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Permanganate Injection
Pilot Test Report

Abandoned Chemical Sales Facility Site #828105

September 2015

Permanganate Injection Pilot Study Report

Abandoned Chemical Sales Facility Site #828105

Prepared for:
New York State Department of Environmental Conservation

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Date:
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Malcolm Pirnie, Inc. was acquired by ARCADIS in July 2009.

Figures

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Appendices

1. Introduction

This report summarizes the sodium permanganate injection pilot test conducted at the Abandoned Chemical Sales Facility Site (NYSDEC Site No. 828105), in Rochester, New York (Figure 1). The sodium permanganate injection pilot test was conducted under the New York State Department of Environmental Conservation (NYSDEC) Standby Contract No. D007618-3.1.

In March 2014, ARCADIS performed injectability testing in monitoring wells MW-16S, MW-16i, MW-17S, and MW-17i. The injectability testing involved injecting clean water into the bedrock via the aforementioned wells to assess the ability of the fractures to accept an injection solution. Data collected from this field event was evaluated and incorporated into the In-Situ Chemical Oxidation Pilot Injection Program Design Plan (Malcolm Pirnie 2014) submitted to the NYSDEC in June 2014.

The sodium permanganate injection pilot test occurred between December 1 and 5, 2014. Monitoring activities were performed before, during, and following the sodium permanganate injection pilot test in accordance with the In-Situ Chemical Oxidation Pilot Injection Program Design Plan (Malcolm Pirnie 2014a). This report provides a summary of the sodium permanganate injection pilot test field activities and results.

1.1 Background

Figure 1 depicts the general location of the site. The commercially-zoned site is situated in a mixed residential, commercial and industrial area of the city. It is generally bordered by Dodge Street to the east, an industrial facility housing the Monroe Fire Extinguisher Company, Inc. to the north, the Rochester and Southern Railroad immediately to the west, Jay Street to the south, and three single- and multi-tenant residential buildings to the southeast. Further to the west, beyond the railroad tracks, lies the Valeo Property, the site of a former GM-Delco Facility, which is also on the NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites (NYSDEC site number 828099).

Prior to being purchased by M.A. Ferrauilo in 1994, the property was owned by the Chemreal Corp and utilized by the Chemical Sales Corporation (a.k.a. Chemcore, Inc.) from November 1952 through September 1994 as a location for manufacturing and distributing chemicals. Chemical Sales Corporation constructed a building on the site from which their operations were conducted. The existing structure on the site has two primary tenants. The southern portion of the building is currently utilized by M.A.

Farrauilo Plumbing, a plumbing, heating and ventilation contractor. A high performance motor shop is located in the northern portion of the structure.

The site is generally flat, with a gradual slope from west to east. Surface elevations vary by less than five feet across the site. With the exception of a grassy area in the northern portion, the majority of the site is covered with an asphalt and gravel parking surface and a building. The northern third of the site is covered by a grassed lawn, with a few trees present. The middle portion of the site contains the 11,000 square foot (sf) single-story concrete masonry unit (CMU or concrete block) commercial building and appurtenant supply storage trailers. The building is founded on a concrete slab. An approximately 5,000 square foot fenced, asphalt-paved parking and storage area is located immediately east of the building, and gravel parking lots and driveways are present to the west, north and east of the building. The southern portion of the site contains an approximately 3,800 square foot asphalt-paved parking area and driveways. Vehicular access to the site is provided from Jay Street to the south and Dodge Street to the east.

Overhead electric and buried gas, water, and sewer utilities serving the site run from Jay Street to the southern portion of the site structure. A sewer utility line runs underneath Jay Street and is set approximately 17 feet below the top of bedrock and extends to approximately 4 feet below the water table.

Overburden soil at the site consists of one to two feet of fill overlying four to eight feet of fill and/or native soil. The fill consists of a dry medium to coarse-grained sand, with trace amounts of silt, some gravel and debris, including concrete, bricks and wood. The native soil ranges from poorly-graded silty sand to gravelly sand. Below this, at a depth of approximately four to eight feet below the ground surface, dolomite bedrock with minor amounts of shale is present. The upper two to three feet of the bedrock is weathered and fractured. Groundwater is generally not observed in the site overburden although perched water is present at the overburden/bedrock interface following precipitation or snow melt.

Bedrock monitoring well locations are shown on Figure 2. Shallow bedrock monitoring wells generally monitor groundwater in the 10-25 feet below ground surface (bgs) interval while intermediate bedrock monitoring wells generally monitor groundwater in the 25 to 45 foot bgs interval. No monitoring of deep bedrock (greater than 45 feet bgs) has occurred at the site.

The investigatory history is detailed in the Remedial Investigation / Feasibility Study (RIFS) Report (EA 2011) and the Contaminated Soil Removal and Disposal Work Plan (Malcolm Pirnie, 2013) and Report (Malcolm Pirnie, 2014b). The NYSDEC listed the site as a Class 2 site in the New York State Registry of Inactive Hazardous Waste Disposal Sites in 2002 following a preliminary site assessment. The primary contaminants of concern at the site identified during the RI are tetrachloroethene (PCE), trichloroethene (TCE), and 1,1,1-trichloroethane (1,1,1-TCA) and their breakdown products [cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride, 1,1-dichloroethane (1,1-DCA), and chloroethane].

As part of RIFS (EA 2011) in-situ thermal remediation, monitored natural attenuation (MNA), in-situ chemical oxidation (ISCO) and enhanced anaerobic bioremediation were evaluated as either stand alone or combined alternatives. ISCO followed by enhanced anaerobic bioremediation was recommended in the RIFS report because it:

- Has a relatively short implementation time;
- Is more readily implemented in a fractured rock setting than thermal remediation;
- Is more effective in the short- and long- term than no action and MNA; and
- Has a lower cost than thermal remediation.

The RIFS report also suggested an ISCO pilot test prior to the full-scale implementation to confirm the implementability and effectiveness.

The record of decision (ROD) (NYSDEC, 2011) detailed the proposed remedy for the site, which includes targeted soil excavation and approximately three ISCO injection events to reduce the groundwater contaminant concentrations, followed by enhanced bioremediation.

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 chemical oxidants and other amendments into the subsurface to transform contaminants of concern into innocuous end products such as carbon dioxide (CO_2), water, and inorganic compounds. For chemical oxidation remedies, assessment of reagent distribution is particularly important because of the relatively fast reaction kinetics and

corresponding short longevity (on the order of months for sodium permanganate, depending on aquifer geochemistry, presence and abundance of natural organic material (NOM) and presence of non-aqueous phase liquid (NAPL)) of oxidants in the subsurface. With the injection of an appropriate oxidant (i.e., capable of oxidizing the target constituents of concern [COCs]), treatment effectiveness is controlled by the effectiveness of oxidant distribution and COC partitioning. With partitioning in the subsurface, VOCs are typically found in the free phase, aqueous phase and sorbed phase. Based on groundwater data collected in the April 2014 sampling event, concentrations of both parent and daughter compounds, PCE, TCE and 1,1,1-TCA,cis-1,2-DCE, respectively, are above aqueous solubility (EPA, 2004) which indicates the presence of free phase COCs. Generally, oxidants in the presence of free phase contaminants do not have enough oxidation potential to fully degrade the aforementioned COCs to innocuous end products. Aqueous phase oxidant chemistry readily addresses the aqueous phase fraction of COC mass. Therefore, oxidant persistence in the subsurface must be managed to address the aqueous phase, while accounting for oxidant loss to free phase contact and NOM in the treatment zone. Overall treatment effectiveness is evaluated in the field and through post injection monitoring to evaluate if the appropriate oxidant dosage, reagent solution volume, and proposed number of planned oxidation events are sufficient to achieve project objectives.

Injection locations can be either permanently installed wells or temporary injection points installed using direct-push methods. However, contact between the oxidant and contaminant is required to facilitate the reaction which is the most important technical limitation of this technology, as it can be difficult to accomplish. Accordingly, this remedial approach generally includes several oxidant injections over time accompanied by groundwater sampling and analysis. Once the mass of COCs have been addressed using ISCO, an enhanced anaerobic bioremediation event will be performed to degrade remaining residual mass through natural microbial processes in a reducing environment.

The most common oxidants utilized for ISCO 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, 20005), 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 (MnO_2) byproduct.

There are two forms of permanganate that are used for ISCO, potassium permanganate ($KMnO_4$) and sodium permanganate ($NaMnO_4$) (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), in accordance with securing the nation's chemical facilities, has placed potassium permanganate on a list with other chemical substances determined to be potentially dangerous. Because of the homeland security issues, paperwork, and restrictions placed on the use of potassium permanganate, sodium permanganate was selected as the oxidant to be used in this pilot study.

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

$$4NaMnO_4 + 3C_2Cl_4 + 4H_2O \rightarrow 6CO_2 + 4MnO_2 + 4Na^+ + 12Cl^- + 8H^+$$

$$2NaMnO_4 + C_2HCl_3 \rightarrow 2CO_2 + 2MnO_2 + 3Cl^- + H^+ + 2Na^+$$

Additionally, breakdown compounds such as DCE react with sodium permanganate and hydrogen ions producing carbon dioxide, manganese dioxide, sodium ions, chloride ions and water in a pH range between 3.5 and 12 standard units. The balance chemical equation for this reaction is given below (ITRC, 2005).

$$8NaMnO_4 + 3C_2H_2Cl_4 + 2H^+ \rightarrow 6CO_2 + 8MnO_2 + 8Na^+ + 6Cl^- + 4H_2O$$

Sodium permanganate does not react with 1,1,1-TCA, a chlorinated alkaline, as there are no readily available electron pairs to facilitate the degradation (ITRC 2005).

1.3 Objective

The sodium permanganate injection pilot test, the results of which are summarized herein, was conducted to evaluate the feasibility of using sodium permanganate to remediate PCE, TCE and associated daughter compounds in bedrock at the site.

2. Preliminary Activities

Several activities, including development of a Health and Safety Plan (HASP), receiving Underground Injection Control Program approval, execution of an access agreement, excavation and installation of overburden injection points in four areas, and baseline monitoring were conducted before sodium permanganate injection activities began. These preliminary activities are summarized below.

2.1 Health and Safety Plan

A site-specific HASP was prepared for use during the sodium permanganate injection pilot test at the site. The HASP 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 on-site during 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 February 21, 2014. The USEPA provided approval for injecting sodium permanganate and water into wells at the site in a March 5, 2014 letter (Appendix A).

2.3 Access Agreement

Prior to the start of field work, an access agreement was executed between Rochester & Southern Railroad, Inc. and ARCADIS U.S., Inc. (ARCADIS) on November 24, 2014. The terms of the access agreement, which allowed ARCADIS to collect groundwater samples and conduct remediation and monitoring activities on the railroad property, was followed during the pilot test. A copy of the access agreement is included in Appendix B.

2.4 Injection Well Installation

Nothnagle Drilling installed four injection wells (MW-16S, MW-16i, MW-17S, and MW-17i) at the site in January 2013. The injection well locations are shown on Figures 2 and 3 and boring logs are provided in Appendix C. Two injection wells were completed as 4-inch diameter open boreholes within the shallow bedrock [approximately 10-25

feet below ground surface (bgs)] and two injection wells were completed as 4-inch diameter open boreholes within the intermediate (approximately 25-45 feet bgs) bedrock zone. One injection well cluster is installed in the site parking lot (MW-16S and MW-16i) and a second injection well cluster is installed on the south side of Jay Street (MW-17S and MW-17i). The injection wells were installed to collect data to design and implement the ISCO pilot injection program.

2.5 Excavation Areas

Between April and August 2014, fill and soil was removed from four excavation areas in and around the site building (EA-1, EA-2, EA-3, and EA-4). In accordance with the Contaminated Soil Removal and Disposal Work Plan (Malcolm Pirnie 2013), prior to backfilling the excavation areas, piping was installed with one or two slotted screens lying horizontally in the bottom of each excavation connected to a vertical riser. During the pilot injection event, sodium permanganate was injected into these risers in accordance with the In-Situ Chemical Oxidation Pilot Injection Program Design Plan (Malcolm Pirnie 2014a). The excavation areas are shown on Figure 2.

2.6 Baseline Monitoring

Baseline groundwater quality monitoring was performed at monitoring wells MW-1 MW-2, MW-3, MW-4, MW-5, MW-6, MW-6i, MW-7, MW-8i, MW-9, MW-10, MW-10i, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16S, MW-16i, MW-17S and MW-17i in March and April of 2014. Baseline groundwater samples were collected using passive diffusion bags (PDBs). Depth to water and depth to bottom measurements were recorded prior to deployment and retrieval of the PDBs. The PDBs were placed in the water column of each monitoring well within the screened interval. The PDBs were retrieved after 21 days, allowing VOCs in the groundwater to diffuse through the membrane walls of the PDB. The PDBs were deployed in twenty-one wells on March 27 and 28, 2014 and retrieved between April 16 and 18, 2014. PDB samples were analyzed by Con-Test Analytical Laboratory (Con-Test) in East Longmeadow, Massachusetts for TCL volatile organic compound (VOC) analysis by USEPA Method 8260B.

Additional groundwater was collected from monitoring wells MW-3, MW-9, MW-10, MW-10i and MW-16i with a peristaltic pump and analyzed for select metals, dissolved gasses, and wet chemistry parameters to establish baseline geochemical conditions. Groundwater samples were analyzed by Con-Test in East Longmeadow, Massachusetts for dissolved iron, dissolved manganese, ethane, ethene, methane,

alkalinity, chloride, sulfate, sulfide, and total organic carbon (TOC).Field parameters, including temperature, dissolved oxygen (DO), pH, conductivity, and oxygen reduction potential (ORP), were measured and recorded. Groundwater purge logs are provided in Appendix D.

Groundwater in the southern portion of the site is generally characterized by total CVOC concentrations exceeding 100,000 micrograms per liter. Parent compounds, including PCE, TCE, and 1,1,1-TCA, generally constitute a large proportion of the CVOCs and the CVOCs appear less degraded than in the northern portion of the site. The proportion of 1,2-cis DCE increases in the downgradient direction from MW-16i to MW-10i indicating some breakdown of PCE and TCE. 1,1,1-TCA appears more resistant to breakdown and only limited increases in daughter products are observed from MW-16i to MW10i. Aromatics constitute a small proportion of the total VOC concentrations (generally less than 3%), which in part may explain the more limited reductive dechlorination compared to the northern portion of the site.

The following compounds that exceed NYSDEC GA Standards were detected in multiple wells during the April 2014 baseline sampling event:

- PCE was detected at concentrations ranging from 0.12 µg/L to 7,500 µg/L;
- TCE was detected at concentrations ranging from 0.19 µg/L to 61,000 µg/L;
- 1,1,1-TCA was detected at concentrations ranging from 0.23 µg/L to 63,000 µg/L;
- cis-1,2-DCE was detected at concentrations ranging from 0.95 µg/L to 150,000 µg/L;
- 1,1-DCE was detected at concentrations ranging from 2.8 µg/L to 1,200 µg/L;
- 1,1-DCA was detected at concentrations ranging from 2.8 µg/L to 4,900 µg/L;
- Vinyl Chloride was detected at concentrations ranging from 0.52 µg/L to 6,000 µg/L.

The analytical laboratory reports are included in Appendix E. The groundwater analytical data are summarized in Table 1.

Geochemical analysis is used to assess potential inefficiencies of using ISCO as a remedy. Based on a review of the April 2014 inorganic geochemical data, it was concluded that there were no significant sinks for the injected oxidant that may reduce the effectiveness of ISCO. Baseline geochemical data will be used in comparison with post-injection groundwater quality to evaluate the overall effectiveness of the sodium permanganate injection. Dissolved gasses and wet chemistry analytical data collected as part of the geochemical evaluations are included in Appendix E and are summarized in Table 2.

3. Sodium Permanganate Injection Activities

The permanganate injection pilot test was conducted between December 1 and 5, 2014. A total of 14,282 gallons of 3% permanganate solution was injected into the subsurface (7,811 gallons into injection wells and 6,471 gallons into former excavation areas). General observations during the pilot test are summarized in Table 3. As a safety precaution, due to freezing temperatures, the injection ran continuously over a five day period to keep solution and equipment from freezing. A 3rd party toller diluted 40% concentrated sodium permanganate down to a 3% by weight solution for delivery to the site in a double walled stainless steel tanker. Three tankers were delivered between December 1st and December 3rd. As a tanker was emptied another tanker was delivered and swapped out for the empty tanker. On December 5, the third tanker was emptied and picked up by the toller. The first and second tankers both contained 4,757 gallons of solution and the third contained 4,768 gallons of solution for a total delivered volume of 14,282 gallons. The tankers were staged in a 12 x 50 x 1 foot chemically-compatible secondary containment structure while the contents of the tanker were discharged to the injection locations.

