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.16	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Carbon Disulfide	ND	8.0	2.0	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Carbon Tetrachloride	ND	10	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Chlorobenzene	ND	2.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Chlorodibromomethane	ND	1.0	0.20	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Chloroethane	ND	4.0	0.56	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Chloroform	ND	4.0	0.44	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Chloromethane	ND	4.0	0.65	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
2-Chlorotoluene	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
4-Chlorotoluene	ND	2.0	0.28	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	0.68	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Dibromomethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2-Dichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,3-Dichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,4-Dichlorobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
trans-1,4-Dichloro-2-butene	ND	10	0.62	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.36	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1-Dichloroethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2-Dichloroethane	ND	2.0	0.39	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1-Dichloroethylene	ND	2.0	0.42	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
cis-1,2-Dichloroethylene	ND	2.0	0.29	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
trans-1,2-Dichloroethylene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2-Dichloropropane	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,3-Dichloropropane	ND	1.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
2,2-Dichloropropane	ND	2.0	0.32	µg/L	2	V-05	SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1-Dichloropropene	ND	4.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
cis-1,3-Dichloropropene	ND	1.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
trans-1,3-Dichloropropene	ND	1.0	0.22	µg/L	2	V-05	SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Diethyl Ether	ND	4.0	0.44	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: PZ-5

Sampled: 4/26/2016 10:45

Sample ID: 16D1234-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	0.36	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,4-Dioxane	ND	200	53	µg/L	2	V-16	SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Ethylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Hexachlorobutadiene	ND	1.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
2-Hexanone (MBK)	ND	20	3.0	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Methyl Acetate	ND	2.0	0.84	µg/L	2	L-04	SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.18	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Methyl Cyclohexane	ND	2.0	1.3	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Methylene Chloride	ND	10	6.4	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.9	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Naphthalene	ND	4.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
n-Propylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Styrene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Tetrachloroethylene	150	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Tetrahydrofuran	ND	20	2.1	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Toluene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2,3-Trichlorobenzene	ND	10	0.28	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.38	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,3,5-Trichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1,1-Trichloroethane	ND	2.0	0.19	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1,2-Trichloroethane	ND	2.0	0.23	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Trichloroethylene	1.7	2.0	0.40	µg/L	2	J	SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.29	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2,3-Trichloropropane	ND	4.0	0.38	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.28	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,2,4-Trimethylbenzene	ND	2.0	0.36	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
1,3,5-Trimethylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Vinyl Chloride	ND	4.0	0.27	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
m+p Xylene	ND	4.0	0.50	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
o-Xylene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 15:51	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual						
1,2-Dichloroethane-d4	101	70-130								
Toluene-d8	98.1	70-130								
4-Bromofluorobenzene	96.9	70-130								

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: IP-8

Sampled: 4/26/2016 11:10

Sample ID: 16D1234-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	28	100	9.7	µg/L	2	J	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Acrylonitrile	ND	10	1.2	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.18	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Benzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Bromobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Bromochloromethane	ND	2.0	0.45	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Bromodichloromethane	ND	1.0	0.18	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Bromoform	ND	2.0	0.42	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Bromomethane	ND	4.0	1.9	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
2-Butanone (MEK)	ND	40	4.7	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
tert-Butyl Alcohol (TBA)	ND	40	4.3	µg/L	2	V-16	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
n-Butylbenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
sec-Butylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
tert-Butylbenzene	ND	2.0	0.22	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.16	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Carbon Disulfide	ND	8.0	2.0	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Carbon Tetrachloride	ND	10	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Chlorobenzene	ND	2.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Chlorodibromomethane	ND	1.0	0.20	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Chloroethane	ND	4.0	0.56	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Chloroform	ND	4.0	0.44	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Chloromethane	ND	4.0	0.65	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
2-Chlorotoluene	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
4-Chlorotoluene	ND	2.0	0.28	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	0.68	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Dibromomethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2-Dichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,3-Dichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,4-Dichlorobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
trans-1,4-Dichloro-2-butene	ND	10	0.62	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.36	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1-Dichloroethane	ND	2.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2-Dichloroethane	ND	2.0	0.39	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1-Dichloroethylene	ND	2.0	0.42	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
cis-1,2-Dichloroethylene	ND	2.0	0.29	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
trans-1,2-Dichloroethylene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2-Dichloropropane	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,3-Dichloropropane	ND	1.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
2,2-Dichloropropane	ND	2.0	0.32	µg/L	2	V-05	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1-Dichloropropene	ND	4.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
cis-1,3-Dichloropropene	ND	1.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
trans-1,3-Dichloropropene	ND	1.0	0.22	µg/L	2	V-05	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Diethyl Ether	ND	4.0	0.44	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: IP-8