An air compressor and a mobile injection trailer, which included two diaphragm pumps, distribution manifold , recirculation fittings (used to recirculate solution back into the tanker for agitation), piping, hosing, totalizers, and a 250-gallon storage tank, were mobilized to the site for the injection. The tanker along with the injection equipment was staged in the parking lot on the southern side of the site building throughout the entire injection process. The injection layout is shown on Figure 4. An injection trailer process and instrumentation diagram (P&ID) is included as Appendix F. Photographs of the injection setup are included in Appendix G.

3.1 Injections into Bedrock

A Teflon-lined double diaphragm pump was used to transfer the 3% sodium permanganate solution from the tanker to injection wells MW-16i and MW-17i. The injection wellhead manifolds were retrofitted with a pressure relief control valve and a pressure gauge to monitor pressure at the wellhead. A total of 2,506 and 5,305 gallons were injected in MW-16i and MW-17i, respectively. The breakdown of volume distribution to the injections wells is summarized in Table 4. MW-16i accepted solution at an average flow rate of 0.45 gpm under an average pressure of 6 psi at the wellhead. MW-17i accepted solution at an average flow rate of 0.96 gpm under an average pressure of 5 psi at the wellhead.

Injection flow rates were lower than observed during the aquifer pump test performed in March 2014. This is partially attributed to injecting a higher density material continuously over a longer span (5 days) versus the injectability test, which involved pumping water over a much shorter time span (several hours or less) than the permanganate injection pilot test. The pressure at the well heads was not increased beyond 7.5 psi to reduce the potential for daylighting of the solution and to minimize the potential for health and safety hazards.

The original scope proposed injecting approximately 4,200 gallons of solution into MW-16i and MW-17i, respectively. Typically, distribution of injection solution in competent bedrock is based on the availability and interconnectedness of bedrock fractures in the particular treatment interval. Preferential pathways give way for solution transport through the bedrock and, as such, most injection wells accept solution at different flow rates. The treatment interval in MW-17i likely extended along a greater concentration of permeable fractures allowing the area enveloping MW-17I to accept and distribute more solution than MW-16i.

Any solution discharged as a result of pressure relief was collected in a 5-gallon bucket and used to fill the casings of MW-16S and MW-17S. Due to the low flow rates established in the aquifer pump test, solution was injected into MW-16S and MW-17S by way of gravity feed to apply head pressure and flow on the existing fractures in the shallow interval. Periodic inspections of all injection equipment, chemical hosing and manifolds was completed each shift and noted in a field log. No daylighting of permanganate was observed during injection activities.

The start and stop times for each injection batch were recorded, along with the start and stop totalizer readings and pressure at the well head for each injection point used.

From the recorded times, the total injection times per tanker were calculated. Based on the total injection times per tanker and totalizer readings, the total and cumulative volumes of permanganate solution injected, and the average flow rates for each injection point used were also calculated. The sodium permanganate injection pilot test data are summarized in Table 5.

3.2 Injection into Former Excavation Areas

6,471 gallons of solution was distributed amongst the former excavation areas EA-1 through EA-4. The solution was transferred by filling a truck-mounted 250-gallon tank and then transporting the solution to each respective excavation area where solution was gravity fed into the subsurface. Due to the large amount of solution proposed at location EA-3, solution was partially pumped to the location using a chemically-compatible double diaphragm pump and flow meter. A total of 750, 1,250, 3,721 and 750 gallons were distributed to EA-1, EA-2, EA-3 and EA-4, respectively. Volume distribution to the excavation areas is outlined in Table 4.

3.3 Monitoring During Injections

During the injection process, depth to water was periodically monitored at MW-3, MW-9, MW-10, MW-10i, MW-11, MW-12, MW-16S and MW-17S. Introducing a significant volume of permanganate solution into bedrock typically displaces natural groundwater due to density flow which can cause correlating water level changes in surrounding wells where communication between fractures exists. Changes in water levels of less than 0.03 feet were observed in surrounding monitoring wells over the course of the injection event. Groundwater at monitoring wells MW-3, MW-10, MW-10i, MW-11 and MW-12 were monitored for field parameters [pH, oxidation/reduction potential (ORP), temperature, dissolved oxygen (DO), and specific conductivity (SC)] and for the characteristic purple color of sodium permanganate. Field monitoring data is included in Table 6. The purple color indicative of permanganate was observed in MW-10i, which is located adjacent to MW-17i after approximately 3,000 gallons had been injected into MW-16i and MW-17i. As expected, the conductivity and ORP at MW-10i increased immediately following the observation of the purple color. After 3,000 gallons of permanganate were injected, field parameters were not measured at MW-10i to prevent the need for cleaning and recalibration of the field monitoring equipment between each sample reading. The specific conductivity at monitoring points MW-3, MW-10, MW-11, and MW-12 remained fairly stable during the pilot test indicating injected permanganate did not flow to these wells during the pilot test. Groundwater temperature and pH readings remained stable during the pilot test.

3.4 Investigation Derived Waste

The pump was shut off when leakage or spilling of sodium permanganate outside of the secondary containment structure was observed. Sodium tri-polyphosphate was used to neutralized and absorb spilled solution. Adsorbent pads and socks were also used during the pilot test to address any minor leaks. Waste generated from leaks was placed in two 55-gallon open top drums and labeled for off-site disposal. The two drums were picked up by Op-Tech Environmental Services, Inc. on January 8, 2015 and disposed of as non-hazardous waste. The waste disposal manifest is provided in Appendix H.

4. Post-Injection Monitoring

One round of post-injection groundwater quality monitoring was performed in April 2015. The post-injection sampling locations, methods, and analyses were the same as during the baseline monitoring event, which are summarized in Section 2.6. The analytical laboratory reports are included in Appendix E. The groundwater analytical data are summarized in Table 1.

The post-injection sampling event VOC results were, in general, similar to the baseline sampling event results. Exceptions were at MW-10i and MW-17S, where VOC groundwater concentrations decreased by three or four orders of magnitude. The effectiveness of the injections into the former excavation areas is unknown because no wells or other points were installed to monitor these areas.

5. Summary

A total of 14,282 gallons of 3% permanganate solution was injected into the subsurface (7,811 gallons into injection wells and 6,471 gallons into former excavation areas) between December 1 and 5, 2014. MW-16i accepted solution at an average flow rate of 0.45 gpm under an average pressure of 6 psi at the wellhead. MW-17i accepted solution at an average flow rate of 0.96 gpm under an average pressure of 5 psi at the wellhead. The permanganate solution was gravity fed or pumped into the former excavation areas. Concentrations of VOCs in the bedrock groundwater decreased by three or four orders of magnitude at MW-10i and MW-17S but were similar to pre-injection event results at the remaining monitoring wells.

6. References

EA Engineering, P.C. and Its Affiliate EA Science and Technology (EA). 2011. Remedial Investigation/Feasibility Study Report Abandoned Chemical Sales Facility (828105) Rochester, New York. February 2011.

EPA, 2004, *DNAPL Remediation: Selected Projects Approaching Regulatory Closure Status Update,* EPA 542-R-04-016, December 2004

ITRC (Interstate Technology & Regulatory Council). 2005. *Technical and Regulatory Guidance for In Situ Chemical Oxidation of Contaminated Soil and Groundwater*, 2nd ed. ISCO-2. Washington, D.C.: Interstate Technology & Regulatory Council, In Situ Chemical Oxidation Team. January 2005.

Malcolm Pirnie, Inc. 2013. *Contaminated Soil Removal and Disposal Work Plan, Abandoned Chemical Sales Facility,* 1600 Jay Street, NYSDEC Site Number 828105, Rochester, Monroe County, New York. July 2013.

Malcolm Pirnie, Inc. 2014a. *In-Situ Chemical Oxidation Pilot Injection Program Design Plan*, Abandoned Chemical Sales Facility, 1600 Jay Street, NYSDEC Site Number 828105, Rochester, Monroe County, New York, June 2014.

Malcolm Pirnie, Inc. 2014b. *Contaminated Soil Removal and Disposal Report, Abandoned Chemical Sales Facility,* 1600 Jay Street, NYSDEC Site Number 828105, Rochester, Monroe County, New York. December 2014.

NYSDEC. 2011. *Record of Decision*. Abandoned Chemical Sales Facility, State Superfund Project Rochester, Monroe County, Site No. 828105. March 2011.

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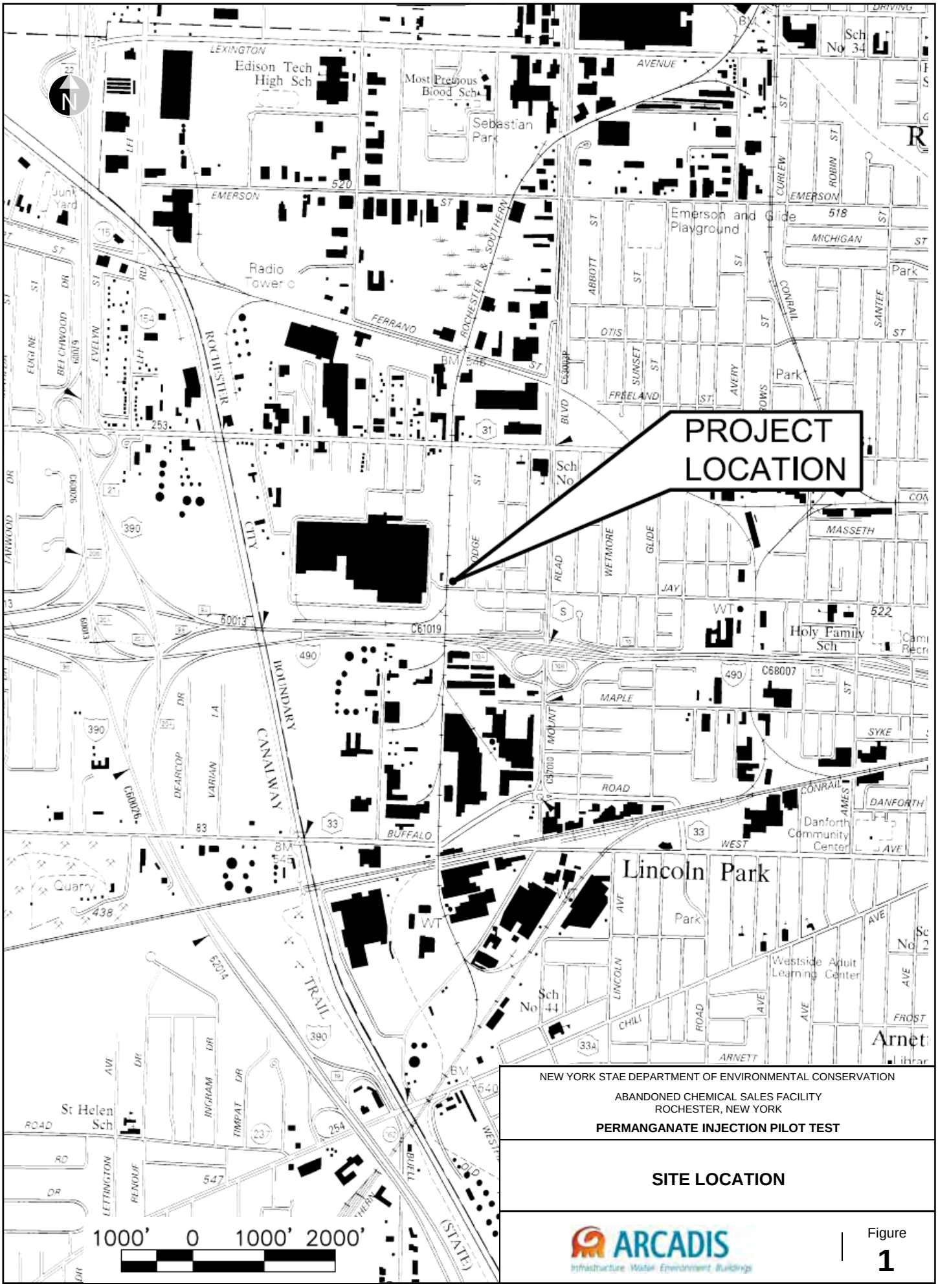
Figures



NEW YORK STAE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ABANDONED CHEMICAL SALES FACILITY
ROCHESTER, NEW YORK

PERMANGANATE INJECTION PILOT TEST

SITE LOCATION

ARCADIS
Infrastructure Water Environment Buildings

Figure
1

G:\PROJECT\00266397\ISCO\Permanganate Injection Pilot Test Report\Figure 1 – Site .pptx

EA-4 INJECTION WELL
MW-12
GRAVEL DRIVEWAY
DEBRIS PILES
DEBRIS PILES
BRICK
MW-11
STORAGE BOX
8' OH DOOR
MW-7
EXCAVATION AREA 3
EA-2 INJECTION WELL
MW-17S
MW-17I
MW-10I
MW-10
CONC. PAD
EXISTING ONE STORY STEEL BUILDING #1600
INTERIOR WALL
INTERIOR WALL
EXCAVATION AREA 4
MW-16S
MW-16I
BITUMINOUS PAVED PARKING
CONC. PAD
TREES
MW-1
EA-1 INJECTION WELL
GATE
STORAGE TRAILERS
CONC. STEPS
EXCAVATION AREA 2
EA-3 INJECTION WELL
MW-9
MW-3
15" LOCUST
PORCH
HSE #1558
PORCH
BITUMINOUS PAVED PARKING
STOCKADE FENCE
GRAVEL PARKING
MW-6
MW-6-I
CHAIN LINK FENCE
CAMBRIA STREET
CARPORT
EXCAVATION AREA 1
PORCH
HSE #1568
PORCH
PAVED DRIVEWAY
TRAILER
36" POPLAR
JAY STREET
EDGE OF PAVEMENT
CONCRETE SIDEWALK
EDGE OF PAVEMENT
STOCKADE FENCE
GRAVEL PARKING
GATE
MW-8-I
MW-8
TRAILERS
MW-2
40" OAK
24" OAK
20" CHERRY
12" ASH
12" ASH
8" PINE TYP (9 PLACES)
HSE #1540
PORCH
10" APPLE
CONC. GUTTER
EDGE OF PAVEMENT
DODGE STREET
EDGE OF PAVEMENT

20 0 20 40

SCALE: 1" = 40'

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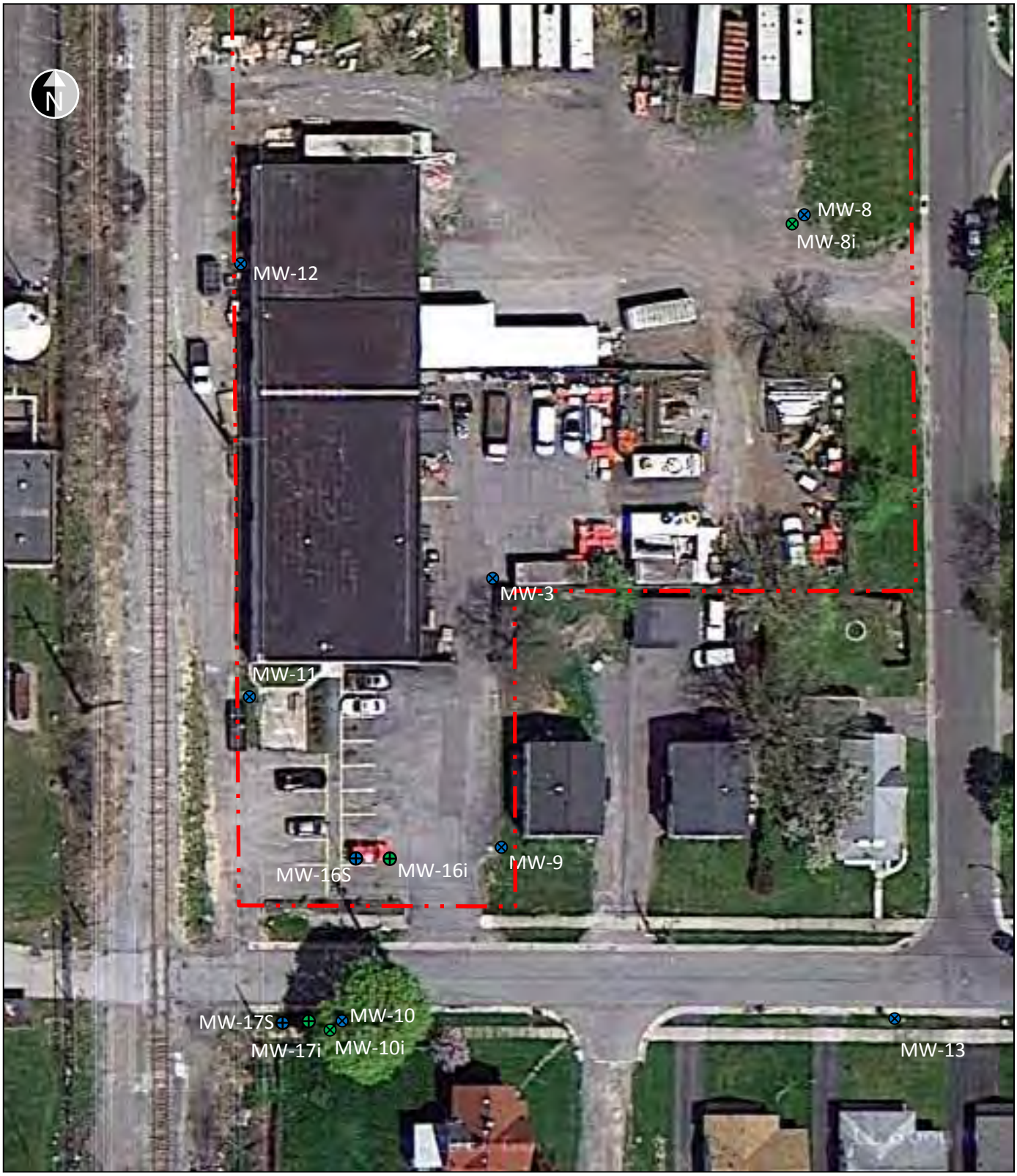
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ABANDONED CHEMICAL SALES FACILITY, ROCHESTER, NEW YORK
PERMANGANATE INJECTION PILOT TEST REPORT

PLAN OF EXCAVATION AREAS

FEBRUARY 2015
FIGURE 2



APPROXIMATE SITE PROPERTY LINE

EXISTING SHALLOW BEDROCK MONITORING WELL

EXISTING INTERMEDIATE BEDROCK MONITORING WELL

EXISTING SHALLOW BEDROCK INJECTION WELL

EXISTING INTERMEDIATE BEDROCK INJECTION WELL

APPROXIMATE SCALE IN FEET

0 16 32 64

NEW YORK STAE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ABANDONED CHEMICAL SALES FACILITY
ROCHESTER, NEW YORK

PERMANGANATE INJECTION PILOT TEST

INJECTION AND MONITORING WELLS

ARCADIS
Infrastructure Water Environment Buildings

Figure
3

G:\PROJECT\00266397\ISCO\Permanganate Injection Pilot Test Report\Figure 3.pptx

Source: GOOGLE EARTH, Downloaded 1/2014

INJECTION MANIFOLD
DIAPHRAGM PUMP
AIR COMPRESSOR
EA-4 INJECTION WELL
INJECTION TRAILER
MW-12
GRAVEL DRIVEWAY
MW-11
STORAGE BOX
DEBRIS PILES
MW-7
MW-17S
MW-17I
MW-10I
MW-10
MW-16S
MW-16I
CONC. PAD
EXISTING ONE STORY STEEL BUILDING #1600
INTERIOR WALL
8' OH DOOR
EXCAVATION AREA 3
EXCAVATION AREA 4
EA-2 INJECTION WELL
TREES
MW-1
BITUMINOUS PAVED PARKING
SODIUM PERMANGANATE TANKER
SECONDARY CONTAINMENT
STORAGE TRAILERS
CONC. STEPS
EA-3 INJECTION WELL
EXCAVATION AREA 2
EA-1 INJECTION WELL
MW-9
MW-3
15" LOCUST
PORCH
HSE #1558
PORCH
BITUMINOUS PAVED PARKING
STOCKADE FENCE
MW-6
MW-6-I
CHAIN LINK FENCE
CAMBRIA STREET
CARPORT
PAVED DRIVEWAY
PORCH
HSE #1568
PORCH
STOCKADE FENCE
GRAVEL PARKING
GATE
EXCAVATION AREA 1
TRAILER
36" POPLAR
40" OAK
24" OAK
20" CHERRY
12" ASH
12" ASH
MW-8-I
MW-8
TRAILERS
MW-2
8" PINE TYP (9 PLACES)
JAY STREET
EDGE OF PAVEMENT
EDGE OF PAVEMENT
CONCRETE SIDEWALK
HSE #1540
PORCH
10" APPLE
CONC. GUTTER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
DODGE STREET

20 0 20 40

SCALE: 1" = 40'

USER: HAUSMANN FILENAME: C:\ACAD\PROJ\00266397.0000\FIGURES-PIP TEST REPORT\FIG 4-INJECTION LAYOUT.DWG SAVE DATE: 2/2/2015 2:16 PM PLOT DATE: 2/2/2015 2:17 PM

ARCADIS
Infrastructure · Water · Environment · Buildings

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ABANDONED CHEMICAL SALES FACILITY, ROCHESTER, NEW YORK
PERMANGANATE INJECTION PILOT TEST REPORT

INJECTION LAYOUT

FEBRUARY 2015
FIGURE 4

ARCADIS

Tables

TABLE 1
Summary of Groundwater Volatile Organic Compound Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID	MW-1							MW-2					MW-3						
Sampling Date	Nov-01	Nov-01	Nov-07	Sep-10	Sep-10	Apr-14	Apr-15	Nov-01	Nov-07	Sep-10	Apr-14	Apr-15	Nov-01	Nov-07	Nov-07	Sep-10	Sep-10	Apr-14	Apr-15
Units			ug/L	ug/L	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-TCA	720	1000 J	U	U	U	0.23	U	11		U	3.2	U	1900 J	U	1100	280	500	6	27
1,1,2-TCA	U	5 J	U	U	U	U	U	U		U	U	U	U	U	U	U	U	U	U
1,1-DCA	3300	2700 J	48 J	180	33	5.5	12	630 J	38	57	4.9	7.2 J	22000	17000	15000	4800	11000	320	600
1,2-DCA	U	8 J	U	U	U	U	U	U		U	U	U	U	7.4	U	1.8	U	U	U
Chloroethane	570	720 J	4300	1200	120	27	24	100	71	150	U	U	U	1800	1500	870	1700	27	67
PCE	U	14	U	U	U	16	0.70 J	630 J	6.1 J	U	530	200	U	5	U	3.2	U	U	U
TCE	370 J	460 J	U	U	U	3.7	1.9	210 J	5.4 J	U	140	140	U	5.3	U	4.2	U	1.4	4.8 J
cis-1,2-DCE	18000	7700 J	260	U	170	0.95	1.7	900 J	580	87	400	280	68000 J	55000	41000	11000	2500	390	610
1,1-DCE	U	94	U	U	U	5.5	U	U		U	4.9	3.3 J	290 J	340	340 E	73	220	3.1	3.8 J
Vinyl Chloride	1900	2400 J	1200	6.2 J	390	0.52	1.3	490 J	310	400	53	86	23000	25000	16000	11000 J	22000	390	940
Benzene	U	12	U	U	U	0.27	0.44 J	4 J	U	U	U	U	U	7	U	4.4	U	0.46	U
Toluene	7300	3000 J	3500	140	28	0.13	U	750 J	12 J	7.4	U	U	11000	7200	5800	1700	4300	20	22
Ethylbenzene	360 J	420 J	350 J	470	220	0.24	17	250 J	7.6 J	170	U	U	U	78	U	31	U	1.2	U
Xylene, Total	1900	1500 J	1400	690	340	3 U	1.8 J	770 J	U	9.5	U	U	300 J	440	U	210	230	7.2	U
Sampling Method	Bailer	Bailer	PDB	PDB	LF	PDB	PDB	Bailer	PDB	PDB	PDB	PDB	Bailer	LF	PDB	PDB	LF	PDB	PDB

NOTES:

U = Not detected

J = Reported concentration is estimated.

LF = Low flow sampling

PDB = Passive Diffusion Bag

E = Exceeded calibration range

* = Result may be biased low because of injectability test conducted in March 2014.

Concentrations are in micrograms per liter (ug/l)

^ - instrument related QC is outside acceptance limits.

TABLE 1
Summary of Groundwater Volatile Organic Compound Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID	MW-4				MW-5					MW-6						MW-6i				
Sampling Date	Nov-01	Nov-07	Apr-14	Apr-15	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15	Nov-07	Nov-07	Sep-10	Sep-10	Apr-14	Apr-15	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-TCA	U	U	U	U	U	U	U	U	U	U	U	U	U	3	2.7			U	0.25	U
1,1,2-TCA	U	U	U	U	U	U	U	U	U	U	U	U	U	1 U	U			U	U	U
1,1-DCA	U	U	U	U	11	19	16	10	4.7	18 J	17 J	2.9	11	2.8	3.1	5.2 J	1.7 J	11	6.9	1.1
1,2-DCA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U			U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U	320	560	U	U	U	0.42 J	17 J	U	U	U	U
PCE	U	U	U	U	U	U	U	0.12	U	U	U	U	0.97 J	23	12	U	U	U	U	U
TCE	U	U	U	U	U	U	U	0.29	U	U	U	2.3	1.5	14	22	5 J	2.9 J	0.96 J	0.19	1.0
cis-1,2-DCE	U	U	U	U	3.9 J	2.2 J	4.5	3.2	2.6	140 J	23 J	9.1	34	3.8	13	47 J	26	15	10	4.9
1,1-DCE	U	U	U	U	U	U	U	10	U	U	U	U	U	2.8	U			U	6.9	U
Vinyl Chloride	U	U	U	U	2.1 J	2.3 J	U	1.5	1.2	55 U	17 J	U	21	2	5.8	8.5	11	11 J	2.9	U
Benzene	U	U	U	U	U	U	U	0.28	U	U	U	19	U	U	U	2.4 J	7	U	0.19	25
Toluene	U	U	U	U	U	U	U	U	U	150 J	330	4.1	U	U	U	1.9	4.1	U	U	24
Ethylbenzene	U	U	U	U	U	U	U	U	U	100 J	200	7.6	U	U	U	1 J	4.8 J	U	U	12
Xylene, Total	U	U	U	U	U	U	U	U	U	230 J	480	U	U	U	U	3.1 J	15	U	U	45
Sampling Method	Bailer	PDB	PDB	PDB	LF	PDB	PDB	PDB	PDB	LF	PDB	PDB	LF	PDB	PDB	LF	PDB	LF	PDB	PDB

NOTES:

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E = Exceeded calibration range

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TABLE 1
Summary of Groundwater Volatile Organic Compound Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID	MW-7					MW-8				MW-8i					MW-9				
Sampling Date	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15	Nov-07	Nov-07	Sep-10	Apr-15	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-TCA	U	U	U	U	U	U	U	U	U	U	U	22	10	12	800 J	1000	34	23	40
1,1,2-TCA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-DCA	2.5 J	2.3 J	2.2	U	U	21	47	80	6.7	U	59 J	91	61	63	8600	11000	1400	660	860
1,2-DCA	U	U	U	U	U	U	U	U	U	130 J	U	U	U	U	2.2 J	U	U	U	U
Chloroethane	U	U	U	U	U	160	210	180	1.3	U	U	2.3	U	U	370 E	U	71	86	93
PCE	U	U	U	0.51	0.49 J	240	240	130	1300	70 J	U	U	U	3.5	3.5 J	U	0.75 J	U	0.61 J
TCE	U	U	U	U	U	42	45	120	260	2000	44 J	3.2	14	93 J	85	U	2.7	U	3.1
cis-1,2-DCE	4.4 J	U	1.3	U	U	370	920	1700	190	U	4100	2700	4600	5000	19000	15000	1200	1000	1800
1,1-DCE	U	U	U	U	U	U	U	2.5	0.81 J	5700	U	17	61	61 J	340 J	97	9.1	40	13 J
Vinyl Chloride	U	U	0.79 J	U	U	240	620	2600 J	25	840	590 J	2300 J	680	1100	18000	13000	750 J	510	1600
Benzene	U	U	U	U	U	2.8 J	4.3 J	4.5	0.44 J	U	U	3.9	U	2.4	8.4	U	U	U	0.81 J
Toluene	U	U	U	U	U	210	700	49	U	U	32 J	7.6	U	3.0	2700	3500	89	92	320
Ethylbenzene	U	U	U	U	U	10	36	49	U	U	U	3.2	U	1.8	35	37 J	1.7	U	3.0
Xylene, Total	U	U	U	U	U	28	130	66	U	U	U	14.1	U	7.0	200	230	55	10	28
Sampling Method	LF	PDB	PDB	PDB	PDB	LF	PDB	PDB	PDB	LF	PDB	LF	PDB	PDB	LF	PDB	PDB	PDB	PDB

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TABLE 1
Summary of Groundwater Volatile Organic Compound Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID	MW-10					MW-10i						MW-11				
Sampling Date	Nov-07	Sep-10	Jan-13	Apr-14	Apr-15	Nov-07	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-TCA	15000	55000	43000	63000	61000	1500 J	15000	13000	36000	26000	130 ^	990 J	1600 J	310	220	120
1,1,2-TCA	7	14	U	U	U	U	1.7 J	U	4.7	U	U	U	U	1	U	U
1,1-DCA	2800 J	3100	3200	4900	4000	620 J	3500 J	2900	7700	2200	10	19000 J	36000 J	690	340	190 J
1,2-DCA	U	1.2	3200	U	U	U	U	U	0.91 J	U	U	U	9.3	2.7	U	0.45 J
Chloroethane	U	4.8	U	U	U	U	U	U	6.3	U	U	U	4600 J	25	U	3.9
PCE	1700	6700	3100	7500	5100	16	180	130	2400	1500	0.98 J	U	18	1.9	U	5.6
TCE	15000	65000	4500	61000	40000	200	1600 J	2400 J	25000	8700	U	U	7.5	50	190	200
cis-1,2-DCE	51000	62000	59000	82000	80000	19000	65000	45000	130000	60000	2.2	47000 J	89000	17000	8100	5900
1,1-DCE	1300 E	9800	1800	1200	1000 J	220 E	1300 J	830 J	8000	600	U	U	900 J	340	120	100 J
Vinyl Chloride	990 J	2200	U	2100	2800	710 U	1500 J	890 J	4700	1400	U	25000 J	44000	1600 J	540	520
Benzene	10	10	U	U	U	2.8 J	5.2	8.8	23	U	U	U	24	0.53 J	U	U
Toluene	2200 J	5400	3800	6100	4100	91	450 E	170	7700	2000	3.0	6700 J	14000	2.9	36	U
Ethylbenzene	66	140	U	130	U	4.3 J	15	16	140	75	U	U	190	U	U	U
Xylene, Total	300	580	U	580	U	17	67	84	580	330	U	U	910 J	U	U	U
Sampling Method	LF	PDB	Bailer	PDB	PDB	LF	PDB Shallow	PDB Deep	LF	PDB	PDB	LF	PDB	PDB	PDB	PDB

NOTES:

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E = Exceeded calibration range

* = Result may be biased low because of injectability test conducted in March 2014.

Concentrations are in micrograms per liter (ug/l)

^ - instrument related QC is outside acceptance limits.