Sampled: 4/26/2016 11:10

Sample ID: 16D1234-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	1.0	0.36	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,4-Dioxane	ND	200	53	µg/L	2	V-16	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Ethylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Hexachlorobutadiene	ND	1.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
2-Hexanone (MBK)	ND	20	3.0	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Methyl Acetate	ND	2.0	0.84	µg/L	2	L-04	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.18	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Methyl Cyclohexane	ND	2.0	1.3	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Methylene Chloride	ND	10	6.4	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.9	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Naphthalene	ND	4.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
n-Propylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Styrene	ND	2.0	0.30	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	0.24	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.32	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Tetrachloroethylene	92	2.0	0.34	µg/L	2	RL-11	SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Tetrahydrofuran	ND	20	2.1	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Toluene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2,3-Trichlorobenzene	ND	10	0.28	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.38	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,3,5-Trichlorobenzene	ND	2.0	0.34	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1,1-Trichloroethane	ND	2.0	0.19	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1,2-Trichloroethane	ND	2.0	0.23	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Trichloroethylene	ND	2.0	0.40	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.29	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2,3-Trichloropropane	ND	4.0	0.38	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.28	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,2,4-Trimethylbenzene	ND	2.0	0.36	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
1,3,5-Trimethylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Vinyl Chloride	ND	4.0	0.27	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
m+p Xylene	ND	4.0	0.50	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
o-Xylene	ND	2.0	0.26	µg/L	2		SW-846 8260C	5/6/16	5/7/16 16:17	EEH
Surrogates	% Recovery	Recovery Limits		Flag/Qual						
1,2-Dichloroethane-d4	102	70-130								
Toluene-d8	98.5	70-130								
4-Bromofluorobenzene	101	70-130								

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: TB (042616)

Sampled: 4/26/2016 00:00

Sample ID: 16D1234-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	11	50	4.9	µg/L	1	J	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Benzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
tert-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.080	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Carbon Tetrachloride	ND	5.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Chlorobenzene	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Chlorodibromomethane	ND	0.50	0.10	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Chloroethane	ND	2.0	0.28	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Chloroform	ND	2.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
2-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
4-Chlorotoluene	ND	1.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Dibromomethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,3-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,4-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
trans-1,4-Dichloro-2-butene	ND	5.0	0.31	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2-Dichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2-Dichloropropane	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
2,2-Dichloropropane	ND	1.0	0.16	µg/L	1	V-05	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
cis-1,3-Dichloropropene	ND	0.50	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
trans-1,3-Dichloropropene	ND	0.50	0.11	µg/L	1	V-05	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH

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

Project Location: Bedford, NY

Sample Description:

Work Order: 16D1234

Date Received: 4/27/2016

Field Sample #: TB (042616)