TABLE 1
Summary of Groundwater Volatile Organic Compound Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID	MW-12					MW-13				MW-14			
Sampling Date	Nov-07	Nov-07	Sep-10	Apr-14	Apr-15	Mar-08	Sep-10	Apr-14	Apr-15	Sep-10	Sep-10	Apr-14	Apr-15
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-TCA	970 J	1300 J	260	34	49	U	1600	2300	35000	U	U	U	U
1,1,2-TCA	U	U	U	U	U	U	0.52 J	U	U	U	U	U	U
1,1-DCA	690 J	530 J	450	67	94	U	850 J	1100	3700 J	U	U	U	U
1,2-DCA	U	U	U	U	U	U	1	U	U	U	U	U	U
Chloroethane	U	U	52	15	18	U	4.3	U	U	U	U	U	U
PCE	U	U	U	4.6	0.56 J	U	1200	740	2000 J	U	U	U	U
TCE	U	U	2.9	9	5.9 J	2200 J	20000	5300	24000	U	0.52 J	U	U
cis-1,2-DCE	12000	24000	7100	900	970	110000	140000	150000	150000	U	0.98 J	U	U
1,1-DCE	U	U	43	67	1.5	U	1500	700	1400 J	U	U	U	U
Vinyl Chloride	2400 J	2800 J	2700 J	180	300	4700 J	7600 J	6000	7300	U	U	U	U
Benzene	U	U	U	U	U	U	32	U	U	2.2	U	U	U
Toluene	550 J	790 J	2.9	21	24	U	1400	1100	3400 J	U	U	U	U
Ethylbenzene	U	U	44	11	12	U	100	U	U	U	U	U	U
Xylene, Total	U	U	140	22	23	U	180	U	210 J	U	U	U	U
Sampling Method	LF	PDB	PDB	PDB	PDB	LF	PDB	PDB	PDB	PDB	LF	PDB	PDB

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TABLE 1
Summary of Groundwater Volatile Organic Compound Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID	MW-15				MW-16S				MW-16i			MW-17S			MW-17i		
Sampling Date	Sep-10	Sep-10	Apr-14	Apr-15	Oct-13	Oct-13	Apr-14	Apr-15	Oct-13	Apr-14	Apr-15	Oct-13	Apr-14	Apr-15	Oct-13	Apr-14	Apr-15
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-TCA	U	U	U	U	50	51	68	70	28000	33000	33000	12000	5100	80	2000	230	10000
1,1,2-TCA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.37 J
1,1-DCA	U	U	U	U	190	200	190	140	3200	2300	2700	4400	1700	20	4800	77	850
1,2-DCA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
PCE	U	U	U	U	17	18	12	7.4 J	6300	6300	5200	U	U	U	3600	83	160 J
TCE	U	U	U	U	120	120	91	55	38000	31000	25000	U	130	U	14000	110	1100
cis-1,2-DCE	U	1.1	0.21	U	320	320	350	290	53000	48000	47000	76000	27000	U	56000	1200	15000
1,1-DCE	U	U	U	U	24	25	21	17	U	520	460 J	1100	350	U	U	11	140 J
Vinyl Chloride	U	0.62 J	U	U	14	11	1.4	21	U	1400	1200	U	410	U	U	17	430
Benzene	4.9	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	4.0
Toluene	3.3	U	U	U	U	U	U	U	3700	3200	2500	1300	580	0.61 J	3200	64	460
Ethylbenzene	U	U	U	U	U	U	U	U	U	110	U	U	U	U	U	2.6	24
Xylene, Total	2.7	U	U	U	U	U	U	U	U	460	U	U	U	U	U	12	130
Sampling Method	PDB	LF	PDB	PDB	Bailer	Bailer	PDB*	PDB	Bailer	PDB*	PDB	Bailer	PDB*	PDB	Bailer	PDB*	PDB

NOTES:

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PDB = Passive Diffusion Bag

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Concentrations are in micrograms per liter (ug/l)

^ - instrument related QC is outside acceptance limits.

TABLE 2
Summary of Groundwater Dissolved Metals, Dissolved Gasses, and Wet Chemistry Parameter Analytical Results
Abandoned Chemical Sales Facility (SITE #828105)
Rochester, New York

Well ID		MW-3	MW-3	MW-9	MW-9	MW-10	MW-10	MW-10i	MW-10i	MW-16i	MW-16i
Sampling Date		Apr-14	Apr-15	Apr-14	Apr-15	Apr-14	Apr-15	Apr-14	Apr-15	Apr-14	Apr-15
Unit											
Dissolved Metals											
Iron	mg/L	0.07	1.7	0.23	5.0	0.05 U	0.05 U	4.5	0.69	36	7.0
Manganese	mg/L	0.0047	0.16	0.065	0.34	0.0071	0.50	0.12	13.1	0.25	9.6
Dissolved Gasses											
Ethane	mg/L	0.045	0.69	0.02	2.4	0.021	1.0	0.022	0.51	0.065	27
Ethene	mg/L	0.072	0.036 J	0.72	0.15 U	0.19	0.15 U	0.29	0.057 J	0.059	0.15 U
Methane	mg/L	0.86	0.69	1.1	1.7	1.3	0.2	0.41	0.07 U	0.3	0.14 U
Wet Chemistry Parameters											
Alkalinity	mg/L	420	404	330	388	460	452	340	264	220	280
Chloride	mg/L	150	200 B	220	324 B	140	153 B	140	146 B	97	182 B
Sulfate	mg/L	210	96.5	35	62.4	65	120	42	3060	63	290
Sulfide	mg/L	2.0 U	0.13	2.0 U	0.28	2.0 U	4.8	2.0 U	0.01 U	2.0 U	0.01 U
Total Organic Carbon	mg/L	3.6	3.9 B	3.4	8.9 B	6.2	6.7 B	4.1	65.3 B	6.4	9.9 B
Field Parameters											
pH	SU	6.00	7.00	6.36	6.94	6.14	6.9	7.29	8.03	6.8	8.29
Temperature	^{0}C	9.99	7.3	9.48	11.3	10.98	11.30	12.20	11.9	9.98	14
Conductivity	umhos/cm	1350	1910	1143	2310	1251	1790	2067	7530	1399	2230
ORP	mvolts	-18	-96	-47	81	-179	-230	-200	209	-180	-230
DO	ppm	2.0	0.26	3.5	2.2	0.30	0.13	15	0.07	1.2	0.13
Turbidity	NTU	890	6.89	0.0	6.4	0.0	1.46	32	9.9	210	25.8

NOTES:

U = Not detected

NA = Not Analyzed

Concentrations are in milligrams per liter (mg/l)

Table 3
Sodium Permanganate Injection Field Monitoring Form
Abandoned Chemical Sales Facility
1600 Jay Street, Rochester, NY 14611

ARCADIS Personnel: CT/ES/DS/PF

Date	Time	Total Volume Injected (gal)	Field Observations				
			Injection Well Seals intact?	Daylighting observed around injection wells?	Daylighting observed anywhere onsite/offsite?	Leaks observed in injection skid?	Solution observed in containment? Volume?
12/1/2014	12:00	~75	Yes	No	No	Yes / Small	Yes / Small
12/1/2014	13:00	~500	Yes	No	No	No	No
12/1/2014	20:00	~1,100	Yes	No	No	Yes / Small	No
12/1/2014	22:00	~1,340	Yes	No	No	Yes / Small	No
12/2/2014	1:00	~1,680	Yes	No	No	Yes / Small	No
12/2/2014	3:00	~1,920	Yes	No	No	Yes / Small	No
12/2/2014	6:00	~2,300	Yes	No	No	Yes / Small	No
12/2/2014	22:00	~5,300	Yes	No	No	Yes / Small	No
12/3/2014	0:00	~5,630	Yes	No	No	Yes / Small	No
12/3/2014	2:00	~5,960	Yes	No	No	Yes / Small	No
12/3/2014	4:00	~6,290	Yes	No	No	Yes / Small	No
12/3/2014	6:00	~6,630	Yes	No	No	Yes / Small	No
12/3/2014	22:00	~8,020	Yes	No	No	Yes / Small	No
12/4/2014	0:00	~8,300	Yes	No	No	Yes / Small	No
12/4/2014	4:00	~8,644	Yes	No	No	Yes / Small	No
12/4/2014	8:00	~8,950	No	No	No	MW-16I leak	Yes / Small
12/4/2014	11:00	~11,000	Yes	No	No	Yes / Small	No
12/4/2014	14:00	~12,000	Yes	No	No	No	No
12/4/2014	17:00	~12,800	Yes	No	No	No	No
12/5/2014	8:00	~14,000	Yes	No	No	No	No
12/5/2014	13:00	14,282	Yes	No	No	No	Yes / Small

Table 4

Sodium Permanganate Injection Volume Distribution

Abandoned Chemical Sales Facility

1600 Jay Street, Rochester, NY 14611

Injection Location	Proposed Injection Volumes (Gal.)	Actual Injection Volumes (Gal.)
MW-16i	4,200	2,506
MW-17i	4,200	5,305
EA-1	750	750
EA-2	1,200	1,250
EA-3	3,150	3,721
EA-4	750	750

Table 5

Sodium Permanganate Pilot Test Injection Log

Abandoned Chemical Sales Facility

1600 Jay Street, Rochester, NY 14611

Batch Start/Stop	Date	Injection Well ID	Time	Totalizer Reading (Gal.)	pH	Specific Conductivity	Injection Well ID	Time	Totalizer Reading (Gal.)	pH	Specific Conductivity
Tanker 1 Start	12/1/14	MW-16I	11:30	2,021	6.60	11.61	MW-17I	11:30	27821	6.61	11.59
Tanker 1 Mid			12:38	2,065	Pressure: 2.5 psi			12:38	27911	Pressure: 0.0 psi	
Tanker 1 Mid			13:58	2,130	Flow Rate: 0.60 gpm			13:55	28008	Flow Rate: 1.34 gpm	
Tanker 1 Mid	12/1/14	MW-16I	16:20	2,199	--	--	MW-17I	16:20	28146	--	--
Tanker 1 Mid			17:00	2,217	Pressure: 2.5 psi			17:00	28274	Pressure: 6.5 psi	
Tanker 1 Mid			18:00	2,279	Flow Rate: 1.03 gpm			18:00	28382	Flow Rate: 1.8 gpm	
Tanker 1 Mid	12/1/14	MW-16I	19:00	2,359	--	--	MW-17I	19:00	28405	--	--
Tanker 1 Mid			20:00	2,402	Pressure: 7.5 psi			20:00	28583	Pressure: 6.0 psi	
Totals			--	--	Flow Rate: 1.33 gpm			--	--	Flow Rate: --	
Tanker 1 Mid	12/2/14	MW-16I	2:00	2,745	--	--	MW-17I	2:00	29010	--	--
Tanker 1 Mid			8:00	3,099	Pressure: 6.5 psi			8:00	29535	Pressure: 4.5 psi	
Totals			--	1,078	Flow Rate: 1.3 gpm			--	1714	Flow Rate: 1.0 gpm	
Tanker 1 Mid	12/2/14	MW-16I	11:15	3,300	6.63	11.55	MW-17I	11:15	29834	--	--
Tanker 1 Stop			16:40	3,755	Pressure: 7.5 psi			16:40	30618	Pressure: 6.0 psi	
Totals			--	--	Flow Rate: --			--	--	Flow Rate: --	
Tanker 2 Mid	12/2/14	MW-16I	23:00	4,163	--	--	MW-17I	23:00	31449	--	--
Tanker 2 Stop			--	--	Pressure: 6 psi			--	--	Pressure: 4.75 psi	
Totals			--	--	Flow Rate: 0.75 gpm			--	--	Flow Rate: 2 gpm	
Tanker 2 Mid	12/3/14	MW-16I	7:00	4,489	--	--	MW-17I	7:00	32162	--	--
Tanker 2 Mid			--	--	Pressure: 5.5 psi			--	--	Pressure: 4.5 psi	
Totals			--	--	Flow Rate: 0.75 gpm			--	--	Flow Rate: 2 gpm	
Tanker 2 Mid	12/3/14	MW-16I	10:35	4,633	--	--	MW-17I	10:35	32624	--	--
Tanker 2 Stop			18:30	4,738	Pressure: --			18:30	32624	Pressure: --	
Totals			--	--	Flow Rate: --			--	--	Flow Rate: --	
Tanker 3 Mid	12/3/14	MW-16I	18:30	4,738	--	--	MW-17I	18:30	32624	--	--
Tanker 3 Mid			--	--	Pressure: --			--	--	Pressure: --	
Totals			--	--	Flow Rate: --			--	--	Flow Rate: --	
Tanker 3 Mid	12/4/14	MW-16I	7:15	5,134	--	--	MW-17I	7:15	33766	--	--
Tanker 3 Mid			10:30	5,168	Pressure: --			10:30	33964	Pressure: < 1 psi	
Totals			--	--	Flow Rate: --			--	--	Flow Rate: --	
Tanker 3 Start	12/4/14	MW-16I	15:30	--	6.56	11.37	MW-17I	15:50	--	6.56	11.4
Tanker 3 Mid			--	--	Pressure: 5.0 psi			--	--	Pressure: 7.5 psi	
End Injection			13:50	6,191	Flow Rate: --			13:50	36,648	Flow Rate: --	

Table 6
Sodium Permanganate Pilot Test Field Monitoring Data
Abandoned Chemical Sales Facility
1600 Jay Street, Rochester, NY 14611

Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-3																			
				Screen Intervals (Feet Below Top of Casing)																			
				24' to 22'				22'' to 20'				20' to 18'				18' to 16'				16' to 14'			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/1/2014	12:45	~150	7.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	8:30	~8,900	7.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	10:50	~11,000	7.81	6.61	1.999	-30.1	9.0	6.63	2.010	-28.0	10.1	6.63	3.101	-16.6	14.4	6.81	3.101	-4.5	20.1	6.81	3.111	0.1	--
12/4/2014	13:05	~12,000	7.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	16:00	~12,700	7.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-9																			
				Screen Intervals (Feet Below Top of Casing)																			
				24' to 22'				22'' to 20'				20' to 18'				18' to 16'				-- to --			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/1/2014	13:10	~160	12.98	- Casing bent - unable to lower YSI sonde into water column																			
12/2/2014	23:00	~5,300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/3/2014	8:30	~6,800	12.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/3/2014	12:30	~7,100	13.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/3/2014	16:00	~7,400	13.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	8:00	~8,900	13.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	9:45	~10,000	12.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	14:00	~12,000	12.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	16:50	~12,800	12.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-10																			
				Screen Intervals (Feet Below Top of Casing)																			
				27' to 25'				25' to 23'				23' to 21				21' to 19'				19' to 17'			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/2/2014	11:10	~3,300	--	6.67	3.524	654.6	6.53	6.33	1.853	647.5	3.98	6.33	1.425	606.9	2.47	6.77	1.410	567.0	1.79	6.77	1.414	544.1	1.54
12/3/2014	9:00	~6,900	13.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/3/2014	16:00	~7,600	13.11	6.69	3.616	700.1	5.51	6.70	1.903	698.3	4.03	6.73	1.485	610.1	2.53	6.73	1.411	557.0	1.81	6.74	1.431	540.1	1.55

Table 6
Sodium Permanganate Pilot Test Field Monitoring Data
Abandoned Chemical Sales Facility
1600 Jay Street, Rochester, NY 14611

Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-10i Screen Intervals (Feet Below Top of Casing)																	
				24' to 22'				22'' to 20'				20' to 18'				18' to 16'				16' to 14'			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/2/2014	23:30	~5,300	12.89	6.37	17.67	693.7	19.07	Readings stopped as sodium permanganate solution was observed in the monitoring well													
12/3/2014	14:30	~7,000	12.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	9:00	~10,000	12.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	18:00	~12,800	12.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/5/2014	15:20	14,282	12.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-11 Screen Intervals (Feet Below Top of Casing)																	
				23' to 21'				21' to 18'				18' to 14'				14' to 12'				12' to --			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/1/2014	13:05	~500	11.47	6.83	1.935	-31.0	9.0	6.86	2.221	-17.0	11.0	6.86	2.213	4.1	11.9	6.85	2.313	14.0	18.1	6.85	2.210	22.0	21.0
12/2/2014	12:00	~2,900	11.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/2/2014	16:00	~3,200	11.47	6.88	1.951	-33.0	9.9	6.89	2.211	-19.0	11.8	6.88	2.214	4.9	11.1	6.89	2.333	15.0	19.3	6.89	2.334	23.0	22.0
12/3/2014	12:08	~6,800	11.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/3/2014	15:45	~7,100	11.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	9:00	~10,000	11.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	16:50	~12,700	1.1.47	6.89	1.881	-40.1	9.1	6.89	2.349	-23.0	12.1	6.83	1.883	3.1	11.3	6.87	2.000	16.0	19.0	6.87	2.001	24.5	23.0

Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-10 Screen Intervals (Feet Below Top of Casing)																	
				27' to 25'				25' to 23'				23' to 21				21' to 19'				19' to 17'			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/3/2014	23:00	~8,100	10.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	12:00	~10,000	10.16	6.71	1.911	-30.1	9.1	6.81	2.211	-23.4	10.9	6.81	2.213	-21.1	13.5	6.82	2.211	-21.4	15.5	6.82	2.213	-20.1	18.1
12/4/2014	16:00	~12,700	10.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/2014	19:00	~13,000	10.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-16s Screen Intervals																	
				23' to 20'				20' to 17'				17' to 14'				14' to 11'				11' to 8'			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/1/2014	13:00	~154	9.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/2/2014	13:47	~3,790	9.77	6.49	3.533	-38.7	9.0	6.53	3.549	-3.9	10.1	6.55	3.530	7.1	11.1	6.56	3.488	17.0	15.3	6.58	3.483	37.9	24.3
12/2/2014	14:00	~4,000	--	Sodium Permanganate solution injected into well until casing full																			

Table 6
Sodium Permanganate Pilot Test Field Monitoring Data
Abandoned Chemical Sales Facility
1600 Jay Street, Rochester, NY 14611

Date	Time	Total Injected Volume (gal)	Water Level (ft bTOC)	MW-17s																			
				Screen Intervals (Feet Below Top of Casing)																			
				24' to 22'				22'' to 20'				20' to 18'				18' to 16'				16' to 14'			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/1/2014	9:30	0	10.02	6.81	1.931	-33.0	9.0	6.85	2.121	-28.0	10.1	6.89	2.121	-29.1	10.3	6.84	2.291	-23.0	10.5	6.89	2.219	-20.8	16.1
12/2/2014	9:50	~2,700	10.05	6.83	1.919	-40.0	9.9	6.86	2.222	-36.0	10.3	6.86	2.231	-26.0	10.9	6.86	2.233	-16.1	10.3	6.85	2.911	-9.1	11.9
12/2/2014	10:00	~2,700	--																				
Date	**Time**	**Total Injected Volume (gal)**	**Water Level (ft bTOC)**	**MW-17i**																			
				Screen Intervals (Feet Below Top of Casing)																			
				to				to				to				to				to			
				pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)	pH (s.u.)	Cond. (mS/cm)	ORP (mV)	DO (mg/L)
12/1/2014	9:00	0	--	Wellhead placed on well - Start gravity injection of Sodium Permanganate																			

Appendix A

UIC Permit Application

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAR - 5 2014

Mark Flusche, P.HG.
ARCADIS of NY, Inc.
855 Route 146, Suite 210
Clifton Park, NY 12065

Re: Underground Injection Control (UIC) Program Regulation
former Chemical Sales Site (**Reference UICID: 14NY05599021**)
1600 Jay Street
Rochester, NY 14611
Monroe County
Authorization to Inject

Dear Mr. Flusche:

This letter serves to inform you that the U.S. Environmental Protection Agency is in receipt of inventory information addressing wells authorized by rule located at the above-referenced facility in accordance with 40 Code of Federal Regulations (CFR) §144.26. The operation of four (4) Underground Injection Control wells to inject sodium permanganate and water for remediation of chlorinated volatile organic compounds in the subsurface and groundwater at at EPA site (ID # NYR00201772) is authorized by rule, pursuant to 40 CFR § 144.24.

Should any conditions change in the operation of any of the wells listed above (such as injectate composition, closure of the well, injection of cooling water greater than 150 degrees Fahrenheit, construction of additional wells, etc.) you are required to notify this office within five (5) days. Any accidental spills into a well should be reported within twenty-four (24) hours after the event. Change in operation information should be addressed to:

Nicole Foley Kraft, Chief
Ground Water Compliance Section
United States Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
Re: 14NY05599021
Attn: Robert Ferri

Should you own or operate **other** facilities using underground injection wells, please use the enclosed inventory form (EPA Form 7520-16) and instructions, copy for multiple facilities, and submit them to the address listed above. These documents can also be found on the internet at:

http://www.epa.gov/safewater/uic/pdfs/7520-16.pdf
http://www.epa.gov/region02/water/compliance/supplemental_instructions_inventory.pdf
http://www.epa.gov/region02/water/compliance/wellclasstypetable_inventoryc_form

Failure to respond to this letter truthfully and accurately within the time provided may subject you to sanctions authorized by federal law. Please also note that all information submitted by you may be used in an administrative, civil judicial, or criminal action. In addition, making a knowing submission of materially false information to the U.S. Government may be a criminal offense.

Should you have any questions, please contact Robert Ferri of my staff at (212) 637-4227 or ferri.robert@epa.gov.

Sincerely,

Nicole Foley Kraft, Chief
Ground Water Compliance Section

Enclosure

cc: Dixon Rollins
NYSDEC, Region 8
6247 E. Avon-Lima Road
Avon, NY 14414

Richard Elliott, P.E.
Monroe Co. Dept. of Health
P.O. Box 92832
Rochester, NY 14692-8932

Vicek R. Nattanmai
NYSDEC
625 Broadway
Albany, NY 12233

Appendix B

Access Agreement

ROE – Agreement No. 2147228

CONTRACTOR RIGHT OF ENTRY LICENSE AGREEMENT

THIS AGREEMENT (the "Agreement") is made as of November 24, 2014 (the "Effective Date"), by and between **ROCHESTER & SOUTHERN RAILROAD, INC.** a New York corporation, having an address at 400 Meridian Centre, Suite 330, Rochester, NY 14618 ("Railroad") and **ARCADIS U.S., INC.**, having an address at 855 Route 146, Suite 210, Clifton Park, NY, 12065, ("Licensee").

WITNESSETH:

WHEREAS, Licensee has submitted a written request or application to Railroad requesting permission to enter Railroad's property at or near the location specified in Section 1 below for the limited purpose of performing certain work on behalf of Licensee's client, NYSDEC, "Licensee's Client"; and

WHEREAS, Railroad is willing to grant to Licensee the limited right and permission to enter upon such property for the limited purpose of performing such work in accordance with the terms provided herein.

NOW THEREFORE, in consideration of these promises, the Agreement herein, and other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1. LOCATION/PAYMENT/WORK PRACTICES:

1.1 Railroad hereby conveys to Licensee the limited right and permission to enter upon the Railroad's property located at Belt Line Branch Milepost 1.2, Latitude: 43.159877 °, Longitude: -77.664586°, located in the City of Rochester, County of Monroe, State of New York, as reflected on the map attached hereto as Exhibit A-2 (3 pages) and incorporated herein by reference (the "Property") for the purpose of Licensee, through its employees, agents or contractors to perform certain work as outlined on E-mails dated August 15, September 22, and October 2, 2014 and In-Situ Chemical Oxidation Injection Program description dated, attached to and made an integral part hereof as Exhibit A-1 ((3 pages), (the "Work"); and

1.2 Upon payment of a fee referenced in Section 11 herein, Railroad hereby grants to Licensee, the right and permission to enter upon Railroad's Property for the purpose of performing the Work, subject to the terms, conditions and provisions set forth in this Agreement.

1.3 The Work shall be performed at the entire cost and expense of Licensee's Client, in accordance with good and sound engineering practices, to the satisfaction of Railroad's Chief Engineer, or his duly authorized representative (the "Representative"), and in a manner to avoid accident, damage or harm to persons or property and delays to or interference with the operations of Railroad.

Section 2. PRIOR NOTICE/FLAGGING/OTHER CONDITIONS.

2.1 Licensee or Licensee's contractor shall notify Railroad's Representative at least ten (10) business days before proceeding with any phase of the Work on the Property and shall abide by the instructions of said Representative concerning the safety of the Railroad. All persons entering the Property pursuant to the permission granted herein shall comply with and perform the Work in accordance with Genesee & Wyoming Inc.'s Code of Ethics and Conduct and all publicly available policies referenced therein, including but not limited to the Contractor Safety Rules (collectively, the "Policies"), which can be located at:

http://phx.corporate-ir.net/phoenix.zhtml?c=64426&p=irol-govconduct

The following Personal Protective Equipment ("PPE") must be worn at all times on the Property: Hard Hats, Safety Footwear, certified Eye Protection with side shields and approved High-Visibility Work wear. Additional forms of PPE may be required under certain circumstances as specified in the aforesaid Contractor Safety Rules.

2.2 Railroad shall furnish such personnel, flagman or watchman which in Railroad's sole discretion may be necessary to protect the facilities and traffic of Railroad during the performance of said Work. The Licensee or its contractor shall reimburse Railroad promptly for the actual cost of said services, including all applicable surcharges, upon receipt of bill or bills therefor.

2.3 No equipment of Licensee or of its contractor, shall be placed and operated, nor Work permitted to be performed at a distance closer than fifty (50) feet from the center of track, nor equipment moved across the Railroad's track(s) at other than an established public crossing, unless prior arrangements have been made with said Chief Engineer or his Representative. Appropriate precautions must be taken by Licensee and its contractor to avoid interference with or damage to Railroad's facilities during the course of the Work.

2.4 Prior to entering upon the Property, Licensee agrees to comply with the Railroad's **ROADWAY WORKER PROTECTION TRAINING POLICY** as set forth in Exhibit B attached hereto and incorporated herein by reference, if such training is applicable as determined in the sole discretion of Railroad.

2.5 The permission herein granted is subject to all existing leases, licenses and occupancies of the Property by third parties. Licensee acknowledges that, in agreeing to this Agreement, Railroad acts on its own behalf only and has no authority to act, and does not claim to act, on behalf of any other entity or person with respect to any right any such other entity or person may have to object to this Agreement. Licensee shall secure the consent, and protect the facilities, of each such third party occupier of the Property.

2.6 Licensee shall implement and enforce a safety program conforming to all applicable requirements of federal, state and local laws, rules and regulations.

Section 3. LEGAL COMPLIANCE.

Licensee expressly agrees, at its own cost and expense, to comply and cause its agents, employees and contractor(s) to comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (state, federal or local) having jurisdiction over the Work or Licensee's activities including, but not limited to, the location, contact, excavation and protection regulations of the Occupational Safety and Health Act and state "One Call" - "Call Before You Dig" requirements. Licensee shall indemnify, defend and save harmless Railroad and its affiliates from and against, and shall pay, all expenses, damages, penalties, and claims, including without limitation reasonable counsel fees, that may arise from, or be imposed because of, the failure of Licensee to comply with this Section.

Section 4. LIABILITY/INDEMNITY.

4.1 Licensee hereby assumes risk of and agrees to indemnify, defend, protect and save Railroad and its affiliates, and each of their directors, officers, agents and employees, harmless from and against (a) injury to or death of any person or persons whomsoever, including but not limited to the agents, employees or contractor(s) of the parties hereto, and (b) the loss or damage to any property whatsoever, including property claims, demands, suits, judgments or expenses incurred in connection therewith; resulting from or arising out of the acts or omissions of Licensee, its agents, employees or contractor(s), or resulting from, arising out of, or occurring in connection with the entry or presence of Licensee, its agents, employees or contractor(s) on the Property, or resulting from, arising out of Licensee's acts or omissions during the performance or execution of the Work performed under this Agreement ~~or incidental thereto~~.

4.2 IN NO EVENT UNDER THIS AGREEMENT WILL RAILROAD HAVE ANY LIABILITY FOR INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE

TERM "RAILROAD" AS USED IN THIS SECTION 4 SHALL INCLUDE THE SUCCESSORS, ASSIGNS, AND AFFILIATED COMPANIES OF RAILROAD, AND ANY OTHER RAILROAD COMPANY THAT MAY BE LAWFULLY OPERATING UPON AND OVER THE TRACKS, OR THE TRACKS CROSSING OR ADJACENT TO THE TRACKS, AND THE OFFICERS, AGENTS, INVITEES AND EMPLOYEES THEREOF.

Section 5. INSURANCE.

Licensee agrees to comply with the **INSURANCE REQUIREMENTS FOR CONTRACTOR RIGHT-OF-ENTRY LICENSE AGREEMENTS,** attached hereto as Exhibit C and incorporated herein by reference, and shall provide the required Certificate(s) of Insurance to Railroad with return of the signed duplicate original of this Agreement and prior to the commencement of the Work.

Section 6. NOTIFICATION.

Licensee shall promptly notify said Chief Engineer of any loss, damage, injury or death arising out of or in connection with said Work.

Section 7. RESTORATION.

Upon completion of the Work or the term of the Agreement, Licensee shall promptly remove from the Property all tools, equipment and materials placed thereon by Licensee. Licensee shall restore the Property to the same state and condition as when Licensee first entered thereon and shall leave the Property in a condition satisfactory to Railroad's Chief Engineer or Representative.

Section 8. TERM/TERMINATION.

This Agreement and the permission conferred and the license granted by it does not constitute a grant of permanent easement and shall terminate upon completion of the Work or upon thirty (30) days written notice from either party to the other, whichever occurs first, unless extended in writing by Railroad. Notwithstanding the foregoing, Railroad shall have the right to terminate this Agreement and the license granted hereunder immediately if Licensee defaults on any of the terms and/or conditions set forth herein.

Section 9. COMPLIANCE AND DOCUMENTATION.

Licensee agrees, and shall cause its agents, employees or contractor(s), to (a) understand and comply with the terms and conditions of this Agreement, (b) carry a copy of this Agreement at all times while on the Property, and (c) promptly present the copy of this Agreement to any employee of Railroad upon request.

Section 10. CONTACT INFORMATION.

10.1 **RAILROAD**:

The Railroad's Chief Engineer is:

Mr. David C. Baer, VP – Engineering, Maintenance of Way
Rochester & Southern Railroad, Inc.
201 North Penn Street
PO Box 477
Punxsutawney, PA 15767

The Railroad's Representative is:

Mr. Alan D. Stone, Roadmaster
Rochester & Southern Railroad, Inc.
Cell: 585-329-1174

Railroad **EMERGENCY** Phone Number: **800-227-7245**
Reference Location: **Belt Line Branch Milepost 1.2**

10.1 LICENSEE:

Licensee administrative & billing contact:

David Hiss, PE
Senior Engineer
david.hiss@arcadis-us.com
ARCADIS US., Inc.
855 Route 146, Suite 210
Clifton Park, NY, 12065
T. 518.250.7309 I F. 518.250.7301

Section 11. FEE.

Upon execution of this Agreement, Licensee shall pay Railroad the sum of $1,000.00 toward the cost of preparing this Agreement and for the privileges granted to the Licensee for a period not to exceed one year. In the event that said work must continue past the anniversary of the Effective Date, Licensee shall pay an additional fee of $1,000.00 per year in advance for each annual period or portion thereof following the anniversary of the Effective Date. This fee includes Railroad's cost to add the Work covered by this license to its Railroad Protective Liability Insurance policy.

Section 12. NON-WAIVER.

If either party fails to enforce its respective rights under this Agreement, or fails to insist upon the performance of the other party's obligations hereunder, such failure shall not be construed as a permanent waiver of any rights or obligations in this Agreement.

Section 13. APPLICABLE LAW.

This Agreement shall be governed by and construed under the laws of the State or Commonwealth within which the Property is located, without regard to the choice of law provisions thereof.

Section 14. ASSIGNMENT.

Licensee shall not assign this Agreement without the prior written consent of Railroad, which consent may be granted or withheld at Railroad's sole discretion. This Agreement shall be binding upon the parties and their respective successors and permitted assigns.

Section 15. INTERPRETATION/SEVERABILITY.

To the maximum extent possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent

of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this Agreement.

Section 16. COUNTERPARTS.

This Agreement may be executed in multiple counterparts, each of which shall, for all purposes, be deemed an original but which together shall constitute one and the same instrument, and counterparts of this Agreement may also be exchanged via electronic facsimile and any electronic facsimile of any party's signature shall be deemed to be an original signature for all purposes.

Section 17. HEADINGS.

The headings of the Sections of this Agreement are inserted for convenience only and are not intended to govern, limit or aid in the construction of any term or provision of this Agreement.

Section 18. CONSTRUCTION OF TERMS.

It is the intention of the Parties that its terms not be construed against any of the Parties by reason of the fact that it was prepared by one of the Parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

RAILROAD:
ROCHESTER & SOUTHERN RAILROAD, INC.,

By: _____
Name: William V Gentilman
Its: Property Manager
Date: 11/21/2014

LICENSEE:
ARCADIS U.S., INC.,

By: _____
Name: Daniel J. Loewenstein
Its: Senior Vice President
Date: 11/12/14

EXHIBIT B

ROADWAY WORKER PROTECTION TRAINING POLICY

A. In order to maintain the integrity and security of the Property and Railroad's operations, prior to each employee of Licensee and its contractor entering upon the Property (each a "Licensee Applicant"), Licensee shall cause its employees, and shall cause its contractor to require its employees, to successfully complete the Genesee & Wyoming Inc. Roadway Worker Training Program (the "Program") on an annual basis to be administered by Roadway Worker Training, Inc. (the "Program Administer"), at the sole cost and expense of the Licensee or contractor, as the case may be (the current cost of which is $35.00 USD per Licensee Applicant). The Program shall be available via the internet and instructions to access the Program set forth in Paragraph K.