Sampled: 4/26/2016 00:00

Sample ID: 16D1234-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,4-Dioxane	ND	100	26	µg/L	1	V-16	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Ethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Methyl Acetate	ND	1.0	0.42	µg/L	1	L-04	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Methyl Cyclohexane	ND	1.0	0.63	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
n-Propylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.16	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Toluene	0.38	1.0	0.17	µg/L	1	J	SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Trichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2,3-Trichloropropane	ND	2.0	0.19	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.14	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
o-Xylene	ND	1.0	0.13	µg/L	1		SW-846 8260C	5/6/16	5/7/16 10:55	EEH
Surrogates	% Recovery	Recovery Limits	Flag/Qual							
1,2-Dichloroethane-d4	103	70-130								
Toluene-d8	100	70-130								
4-Bromofluorobenzene	100	70-130								

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
16D1234-01 [PZ-1]	B148551	5	5.00	05/06/16
16D1234-02 [PZ-2]	B148551	5	5.00	05/06/16
16D1234-03 [PZ-3]	B148551	0.1	5.00	05/06/16
16D1234-04 [PZ-4]	B148551	1.25	5.00	05/06/16
16D1234-05 [PZ-5]	B148551	2.5	5.00	05/06/16
16D1234-06 [IP-8]	B148551	2.5	5.00	05/06/16
16D1234-07 [TB (042616)]	B148551	5	5.00	05/06/16

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
Batch B148551 - SW-846 5030B										
Blank (B148551-BLK1)				Prepared: 05/06/16 Analyzed: 05/07/16						
Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-16
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	4.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							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							V-05
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							

L-04

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 B148551 - SW-846 5030B

Blank (B148551-BLK1)

Prepared: 05/06/16 Analyzed: 05/07/16

Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	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							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.4		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.9		µg/L	25.0		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0		98.2	70-130			

LCS (B148551-BS1)

Prepared: 05/06/16 Analyzed: 05/07/16

Acetone	95.2	50	µg/L	100		95.2	70-160			†
Acrylonitrile	10.2	5.0	µg/L	10.0		102	70-130			
tert-Amyl Methyl Ether (TAME)	8.84	0.50	µg/L	10.0		88.4	70-130			
Benzene	8.65	1.0	µg/L	10.0		86.5	70-130			
Bromobenzene	9.27	1.0	µg/L	10.0		92.7	70-130			
Bromochloromethane	9.81	1.0	µg/L	10.0		98.1	70-130			
Bromodichloromethane	8.91	0.50	µg/L	10.0		89.1	70-130			
Bromoform	9.72	1.0	µg/L	10.0		97.2	70-130			
Bromomethane	6.09	2.0	µg/L	10.0		60.9	40-160			†
2-Butanone (MEK)	101	20	µg/L	100		101	40-160		V-06	†
tert-Butyl Alcohol (TBA)	96.6	20	µg/L	100		96.6	40-160		V-16, V-20	†
n-Butylbenzene	10.0	1.0	µg/L	10.0		100	70-130			
sec-Butylbenzene	9.49	1.0	µg/L	10.0		94.9	70-130			
tert-Butylbenzene	9.35	1.0	µg/L	10.0		93.5	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.52	0.50	µg/L	10.0		95.2	70-130			
Carbon Disulfide	9.04	4.0	µg/L	10.0		90.4	70-130			
Carbon Tetrachloride	9.69	5.0	µg/L	10.0		96.9	70-130			
Chlorobenzene	8.72	1.0	µg/L	10.0		87.2	70-130			
Chlorodibromomethane	8.48	0.50	µg/L	10.0		84.8	70-130			
Chloroethane	10.8	2.0	µg/L	10.0		108	70-130			
Chloroform	8.87	2.0	µg/L	10.0		88.7	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
Batch B148551 - SW-846 5030B										
LCS (B148551-BS1)										
Prepared: 05/06/16 Analyzed: 05/07/16										
Chloromethane	8.43	2.0	µg/L	10.0		84.3	40-160			†
2-Chlorotoluene	9.10	1.0	µg/L	10.0		91.0	70-130			
4-Chlorotoluene	8.81	1.0	µg/L	10.0		88.1	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	10.1	5.0	µg/L	10.0		101	70-130			
1,2-Dibromoethane (EDB)	9.42	0.50	µg/L	10.0		94.2	70-130			
Dibromomethane	9.27	1.0	µg/L	10.0		92.7	70-130			
1,2-Dichlorobenzene	9.07	1.0	µg/L	10.0		90.7	70-130			
1,3-Dichlorobenzene	9.13	1.0	µg/L	10.0		91.3	70-130			
1,4-Dichlorobenzene	8.61	1.0	µg/L	10.0		86.1	70-130			
trans-1,4-Dichloro-2-butene	9.50	2.0	µg/L	10.0		95.0	70-130			
Dichlorodifluoromethane (Freon 12)	6.94	2.0	µg/L	10.0		69.4	40-160			†
1,1-Dichloroethane	9.32	1.0	µg/L	10.0		93.2	70-130			
1,2-Dichloroethane	8.82	1.0	µg/L	10.0		88.2	70-130			
1,1-Dichloroethylene	8.85	1.0	µg/L	10.0		88.5	70-130			
cis-1,2-Dichloroethylene	8.62	1.0	µg/L	10.0		86.2	70-130			
trans-1,2-Dichloroethylene	8.88	1.0	µg/L	10.0		88.8	70-130			
1,2-Dichloropropane	8.88	1.0	µg/L	10.0		88.8	70-130			
1,3-Dichloropropane	8.73	0.50	µg/L	10.0		87.3	70-130			
2,2-Dichloropropane	6.93	1.0	µg/L	10.0		69.3	40-130		V-05	†
1,1-Dichloropropene	9.14	2.0	µg/L	10.0		91.4	70-130			
cis-1,3-Dichloropropene	7.90	0.50	µg/L	10.0		79.0	70-130			
trans-1,3-Dichloropropene	8.05	0.50	µg/L	10.0		80.5	70-130		V-05	
Diethyl Ether	9.34	2.0	µg/L	10.0		93.4	70-130			
Diisopropyl Ether (DIPE)	8.99	0.50	µg/L	10.0		89.9	70-130			
1,4-Dioxane	87.3	50	µg/L	100		87.3	40-130		V-16	†
Ethylbenzene	9.16	1.0	µg/L	10.0		91.6	70-130			
Hexachlorobutadiene	10.3	0.50	µg/L	10.0		103	70-130			
2-Hexanone (MBK)	105	10	µg/L	100		105	70-160		V-20	†
Isopropylbenzene (Cumene)	9.18	1.0	µg/L	10.0		91.8	70-130			
p-Isopropyltoluene (p-Cymene)	9.74	1.0	µg/L	10.0		97.4	70-130			
Methyl Acetate	6.20	1.0	µg/L	10.0		62.0	* 70-130			L-04
Methyl tert-Butyl Ether (MTBE)	8.75	1.0	µg/L	10.0		87.5	70-130			
Methyl Cyclohexane	9.62	1.0	µg/L	10.0		96.2	70-130			
Methylene Chloride	9.27	5.0	µg/L	10.0		92.7	70-130			
4-Methyl-2-pentanone (MIBK)	108	10	µg/L	100		108	70-160		V-20	†
Naphthalene	10.3	2.0	µg/L	10.0		103	40-130			†
n-Propylbenzene	9.08	1.0	µg/L	10.0		90.8	70-130			
Styrene	9.10	1.0	µg/L	10.0		91.0	70-130			
1,1,1,2-Tetrachloroethane	9.31	1.0	µg/L	10.0		93.1	70-130			
1,1,2,2-Tetrachloroethane	9.54	0.50	µg/L	10.0		95.4	70-130			
Tetrachloroethylene	9.29	1.0	µg/L	10.0		92.9	70-130			
Tetrahydrofuran	9.67	10	µg/L	10.0		96.7	70-130			J
Toluene	8.95	1.0	µg/L	10.0		89.5	70-130			
1,2,3-Trichlorobenzene	9.99	5.0	µg/L	10.0		99.9	70-130			
1,2,4-Trichlorobenzene	9.98	1.0	µg/L	10.0		99.8	70-130			
1,3,5-Trichlorobenzene	9.75	1.0	µg/L	10.0		97.5	70-130			
1,1,1-Trichloroethane	9.21	1.0	µg/L	10.0		92.1	70-130			
1,1,2-Trichloroethane	9.35	1.0	µg/L	10.0		93.5	70-130			
Trichloroethylene	9.10	1.0	µg/L	10.0		91.0	70-130			
Trichlorofluoromethane (Freon 11)	9.73	2.0	µg/L	10.0		97.3	70-130			
1,2,3-Trichloropropane	9.68	2.0	µg/L	10.0		96.8	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
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Batch B148551 - SW-846 5030B
LCS (B148551-BS1)