B. Upon completion of the Program, the Licensee Applicant shall be required to satisfactorily complete a test administered by the Program Administer. The Program Administer shall be responsible for scoring such test and verifying whether the Licensee Applicant satisfies the requirements of Railroad to perform work on the Property. Any Licensee Applicant who fails to achieve a satisfactory score or who refuses to complete such test shall not be permitted to enter the Property.

C. When a satisfactory score is achieved by the Licensee Applicant, the Program Administrator shall furnish a certificate (the "Certificate") to the business address of Licensee or its contractor, as the case may be, for distribution to the Licensee Applicant. Until receipt of the Certificate from the Program Administrator, the Licensee Applicant shall print a temporary certificate authorizing the Licensee Applicant's access to the Property.

D. For the avoidance of doubt, satisfactory completion of the Program as evidenced by receipt of a Certificate does not in itself grant permission to the Licensee Applicant to enter the Property, except as expressly permitted under and in strict compliance with the terms of the Agreement.

E. The Licensee Applicant shall be responsible for carrying the Certificate at all times when on the Property.

F. All communications regarding Licensee Applicants, the Program, or any other matters described in this Exhibit B should be addressed to:

Michael Lundell
GWI Safety Department
13901 Sutton Park Drive South, Suite 180
Jacksonville, FL 32081
Mlundell @gwrr.com
(904) 596-1766

G. Licensee and its contractor shall be responsible for managing and recovering Certificates from their employees who resign, retire or are terminated.

H. Notwithstanding the receipt of a Certificate by a Licensee Applicant, Railroad reserves the right to reject any Licensee Applicant from entering upon the Property in Railroad's sole discretion in accordance with:

i) Genesee & Wyoming Inc. Code of Ethics and Conduct,

ii) Genesee & Wyoming Inc. Contractor Safety Rules, or

iii) upon failure to comply with the terms and conditions of the Agreement and all applicable laws.

I. To the extent that any portion of the requirements set forth in this Exhibit B violates any law, ordinance, statute or regulation that portion shall be ignored and the Licensee or contractor, as the case may be, shall comply with all remaining portions of Railroad's Roadway Protection Training Policy, the Program or the related application process.

J. Licensee or its contractor, as the case may be, shall be primarily responsible for enforcement of the Program; *provided, however*, that both Railroad and the Federal Railroad Administration reserve the right to audit Licensee and its contractor, as the case may be, for compliance with the Program and Railroad's Roadway Protection Training Policy. Should a Licensee or its contractor, as applicable, be found out of compliance, any and all fines or penalties incurred by Railroad due to such non-compliance shall be the sole obligation of the Licensee.

K. To access the G&W Roadway Worker Protection Training for Railroad Contractors Course on RWT On-Line please follow these instructions:

- Start at website www.rrtrainers.com
- Click on the "On-Line Courses" button
- Select the G&W course by clicking on the course name
- On the right hand side of the page select "New User Registration"
- Fill out all of the fields on the registration page and submit
- You will receive a username and password via email
- After receiving the username and password go back to the On-Line Courses page and select the G&W course again
- Complete the registration process and training.

EXHIBIT C

INSURANCE REQUIREMENTS FOR RIGHT-OF-ENTRY LICENSE AGREEMENT

(a) The Licensee shall, at its own cost and expense, prior to entry onto the Property or the commencement of any work pursuant to this Agreement, procure and thereafter maintain throughout the term of this Agreement the following types and minimum amounts of insurance:

(i) The Licensee shall maintain Public Liability or Commercial General Liability Insurance ("CGL"), including Contractual Liability Coverage and CG 24 17 "Contractual Liability – Railroads" endorsement or equivalent language, covering all liabilities assumed by the Licensee under this Agreement with a combined single limit of not less than Three Million Dollars ($3,000,000) for Bodily Injury and/or Property Damage Liability per occurrence, and an aggregate limit of not less than Six Million Dollars ($6,000,000) per annual policy period. Such insurance policy shall be endorsed to provide a **Waiver of Subrogation in favor of the Railroad and its affiliates and** shall name the **Railroad and its affiliates as Additional Insured**. An Umbrella or Excess policy may be utilized to satisfy the required limits of liability under this section, but must "follow form" and afford no less coverage than the primary policy.

(ii) The Licensee shall maintain Commercial Automobile Insurance for all owned, non-owned and hired vehicles with a combined single limit of not less than One Million Dollars ($1,000,000) for Bodily Injury and/or Property Damage Liability per occurrence. Such insurance policy shall be endorsed to provide a **Waiver of Subrogation in favor of the Railroad and its affiliates and shall name the Railroad and its affiliates as Additional Insured.**

(iii) The Licensee shall maintain Statutory Workers' Compensation and Employers' Liability Insurance for its employees (if any) with minimum limits of not less than One Million Dollars ($1,000,000) for Bodily Injury by Accident, Each Accident; One Million Dollars ($1,000,000) for Bodily Injury by Disease, Policy Limit; One Million Dollars ($1,000,000) for Bodily Injury by Disease, Each Employee. Such insurance policy shall be endorsed to provide a **Waiver of Subrogation in favor of the Railroad and its affiliates.**

(iv) **Prior to construction or demolition within 50' of a railroad track,** the Licensee shall purchase Railroad Protective Liability Insurance naming the Railroad as the named insured with limits of Two Million Dollars ($2,000,000) each occurrence and Six Million Dollars ($6,000,000) aggregate limit. The policy shall be issued on a standard ISO form CG 00 35 12 03 or, if available, obtain such coverage from the Railroad.

(b) The following general insurance requirements shall apply:

(i) The specified insurance policies must be effected under standard form policies underwritten by insurers licensed in the state where work is to be performed, and carry a minimum Best's rating of "A-" and size "Class VII" or better. The Railroad reserves the right to reject as inadequate any insurance coverage provided by an insurer that is rated less than the ratings specified in this section.

(ii) All coverages shall be **primary and non-contributory to any insurance coverages maintained by the Railroad and its affiliates.**

(iii) All insurance policies shall be endorsed to provide the Railroad with thirty (30) days prior written notice of cancellation, non-renewal or material changes.

(iv) The Licensee shall provide the Railroad with certificates of insurance evidencing the insurance coverages, terms and conditions required prior to commencement of any activities on or about the Property. Said certificates should reference this Contractor Right of Entry License Agreement by agreement date and description and shall be furnished to the Railroad at the following address, or to such other address as the Railroad may hereafter specify:

Rochester & Southern Railroad, Inc.
PO Box 336
Warren, PA 16365-0336
Fax: 814-723-1712

(v) If any policies providing the required coverages are written on a Claims-Made basis, the following shall apply:

(1) The retroactive date shall be prior to the commencement of the work,

(2) The Licensee shall maintain such policies on a continuous basis,

(3) If there is a change in insurer or policies are canceled or not renewed, the Licensee shall purchase an extended reporting period of not less than three (3) years after the contract completion date, and

(4) Licensee shall arrange for adequate time for reporting of any loss under this Agreement.

(c) The Railroad may require the Licensee to purchase additional insurance if the Railroad reasonably determines that the amount of insurance then being maintained by the Licensee is insufficient in light of all relevant factors. If the Licensee is required to purchase additional insurance, the Railroad will notify the Licensee. Failure of the Licensee to comply within thirty (30) days shall be considered a default subject to termination of the Agreement.

(d) Furnishing of insurance by the Licensee shall not limit the Licensee's liability under this Agreement, but shall be additional security therefore.

(e) The above indicated insurance coverages shall be enforceable by any legitimate claimant after the termination or cancellation of this Agreement, or any amendment hereto, whether by expiration of time, by operation of law or otherwise, so long as the basis of the claim against the insurance company occurred during the period of time when the Agreement was in effect and the insurance was in force.

(f) Failure to provide the required insurance coverages or endorsements (including contractual liability endorsement) or adequate reporting time shall be at Licensee's sole risk.

(g) If contractors are utilized, the Licensee agrees to require all such contractors to comply with the insurance requirements of this Exhibit C.

Bill Gentilman

From: Hiss, David <David.Hiss@arcadis-us.com>
Sent: Thursday, October 02, 2014 1:55 PM
To: Bill Gentilman
Subject: RE: Right of entry at 1600 Jay Street, Rochester, NY

Mr. Gentilman,
The chemical oxidants will be mixed off-site, transported to the site and used. Thus, that which is on-site (and on the railroad property) will be the dilute solution.
The intention is to conduct the overall injection event over a one to two week period (one day on the railroad property), during which time multiple deliveries of product will be scheduled. Our objective is to store as little chemical as possible for as little time as possible at the site.
Product not being actively injected into the ground will be staged within tanks in portable secondary containment berms on the 1600 Jay street Property, and will be managed in accordance with the 6 NYCRR Part 595-599 Hazardous Substances (Chemical Bulk Storage) regulations.
A small quantity of sodium thiosulfate, to be used to neutralize the permanganate solution in the event of an emergency, will also be stored on the site.
If you have any further questions, please contact me.
Dave

David Hiss, PE, BCEE | Senior Engineer | david.hiss@arcadis-us.com

ARCADIS US., Inc. | 855 Route 146, Suite 210 | Clifton Park, NY, 12065
T. 518.250.7309 | F. 518.250.7301
www.arcadis-us.com

Professional Affiliate / Malcolm Pirnie NY, Inc.
Professional Engineer / NY

From: Bill Gentilman [mailto:bgentilman@gwrr.com]
Sent: Thursday, October 02, 2014 12:51 PM
To: Hiss, David
Subject: RE: Right of entry at 1600 Jay Street, Rochester, NY

David:

I have been asked if there will be any on-site (railroad property) or nearby off-site storage of the chemical oxidants. Also, will there be any higher strength chemical brought to the area and diluted for use, or will it be mixed to 3% prior to being brought to the site (on or near the property).

Can you advise?

William V. Gentilman
Property Manager
Rochester & Southern Railroad, Inc.
PO Box 336

Warren, PA 16365
814-726-3552, Fax 814-723-1712
bgentilman@gwrr.com

From: Hiss, David [mailto:David.Hiss@arcadis-us.com]
Sent: Monday, September 22, 2014 4:54 PM
To: Bill Gentilman
Cc: (vivek.nattanmai@dec.ny.gov); Flusche, Mark A.
Subject: FW: Right of entry at 1600 Jay Street, Rochester, NY

Mr. Gentilman,
In accordance with our telephone discussion last week, I am resubmitting my earlier electronic request (see below) for a Right of Entry permit at the referenced location. A summary description of the work and figures depicting the location of the work are included in the attachment to this email.
If you have any questions, please contact me.
Thank you.
David Hiss

David Hiss, PE, BCEE | Senior Engineer | david.hiss@arcadis-us.com

ARCADIS US., Inc. | 855 Route 146, Suite 210 | Clifton Park, NY, 12065
T. 518.250.7309 | F. 518.250.7301
www.arcadis-us.com

Professional Affiliate / Malcolm Pirnie NY, Inc.
Professional Engineer / NY

ARCADIS, Imagine the result

From: Hiss, David
Sent: Friday, August 15, 2014 11:43 AM
To: 'Bill Gentilman'
Subject: Right of entry at 1600 Jay Street, Rochester, NY

Mr. Gentilman,

ARCADIS-US/Malcolm Pirnie are the engineers for the contaminated soil removal project which will occur on your property adjacent to the referenced address. National Vacuum has obtained a Right of Entry agreement with you to remove a small amount of soil, backfill the excavation and install a subsurface injection point in the backfill under contract with the New York State Department of Environmental Conservation (NYSDEC).

We have been retained by the NYSDEC to inject the treatment media into the subsurface injection point upon completion of that work . The injection events will be repeated between two and four times during the remedial program, in conjunction with other injections to occur on the adjacent properties. We will be using a tank on a truck to deliver a measured amount of chemical oxidant by hose to the injection point. We will also be monitoring the well network in the vicinity during each injection event. No subsurface or intrusive work is proposed.

At this time, I would like to begin the process for obtaining the Right of Entry agreement and any other approvals necessary for our work. Can you please send me the information, forms, and requirements for this process?

Thank you in advance for your assistance.

David Hiss

In-Situ Chemical Oxidation Injection Program
Abandoned Chemical Sales Facility - NYSDEC Site #828105
1600 Jay Street, Rochester New York

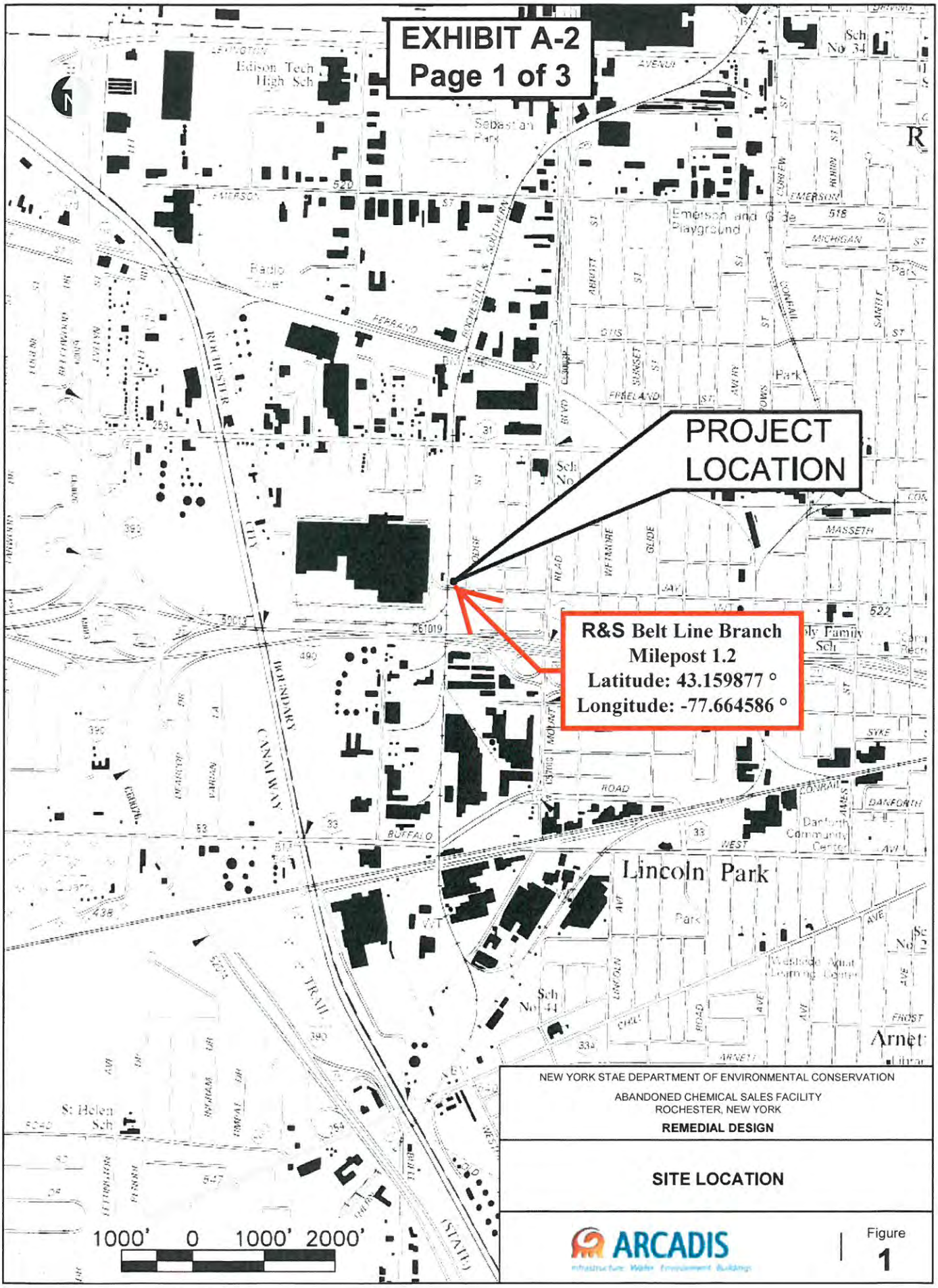
The NYSDEC listed the Abandoned Chemical Sales Facility site (Figure 1) as a Class 2 site in the New York State Registry of Inactive Hazardous Waste Disposal Sites in 2002 following a preliminary site assessment. It is located at 1600 Jay Street in the City of Rochester, NY, which is adjacent to Milepost 1.2 of the R&S Belt Line Branch. The primary contaminants of concern at the site identified during the Remedial Investigation are chlorinated volatile organic compounds (CVOCs), including tetrachloroethene (PCE), trichloroethene (TCE), and 1,1,1-trichloroethane (1,1,1-TCA), and their breakdown products [cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride, 1,1-dichloroethane (1,1-DCA), and chloroethane]. The 2011 record of decision (ROD) detailed the proposed remedy for the site, which includes targeted soil excavation and approximately three pilot in-situ chemical oxidation (ISCO) injection events to remediate residual contamination in soil and reduce the groundwater contaminant concentrations in the bedrock underlying the site. These actions may be followed by enhanced bioremediation. The targeted soil excavation remedial activities were completed in the spring and summer of 2014. The proposed pilot injection activities are scheduled to begin during the fall of 2014.

Four injection wells (MW-16S, MW-16i, MW-17S, and MW-17i) were installed at the site in January 2013 (Figure 2). The primary proposed injection area, near MW-16i and MW-17i, is approximately 9,000 square feet and is not on the railroad property. This area was selected because it contains the highest groundwater CVOC concentrations. In addition, an oxidant will also be injected into injection headers installed in the backfill of the four targeted soil excavation areas. The proposed pilot injection areas are shown on Figure 3. Prior to backfilling the excavation areas during contaminated soil removal and disposal operations, piping was installed with one or two slotted screens lying horizontally in the bottom of each excavation connected to a vertical riser. At each of the soil excavation areas, a minimal volume of oxidant will be injected to reduce the potential for daylighting or short circuiting. The volume of oxidant injected into each excavation area will equal the estimated pore space within the backfill material in a four-foot vertical thickness.

The first pilot injection event will include injection of a total of 8,400 gallons of 3% sodium permanganate into the four on-site injection wells, and a total of 5,850 gallons of 3% sodium permanganate into the injection pipes installed in each of the on-site soil excavation areas. It is estimated that 500-750 gallons will be injected into the EA 4 excavation area, which is immediately west of the site building and on the railroad property. During the injection events, the oxidant will be gravity fed into the soil excavation injection points. The oxidant will disperse in the backfill and along the top of the bedrock, potentially migrating into the bedrock where there are fractures.

Sodium permanganate effectively remediates chlorinated ethenes (PCE, TCE, cis-1,2-DCE, and vinyl chloride) in groundwater. The oxidant to be injected during the second pilot injection event is assumed to be alkaline-activated persulfate. This will be confirmed based upon the analytical results obtained from samples collected after the first pilot injection event.

Prior to mobilization to the site, a site-specific Health and Safety Plan (SSHASP) will be prepared for use during the pilot injection and sampling activities. The SSHASP will address provisions for protecting the health and safety of the public. The safe use and storage of chemical oxidants will be outlined in the SSHASP. Safety data sheets (SDSs) will be obtained for each chemical oxidant and kept onsite throughout the duration of the injection event. Proper and compatible personal protective equipment (PPE), including full chemical-resistant Tyvek suits with hoods, chemical resistant gloves and safety boots will be used during handling of the oxidant solution. During observation of the oxidant injection at the individual wellheads workers shall wear chemical resistant aprons, safety goggles and/or full face shields to protect from splashes or breaks that could occur in the injection lines. Railroad and site health and safety protocols will also be followed.



NEW YORK STAE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ABANDONED CHEMICAL SALES FACILITY
ROCHESTER, NEW YORK

REMEDIAL DESIGN

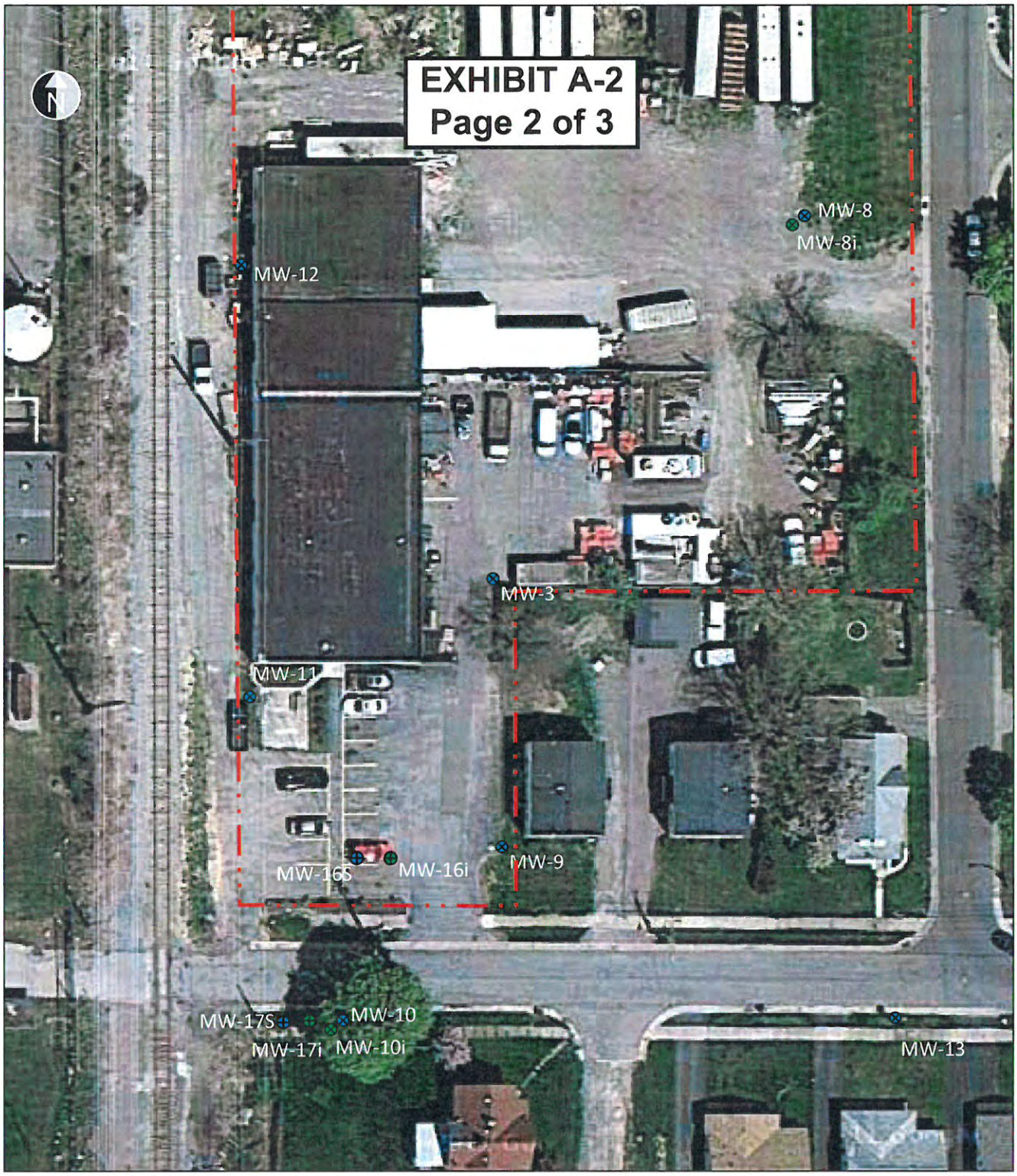
SITE LOCATION

ARCADIS
Infrastructure. Water. Environment. Buildings

Figure
1

G:\PROJECT\00266397\ISCO Design Plan\Figure 1 – Site .pptx

EXHIBIT A-2
Page 2 of 3



APPROXIMATE SITE PROPERTY LINE
EXISTING SHALLOW BEDROCK MONITORING WELL
EXISTING INTERMEDIATE BEDROCK MONITORING WELL
EXISTING SHALLOW BEDROCK INJECTION WELL
EXISTING INTERMEDIATE BEDROCK INJECTION WELL

APPROXIMATE SCALE IN FEET

0 16 32 64

NEW YORK STAE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ABANDONED CHEMICAL SALES FACILITY
ROCHESTER, NEW YORK

REMEDIAL DESIGN

INJECTION AND MONITORING WELLS

ARCADIS
infrastructure water environment buildings

Figure
2

G:\PROJECT\00266397\Monitoring Wells.pptx

Source: GOOGLE EARTH, Downloaded 1/2014

APPROXIMATE SITE PROPERTY LINE

PROPOSED ISCO PILOT INJECTION AREAS

EXISTING SHALLOW BEDROCK MONITORING WELL

EXISTING INTERMEDIATE BEDROCK MONITORING WELL

EXISTING SHALLOW BEDROCK INJECTION WELL

EXISTING INTERMEDIATE BEDROCK INJECTION WELL

APPROXIMATE SCALE IN FEET

0 16 32 64

NEW YORK STAE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ABANDONED CHEMICAL SALES FACILITY
ROCHESTER, NEW YORK

REMEDIAL DESIGN

PROPOSED ISCO TREATMENT AREAS

ARCADIS
Infrastructure Water Environment Buildings

Figure
3

Source: GOOGLE EARTH, Downloaded 1/2014

G:\PROJECT\00266397\Figure 7 - Proposed ISCO Treatment Areas.pptx

Appendix C

Well Construction Logs

ARCADIS
Infrastructure · Water · Environment · Buildings

TEST BORING LOG

BORING No.MW-16i

PROJECT	**Abandoned Chemical Sales**	LOCATION **Rochester, NY**	SHEET **1** OF **2**
CLIENT	**NYSDEC**		PROJECT No. **00255397.0000**
DRILLING CONTRACTOR	**Northnagle Drilling**		MEAS. PT. ELEV.
PURPOSE	**Injection**		GROUND ELEV.
WELL MATERIAL	**steel**		DATUM
DRILLING METHOD(S)	**HSA, Rotary and Coring**	SAMPLE / CORE / CASING	DATE STARTED **1/7/13**
DRILL RIG TYPE		TYPE	DATE FINISHED **1/7/13**
GROUND WATER DEPTH	'	DIA. "	DRILLER
MEASURING POINT		WEIGHT #	PIRNIE STAFF **D. Symonds**
DATE OF MEASUREMENT		FALL "	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. / DEPTH	WELL Constr.	REMARKS
					ASPHALT and gravel			Flushmount
					SILTY SAND (medium brown) overburden and gravel (trace 0.5" -2" diameter), moist	0.5		
2								10" Hollow stem auger, 4" steel casing
4					BEDROCK (medium gray dolostone)	4.0		4.0
6								
8								
10								6.25 Air rotary drill, 4" steel casing
12								
14								
16								
18								

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TEST BORING LOG

BORING No.MW-16i

PROJECT **Abandoned Chemical Sales** | LOCATION **Rochester, NY** | SHEET **2** OF **2**

CLIENT **NYSDEC** | PROJECT No. **00255397.0000**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. / DEPTH	WELL Constr.	REMARKS
								21.0
						21.0		
22								
24								HQ core, open bedrock hole
26					Strong odor, wet			
28					1 small fracture			
30			32.1		1 small fracture			
	10							
32								
34					1 small fracture			
36			500		Several small fractures			
					5 small fractures from 35.5' to 37.5'			
38					1 small fracture			
			380		3 small fractures			
40			999		1 small fracture			
								41.5
						41.5		End of boring

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TEST BORING LOG

BORING No.MW-16s

PROJECT	**Abandoned Chemical Sales**	LOCATION **Rochester, NY**	SHEET **1** OF **2**
CLIENT	**NYSDEC**		PROJECT No. **00255397.0000**
DRILLING CONTRACTOR	**Northnagle Drilling**		MEAS. PT. ELEV.
PURPOSE	**Injection**		GROUND ELEV.
WELL MATERIAL	**steel**		DATUM
DRILLING METHOD(S)	**HSA, Rotary and Coring**	SAMPLE / CORE / CASING	DATE STARTED **1/7/13**
DRILL RIG TYPE	TYPE		DATE FINISHED **1/7/13**
GROUND WATER DEPTH	' DIA. "		DRILLER
MEASURING POINT	WEIGHT #		PIRNIE STAFF **D. Symonds**
DATE OF MEASUREMENT	FALL "		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION (KEY - Color, Major, Minor Moisture, Etc.)	ELEV. DEPTH	WELL Constr.	REMARKS
					ASPHALT and gravel			Flushmount
					SILTY SAND (medium brown) , overburden and gravel (trace 0.5"-2" diameter), moist to wet	0.5		
2								10" Hollow stem auger, 4" steel casing
4					BEDROCK (medium gray dolostone)	4.0		4.0
6								6.25" Air rotary drill, 4" steel casing
8								9.0
						9.0		
10					Small fractures from 9' to 12'			HQ core, open bedrock hole
12			3.3		Vertical fracture (~4")			
14					Vertical fracture (~7")			
					6 small fractures			
16			1.2		6 fractures from 15' to 16.5' Vertical fracture (~6")			
	15							
18					15 small fractures from 17' to 21'			

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TEST BORING LOG

BORING No.MW-16s

PROJECT **Abandoned Chemical Sales** | LOCATION **Rochester, NY** | SHEET **2** OF **2**

CLIENT **NYSDEC** | PROJECT No. **00255397.0000**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22			3.3		7 medium fractures from 21' to 25'			
24			1.2			25.0		25.0 End of boring

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TEST BORING LOG

BORING No.MW-17i

PROJECT	**Abandoned Chemical Sales**	LOCATION **Rochester, NY**	SHEET **1** OF **2**
CLIENT	**NYSDEC**		PROJECT No. **00255397.0000**
DRILLING CONTRACTOR	**Northnagle Drilling**		MEAS. PT. ELEV.
PURPOSE	**Injection**		GROUND ELEV.
WELL MATERIAL	**steel**		DATUM
DRILLING METHOD(S)	**HSA, Rotary and Coring**	SAMPLE / CORE / CASING	DATE STARTED **1/9/13**
DRILL RIG TYPE		TYPE	DATE FINISHED **1/9/13**
GROUND WATER DEPTH	'	DIA. "	DRILLER
MEASURING POINT		WEIGHT #	PIRNIE STAFF **D. Symonds**
DATE OF MEASUREMENT		FALL "	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. / DEPTH	WELL Constr.	REMARKS
2					SILTY SAND (medium brown), overburden and trace gravel (~2"diameter)			Flushmount 10" Hollow stem auger, 4" steel casing
4								
						5.0		
6					BEDROCK (weathered dolostone)	5.0		
8								6.25" Air rotary drill, 4" steel casing
10								
12								
14								
16								
18								

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TEST BORING LOG

BORING No.MW-17i

PROJECT **Abandoned Chemical Sales** | LOCATION **Rochester, NY** | SHEET **2** OF **2**

CLIENT **NYSDEC** | PROJECT No. **00255397.0000**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. / DEPTH	WELL Constr.	REMARKS
22								
24								
26								
28								
30								
						31.0		31.0
32			30		1 fracture at 31.5' 1 fracture at 32'			
					3 fractures at 33'			
34			33		1 large fracture (~2") at 34'			
					5 fractures			HQ core, open bedrock hole
36								
					3 fractures			
					1 fracture at 37.5'			
38			45					
					5 fractures 38' to 40'			
40	13		50					
					Several fractures			
					Horizontal and vertical fractures			
42			55		2 close fractures at 42.5'			
44								
					7 fractures from 43' to 45'			
					Vertical fracture (~3")			45.0
			60			45.0		End of boring

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TEST BORING LOG

BORING No.MW-17s

PROJECT	**Abandoned Chemical Sales**	LOCATION **Rochester, NY**	SHEET **1** OF **2**
CLIENT	**NYSDEC**		PROJECT No. **00255397.0000**
DRILLING CONTRACTOR	**Northnagle Drilling**		MEAS. PT. ELEV.
PURPOSE	**Injection**		GROUND ELEV.
WELL MATERIAL	**steel**		DATUM
DRILLING METHOD(S)	**HSA, Rotary and Coring**	SAMPLE / CORE / CASING	DATE STARTED **1/9/13**
DRILL RIG TYPE		TYPE	DATE FINISHED **1/9/13**
GROUND WATER DEPTH	'	DIA. "	DRILLER
MEASURING POINT		WEIGHT #	PIRNIE STAFF **D. Symonds**
DATE OF MEASUREMENT		FALL "	