Prepared: 05/06/16 Analyzed: 05/07/16

1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.28	1.0	µg/L	10.0		92.8	70-130			
1,2,4-Trimethylbenzene	9.25	1.0	µg/L	10.0		92.5	70-130			
1,3,5-Trimethylbenzene	9.41	1.0	µg/L	10.0		94.1	70-130			
Vinyl Chloride	8.80	2.0	µg/L	10.0		88.0	40-160			†
m+p Xylene	18.4	2.0	µg/L	20.0		92.2	70-130			
o-Xylene	8.98	1.0	µg/L	10.0		89.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.5		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.8	70-130			

LCS Dup (B148551-BS1)

Prepared: 05/06/16 Analyzed: 05/07/16

Acetone	100	50	µg/L	100		100	70-160	5.19	25	†
Acrylonitrile	10.4	5.0	µg/L	10.0		104	70-130	1.46	25	
tert-Amyl Methyl Ether (TAME)	9.28	0.50	µg/L	10.0		92.8	70-130	4.86	25	
Benzene	8.71	1.0	µg/L	10.0		87.1	70-130	0.691	25	
Bromobenzene	9.39	1.0	µg/L	10.0		93.9	70-130	1.29	25	
Bromochloromethane	10.1	1.0	µg/L	10.0		101	70-130	3.11	25	
Bromodichloromethane	8.43	0.50	µg/L	10.0		84.3	70-130	5.54	25	
Bromoform	9.59	1.0	µg/L	10.0		95.9	70-130	1.35	25	
Bromomethane	7.07	2.0	µg/L	10.0		70.7	40-160	14.9	25	†
2-Butanone (MEK)	111	20	µg/L	100		111	40-160	9.30	25	V-06 †
tert-Butyl Alcohol (TBA)	116	20	µg/L	100		116	40-160	18.4	25	V-20, V-16 †
n-Butylbenzene	9.88	1.0	µg/L	10.0		98.8	70-130	1.71	25	
sec-Butylbenzene	9.42	1.0	µg/L	10.0		94.2	70-130	0.740	25	
tert-Butylbenzene	9.37	1.0	µg/L	10.0		93.7	70-130	0.214	25	
tert-Butyl Ethyl Ether (TBEE)	10.1	0.50	µg/L	10.0		101	70-130	6.01	25	
Carbon Disulfide	8.91	4.0	µg/L	10.0		89.1	70-130	1.45	25	
Carbon Tetrachloride	9.62	5.0	µg/L	10.0		96.2	70-130	0.725	25	
Chlorobenzene	8.70	1.0	µg/L	10.0		87.0	70-130	0.230	25	
Chlorodibromomethane	8.76	0.50	µg/L	10.0		87.6	70-130	3.25	25	
Chloroethane	11.0	2.0	µg/L	10.0		110	70-130	1.01	25	
Chloroform	8.77	2.0	µg/L	10.0		87.7	70-130	1.13	25	
Chloromethane	8.65	2.0	µg/L	10.0		86.5	40-160	2.58	25	†
2-Chlorotoluene	8.92	1.0	µg/L	10.0		89.2	70-130	2.00	25	
4-Chlorotoluene	8.80	1.0	µg/L	10.0		88.0	70-130	0.114	25	
1,2-Dibromo-3-chloropropane (DBCP)	11.8	5.0	µg/L	10.0		118	70-130	15.4	25	
1,2-Dibromoethane (EDB)	9.28	0.50	µg/L	10.0		92.8	70-130	1.50	25	
Dibromomethane	9.34	1.0	µg/L	10.0		93.4	70-130	0.752	25	
1,2-Dichlorobenzene	9.11	1.0	µg/L	10.0		91.1	70-130	0.440	25	
1,3-Dichlorobenzene	9.10	1.0	µg/L	10.0		91.0	70-130	0.329	25	
1,4-Dichlorobenzene	8.48	1.0	µg/L	10.0		84.8	70-130	1.52	25	
trans-1,4-Dichloro-2-butene	9.80	2.0	µg/L	10.0		98.0	70-130	3.11	25	
Dichlorodifluoromethane (Freon 12)	6.70	2.0	µg/L	10.0		67.0	40-160	3.52	25	†
1,1-Dichloroethane	9.17	1.0	µg/L	10.0		91.7	70-130	1.62	25	
1,2-Dichloroethane	8.60	1.0	µg/L	10.0		86.0	70-130	2.53	25	
1,1-Dichloroethylene	8.78	1.0	µg/L	10.0		87.8	70-130	0.794	25	
cis-1,2-Dichloroethylene	8.81	1.0	µg/L	10.0		88.1	70-130	2.18	25	
trans-1,2-Dichloroethylene	8.68	1.0	µg/L	10.0		86.8	70-130	2.28	25	
1,2-Dichloropropane	8.69	1.0	µg/L	10.0		86.9	70-130	2.16	25	
1,3-Dichloropropane	8.66	0.50	µg/L	10.0		86.6	70-130	0.805	25	
2,2-Dichloropropane	7.40	1.0	µg/L	10.0		74.0	40-130	6.56	25	V-05 †
1,1-Dichloropropene	8.97	2.0	µg/L	10.0		89.7	70-130	1.88	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
Batch B148551 - SW-846 5030B										
LCS Dup (B148551-BSD1)										
Prepared: 05/06/16 Analyzed: 05/07/16										
cis-1,3-Dichloropropene	7.94	0.50	µg/L	10.0		79.4	70-130	0.505	25	
trans-1,3-Dichloropropene	8.33	0.50	µg/L	10.0		83.3	70-130	3.42	25	V-05
Diethyl Ether	9.45	2.0	µg/L	10.0		94.5	70-130	1.17	25	
Diisopropyl Ether (DIPE)	9.45	0.50	µg/L	10.0		94.5	70-130	4.99	25	
1,4-Dioxane	109	50	µg/L	100		109	40-130	21.7	50	V-16 † ‡
Ethylbenzene	9.03	1.0	µg/L	10.0		90.3	70-130	1.43	25	
Hexachlorobutadiene	10.4	0.50	µg/L	10.0		104	70-130	1.45	25	
2-Hexanone (MBK)	114	10	µg/L	100		114	70-160	8.13	25	V-20 †
Isopropylbenzene (Cumene)	9.06	1.0	µg/L	10.0		90.6	70-130	1.32	25	
p-Isopropyltoluene (p-Cymene)	9.68	1.0	µg/L	10.0		96.8	70-130	0.618	25	
Methyl Acetate	6.61	1.0	µg/L	10.0		66.1	* 70-130	6.40	25	L-04
Methyl tert-Butyl Ether (MTBE)	9.21	1.0	µg/L	10.0		92.1	70-130	5.12	25	
Methyl Cyclohexane	9.51	1.0	µg/L	10.0		95.1	70-130	1.15	25	
Methylene Chloride	9.47	5.0	µg/L	10.0		94.7	70-130	2.13	25	
4-Methyl-2-pentanone (MIBK)	116	10	µg/L	100		116	70-160	6.83	25	V-20 †
Naphthalene	11.2	2.0	µg/L	10.0		112	40-130	8.85	25	†
n-Propylbenzene	8.89	1.0	µg/L	10.0		88.9	70-130	2.11	25	
Styrene	9.09	1.0	µg/L	10.0		90.9	70-130	0.110	25	
1,1,1,2-Tetrachloroethane	9.35	1.0	µg/L	10.0		93.5	70-130	0.429	25	
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0		100	70-130	5.01	25	
Tetrachloroethylene	9.06	1.0	µg/L	10.0		90.6	70-130	2.51	25	
Tetrahydrofuran	10.2	10	µg/L	10.0		102	70-130	5.24	25	
Toluene	8.69	1.0	µg/L	10.0		86.9	70-130	2.95	25	
1,2,3-Trichlorobenzene	10.4	5.0	µg/L	10.0		104	70-130	4.41	25	
1,2,4-Trichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	3.06	25	
1,3,5-Trichlorobenzene	9.84	1.0	µg/L	10.0		98.4	70-130	0.919	25	
1,1,1-Trichloroethane	9.31	1.0	µg/L	10.0		93.1	70-130	1.08	25	
1,1,2-Trichloroethane	9.28	1.0	µg/L	10.0		92.8	70-130	0.751	25	
Trichloroethylene	9.06	1.0	µg/L	10.0		90.6	70-130	0.441	25	
Trichlorofluoromethane (Freon 11)	9.74	2.0	µg/L	10.0		97.4	70-130	0.103	25	
1,2,3-Trichloropropane	10.0	2.0	µg/L	10.0		100	70-130	3.45	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.31	1.0	µg/L	10.0		93.1	70-130	0.323	25	
1,2,4-Trimethylbenzene	9.31	1.0	µg/L	10.0		93.1	70-130	0.647	25	
1,3,5-Trimethylbenzene	9.50	1.0	µg/L	10.0		95.0	70-130	0.952	25	
Vinyl Chloride	8.62	2.0	µg/L	10.0		86.2	40-160	2.07	25	†
m+p Xylene	18.0	2.0	µg/L	20.0		90.2	70-130	2.25	25	
o-Xylene	8.80	1.0	µg/L	10.0		88.0	70-130	2.02	25	
Surrogate: 1,2-Dichloroethane-d4	25.6		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.5		µg/L	25.0		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.2	70-130			

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

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant 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.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
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.
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-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS
Certified Analyses included in this Report

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

CERTIFICATIONS

Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2018
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2017
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2017
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016



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CHAIN OF CUSTODY RECORD

NEW YORK STATE

39 Spruce Street
East Longmeadow, MA 01028

Page 1 of 1

Company Name: ARCADIS Telephone: 518.250.7322

Address: 855 Route 146, Suite 210 Project # 002004320.2

Attention: MARK FLUSCH Client PO#

Project Location: Bedford, NY DATA DELIVERY (check all that apply)

Sampled By: K. Kopkowski ☐ FAX ☒ EMAIL ☒ WEBSITE

Format: ☐ PDF ☐ EXCEL ☒ GIS ☐ OTHER

☐ Project Proposal Provided? (for billing purposes)

☐ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection		Composite	Grab	*Matrix Code	Conc Code
		Beginning Date/Time	Ending Date/Time				
01	PZ-1	4/26/16 11:00	---		X	GW	Y
02	PZ-2	4/26/16 10:55	---		X	GW	---
03	PZ-3 *	4/26/16 10:15	---		X	GW	---
04	PZ-4	4/26/16 10:35	---		X	GW	---
05	PZ-5	4/26/16 10:45	---		X	GW	---
06	IP-8	4/26/16 11:10	---		X	GW	---
07	TB(042616)	---	---		X	TB	---

Comments: * Limited volume

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

Relinquished by: (signature)	Date/Time	Relinquished by:	Date/Time	Turnaround	Program Information/Regulatory
<u>[Signature]</u>	4/26/16 15:00			☐ 5-Day	☐ NY TOGS ☐ NY Restricted Use
Received by: (signature)	3:30	Received by:		☐ 7 Day	☐ AWQ STDS ☐ NY Unrestricted Use
<u>[Signature]</u>	4/27/16 9:37			☒ 10-Day or RUSH [†]	☐ NYC Sewer Discharge
Relinquished by: (signature)		Relinquished by:		24 hr ☐ 48 hr ☐ 72 hr ☐ 4 day ☐	☐ Part 360 GW (Landfill)
Received by: (signature)		Received by:		[†] Require lab approval	Deliverables
					☐ ASP-A ☐ Equis (1 file)
					☐ ASP-B ☐ Equis (4 file)

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

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East Longmeadow, MA. 01028
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Page 1 of 2

Sample Receipt Checklist

CLIENT NAME: Arcadis RECEIVED BY: KKM DATE: 4/27/2016

1) Was the chain(s) of custody relinquished and signed? Yes X No No COC Incl.

2) Does the chain agree with the samples? Yes X No

If not, explain:

3) Are all the samples in good condition? Yes X No

If not, explain:

4) How were the samples received:

On Ice X Direct from Sampling Ambient In Cooler(s) X

Were the samples received in Temperature Compliance of (2-6°C)? Yes X No N/A

Temperature °C by Temp blank Temperature °C by Temp gun 3.8

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

Who was notified Date Time

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

Who was notified Date Time

7) Location where samples are stored:

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature:

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

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

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		16 oz amber	
500 mL Amber		8 oz amber/clear jar	
250 mL Amber (8oz amber)		4 oz amber/clear jar	
1 Liter Plastic		2 oz amber/clear jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		SOC Kit	
40 mL Vial - type listed below	20	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

One vial for PZ-3 received only 3/4 full with large amount of head space - unable to be analyzed

40 mL vials: # HCl <u>20</u> # Methanol <u> </u>	Time and Date Frozen: <u> </u>
Dpc# 277 # Bisulfate <u> </u> # DI Water <u> </u>	
Rev: 4 August 2013 # Thiosulfate <u> </u> Unpreserved <u> </u>	

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

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

KKM

4/27/2016 9:37

APPENDIX D

Photographs



Project Photographs

Crusher Road Site #360127
Crusher Road, Bedford, NY



Photo: 1

Date:
11/10/2015

Description:
Injection Assembly

Location:
Crusher Rd, Bedford, NY



Photo: 2

Date:
11/10/2015

Description:
Injection Lines

Location:
Crusher Rd, Bedford, NY



Photo: 3

Date:
11/10/2015

Description:
Permanganate Solution
Tanker

Location:
Crusher Rd, Bedford, NY

Project Photographs

Crusher Road Site #360127
Crusher Road, Bedford, NY



Photo: 4

Date:
11/10/2015

Description:
Injection Wells

Location:
Crusher Rd, Bedford, NY



Photo: 5

Date:
11/10/2015

Description:
Tanker Connection

Location:
Crusher Rd, Bedford, NY



Photo: 6

Date:
11/10/2015

Description:
Injection Pump and Air
Compressor

Location:
Crusher Rd, Bedford, NY

Project Photographs

Crusher Road Site #360127
Crusher Road, Bedford, NY



Photo: 7

Date:
11/10/2015

Description:
Injection Assembly

Location:
Crusher Rd, Bedford, NY



Photo: 8

Date:
11/10/2015

Description:
Injection Manifold

Location:
Crusher Rd, Bedford, NY



Photo: 9

Date:
11/10/2015

Description:
Injection Set-up

Location:
Crusher Rd, Bedford, NY

Arcadis CE, Inc.

855 Route 146

Suite 210

Clifton Park, New York 12065

Tel 518 250 7300

Fax 518 250 7301

www.arcadis.com

A decorative graphic consisting of three thin orange lines. One line is horizontal, extending across the width of the page. Two other lines are diagonal, starting from the bottom left and extending towards the top right, intersecting the horizontal line.