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. / DEPTH	WELL Constr.	REMARKS
					SILTY SAND (medium brown), overburden, and trace gravel (~2" diameter)			Flushmount
2								10" Hollow stem auger, 4" steel casing
4								
						5.0		
					BEDROCK (weathered dolostone)	5.0		
6								
8								6.25 Air rotary drill, 4" steel casing
10								
12								
14								
						15.0		
			3.3		5 fractures from 15' to 16.8'			
16								
			1.2		1 vertical fracture from 16.9' to 17.4'			
18								
			3.2		8 fractures from 17.4' to 18.5' 1 vertical fracture (~3")			HQ core, open bedrock hole

ARCADIS Infrastructure · Water · Environment · Buildings	TEST BORING LOG	BORING No.MW-17s
PROJECT **Abandoned Chemical Sales**	LOCATION **Rochester, NY**	SHEET **2** OF **2**
CLIENT **NYSDEC**		PROJECT No. **00255397.0000**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
	10		1.2		12 fractures from 19' to 23'			
22								
24					9 fractures from 23' to 25'			
						25.0		End of boring

Appendix D

Groundwater Purge Logs

ARCADIS G&M

po# - 0266397

Low Flow Groundwater Sampling Form

Page 1 of 1

Project/No. ACSF / ~~0111604.4~~ Well MW-03 Date 4/17/14

Total depth (ft bmp) 19.60' Screened Interval (ft bmp) _____ Casing Diameter (inches) 2"

Measuring Point Description TOC Static Water Level (ft bmp) 7.10'

Pump Intake (ft bmp) ~18' Sampling Time: Begin 1530 End 1600

Weather 60° sunny Pump type: Geopump

Sampled by : DAS Water Quality Meter: YSI

Time	Pumping Rate (ml/min)	DTW (ft bmp)	pH (s.u.) +/- 0.1	TEMP. (C) 3%	Cond. (umhos or ms/cm) 3%	ORP (mV) ~~+/-~~ -10	DO (mg/L) 10%	TURB (NTU) 10%	Notes
1530	~260	7.10	5.70	9.82	1.347	-15.9	2.10	900	
1540	~260	7.40	5.72	10.18	1.347	-16.9	1.95	800	
1550	~260	7.90	6.00	9.99	1.352	-17.8	1.98	890	
1600	-collect sample (full list)								
	Abreviated Sampling method (Mark flasdel approval)								

Color: Brown / turbid

Odor: None

Appearance: _____

Analyses: full list

Pump start: 1530

Pump stop: 1610

Gallons removed: ~4

Dup/MS/MSD _____

ARCADIS G&M

PO# 0266397

Low Flow Groundwater Sampling Form

Page 1 of 1

Project/No. ACSF/~~04[illegible]~~ Well MW-09 Date 4/18/14

Total depth (ft bmp) 19.50' Screened Interval (ft bmp) _____ Casing Diameter (inches) 2"

Measuring Point Description TOC Static Water Level (ft bmp) 12.51

Pump Intake (ft bmp) ~18.5' Sampling Time: Begin 0800 End 0845

Weather 50° / breezy Pump type: Geopump

Sampled by : DAS Water Quality Meter: YSI

Time	Pumping Rate (ml/min)	DTW (ft bmp)	pH (s.u.) +/- 0.1	TEMP. (C) 3%	Cond. (umhos or ms/cm) 3%	ORP (mV) +/-10	DO (mg/L) 10%	TURB (NTU) 10%	Notes
0800	~250	12.51	6.35	9.45	1.141	-27.6	3.60	218	
0810	↓		6.35	9.46	1.142	-35.6	3.34	110	
0820			6.36	9.47	1.142	-36.9	3.39	0	
0830			6.39	9.48	1.193	-46.1	3.41	0	
0840		14.21	6.36	9.48	1.143	-46.5	3.51	0	
0845 - collect Samples - full list.									

Color: clear

Odor: slight odor

Appearance: clear

Analyses: full list.

Pump start: 0800

Pump stop: 0845

Gallons removed: ~4.5

Dup/MS/MSD _____

ARCADIS G&M

PO# 0266397

Low Flow Groundwater Sampling Form

Page 1 of 1

Project/No. ACSF ~~0114084~~ Well MW-10i Date 4/17/14

Total depth (ft bmp) 40.50' Screened Interval (ft bmp) Casing Diameter (inches) 2"

Measuring Point Description TOC Static Water Level (ft bmp) 18.22'

Pump Intake (ft bmp) ~30' Sampling Time: Begin 1200 End

Weather 45° Sunny Pump type: Geopump

Sampled by: DAS Water Quality Meter: YSI

Time	Pumping Rate (ml/min)	DTW (ft bmp)	pH (s.u.) +/- 0.1	TEMP. (C) 3%	Cond. (umhos or ms/cm) 3%	ORP (mV) +/-10	DO (mg/L) 10%	TURB (NTU) 10%	Notes Vol
1200	~350	18.22	7.38	12.12	2.075	-166.8	25.84↓	899	0
1210	~350	18.60	7.39	12.11	2.083	-168.8	24.94↓	800	
1220	~350	18.62	7.38	12.13	2.091	-171.5	24.15↓	220	
1240	~260	18.76	7.29	12.05	2.072	-191.0	17.48	101	~2.5
1300	~260	18.76	7.31	12.21	2.075	-199.1	15.41	42	
1315	~260	18.70	7.29	12.14	2.072	-202.4	14.99	36	
1325	~260	18.70	7.30	12.15	2.070	-200.4	14.89	32	
1335	~260	18.70	7.29	12.20	2.067	-201.9	14.80	32	~5
1340	-collect	Samples	(full list)						

Color: Clear

Odor: strong odor

Appearance: cloudy to start → clear

Analyses: Metals, Sulfate, Sulfide, dis Gases TOC, Cl, Alk

Pump start: 1200

Pump stop: 1345

Gallons removed: ~5

Dup/MS/MSD

ARCADIS G&M

pa# 0266397

Low Flow Groundwater Sampling Form

Page 1 of 1

Project/No. AcSF [redacted] Well MW-10s Date 4/17/14

Total depth (ft bmp) 27.20' Screened Interval (ft bmp) Casing Diameter (inches) 2"

Measuring Point Description TOC Static Water Level (ft bmp) 17.96'

Pump Intake (ft bmp) ~26' Sampling Time: Begin 1230 End

Weather 40-50° Sunny Pump type: Grapump

Sampled by: DAS Water Quality Meter: YSI

Time	Pumping Rate (ml/min)	DTW (ft bmp)	pH (s.u.) +/- 0.1	TEMP. (C) 3%	Cond. (umhos or ms/cm) 3%	ORP (mV) +/-10	DO (mg/L) 10%	TURB (NTU) 10%	Notes Vol
1230	~260	17.96	5.07	11.19	1.334	-79.4	4.46	890	e
1245	~260	18.82	5.08	10.74	1.332	-78.3	1.11	250	
1300	~260	18.85	5.16	10.69	1.292	-84.9	0.58	220	
1315	~260	18.90	6.15	11.00	1.293	-49.1	0.50	~250	
1330	~260	18.90	6.15	11.00	1.263	-124.3	0.29	289	~2
1340	~260	18.70	6.08	10.92	1.266	-173.9	0.28	120	
1400	~260	19.15	6.15	10.99	1.239	-167.7	0.31	60	
1430	~260	19.20	6.14	10.98	1.251	-178.9	0.30	50	~4
1445 - collect Samples (full list)									

Color: cloudy → clear

Odor: strong odor

Appearance:

Analyses: full list

Pump start: 1230

Pump stop: 1445

Gallons removed: ~4

Dup/MS/MSD

G:\TECHNICL\FIELD LOGS\Low Flow Samling Form.XLS- Sheet1

ARCADIS

Water Sampling Log

#0266397

Project ACSF USX Salamanca Project No. [redacted]

Page 1 of 1

Site Location Salamanca, New York GATES Date 4/18/14

Site/Well No. MW-16i Replicate No.

Weather 60° sunny Sampling Time: Begin 0900 End 0935

Evacuation Data

Measuring Point	Top of PVC
Sounded Well Depth (ft bmp)	40.05
Depth to Water (ft bmp)	16.82
Depth to Packer (ft bmp)	—
Water Column in Well (ft)	23.68
Casing Diameter	2"
Gallons in Well	3.78g
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	—
Packer Pressure (psi)	—
Pumping Rate (gpm)	—
Evacuation Method	Geopump ~~Disposable Bailer~~
Sampling Method	Geopump ~~Disposable Bailer~~
Purge Time	Begin 0900 End 0935

Field Parameters

Color Blackish particulate / organics

Odor Sulfur.

Appearance

	I	1V	2V	3V	4V	5V
pH (s.u.)	6.78	6.79	6.80	6.80		
Conductivity (mS/cm)	1.385	1.384	1.391	1.399		
Conductivity (µmhos/cm)						
Temperature (°C)	9.45	9.91	9.92	9.98		
DO (mg/L)	1.47	1.49	1.57	1.23		
Turbidity (NTU)	800	770	890	210		
Time	0900	0910	0920	0930		
DTW (ft bmp)	16.82	16.51	16.51	16.57		
ORP	-123.1	135.1	170.0	-176.5		

Remarks: Collect full 1137.

Constituents Sampled: See COC Sampling Personnel: ~~KBI~~ DAS

Well Casing Volumes

Gal./Ft.				
	$1^{1/4}$" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	$1^{1/2}$" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	below measuring point	mS/cm	Milisiemens per centimeter	VOC	Volatile Organic Compounds
°C	Degrees Celsius	s.u.	Standard units	umhos/cm	Micromhos per centimeter
ft	feet	NTU	Nephelometric Turbidity Units		
gpm	Gallons per minute	N/A	Not Applicable		
mg/L	Miligrams per liter	COC	Chain of Custody		

GROUNDWATER SAMPLING LOG

Site ACSF — **Rochester, NY** — **Event:** Post Injection Testing (April 2015)

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-3
Client / Job Number:	00266397.0000	**Date:**	2015-04-14
Weather:	Mostly Sunny, Windy 50s°F	**Time In:**	0750 **Time Out:** 0920

Well Information

Depth to Water:	7.84	(feet TIC)
Total Depth:	19.78	(feet TIC)
Length of Water Column:	11.94	(feet)
Volume of Water in Well:	1.95	(gal)
Screen Interval:		(feet)
Depth to pump Intake:	18.0	(feet TIC)

Well Type:	(Flushmount)	Stick-Up	
Well Material:	Stainless Steel	(PVC)	
Well Locked:	Yes	(No)	
Measuring Point Marked:	(Yes)	No	
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	Bailer	(Peristaltic)	Grundfos	(Other: PDB)	VOC Only
Duration of Pumping:	90 (min)	0755 - 0915			
Average Pumping Rate:	200 (ml/min)	Water-Quality Meter Type:	YSI/Lamotte 2020		
Total Volume Removed:	4.0 (gal)	Did well go dry:	Yes	(No)	

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
	0810	0815	0820	0825	0830	0835	0840	0845	0850	0855	0900	0905	
Volume Purged (gal)	1.0		1.5		2.0		2.5		3.0		3.5		
Rate (mL/min)	200	200	200	200	200	200	200	200	200	200	200	200	
Depth to Water (ft.)	8.67	8.71	8.74	8.77	8.78	8.80	8.82	8.83	8.84	8.85	8.87	8.89	
pH	7.16	7.09	7.05	7.03	7.02	7.01	7.01	7.01	7.01	7.01	7.00	7.00	
Temp. (C)	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.01	7.2	7.3	7.2	7.3	
Conductivity (mS/cm)	1.20	1.34	1.51	1.58	1.66	1.75	1.79	1.81	1.85	1.89	1.90	1.91	
Dissolved Oxygen (mg/l)	1.97	1.52	1.20	1.17	3.25	1.76	1.00	0.82	0.40	0.36	0.28	0.26	
ORP (mV)	11.6	-10.1	-39.4	-44.0	-64.1	-76.8	-72.9	-82.6	-85.9	-89.0	-93.2	-96.3	
Turbidity (NTU)	38.1	29.9	25.7	23.0	17.2	14.8	11.8	10.6	8.24	6.94	6.49	6.89	
Notes:												Began Sampling	

Problems / Observations

Initial Purge: Initial purge was mostly clear with black flecks, slight odor present.

Final Purge: Final purge was clear with no odor.

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID: MW-3		Sample Time: 0905

GROUNDWATER SAMPLING LOG

Site ACSF | **Rochester, NY** | **Event:** Post Injection Testing (April 2015)

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-9
Client / Job Number:	00266397.0000	**Date:**	2015-04-13
Weather:	Sunny Windy 70s	**Time In:** 1530	**Time Out:** 1650

Well Information

Depth to Water:	12.58	(feet TIC)
Total Depth:	19.68	(feet TIC)
Length of Water Column:	7.10	(feet)
Volume of Water in Well:	1.16	(gal)
Screen Interval:		(feet)
Depth to pump Intake:	18.0'	(feet TIC)

Well Type:	(Flushmount)	Stick-Up	
Well Material:	Stainless Steel	(PVC)	
Well Locked:	Yes	(No)	
Measuring Point Marked:	(Yes)	No	
Well Diameter:	1"	(2")	Other:

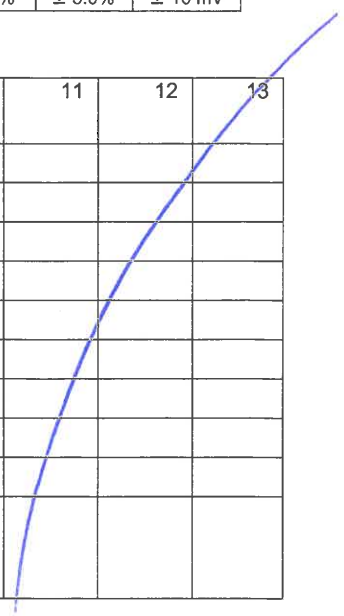
Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	Bailer	(Peristaltic)	Grundfos	(Other: PDB)	VOC Only
Duration of Pumping:	70 (min)	1535 - 1645			
Average Pumping Rate:	200 (ml/min)	Water-Quality Meter Type:	YSI/Lamotte 2020		
Total Volume Removed:	3.5 (gal)	Did well go dry:	Yes	No	

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
	1550	1555	1600	1605	1610	1615	1620	1625	1630	1635			
Volume Purged (gal)	0.75			1.5		2.0		2.5		3.0			
Rate (mL/min)	200mL	200	200	200	200	200	200	200	200	200			
Depth to Water (ft.)	14.61	15.05	15.72	16.10	16.29	16.48	16.65	16.74	16.91	17.08			
pH	7.06	7.06	7.07	7.07	7.04	7.04	6.99	6.97	6.96	6.94			
Temp. (C)	11.1	11.2	11.3	11.2	11.3	11.4	11.4	11.2	11.2	11.3			
Conductivity (mS/cm)	2.21	2.22	2.24	2.25	2.26	2.27	2.29	2.30	2.31	2.31			
Dissolved Oxygen (mg/l)	2.60	2.62	2.40	3.13	2.21	2.50	2.26	2.20	2.16	2.20			
ORP (mV)	-63.4	-71.6	-82.4	-94.3	-95.2	-77.9	-74.0	-78.1	-79.4	-81.1			
Turbidity (NTU)	4.47	5.12	7.61	8.38	5.40	2.46	6.45	6.02	6.57	6.40			
Notes:										Begin Sampling			



Problems / Observations

Initial Purge: Initial purge was mostly clear with small amounts of large flocculant,

Final Purge:

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID: MW-9		Sample Time: 1635

GROUNDWATER SAMPLING LOG

Site ACSF — **Rochester, NY** — **Event:** Post Injection Testing (April 2015)

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-10
Client / Job Number:	00266397.0000	**Date:**	2015-04-13
Weather:	Partly Sunny	**Time In:**	1020 **Time Out:** 1150

Well Information

Depth to Water:	18.65	(feet TIC)
Total Depth:	45.68	(feet TIC)
Length of Water Column:	26.99	(feet)
Volume of Water in Well:	17.6	(gal)
Screen Interval:		(feet)
Depth to pump Intake:	30.0'	(feet TIC)

Well Type:	(Flushmount)	Stick-Up	
Well Material:	Stainless Steel	PVC	
Well Locked:	Yes	(No)	
Measuring Point Marked:	(Yes)	No	
Well Diameter:	1"	2"	Other: 4"

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	Bailer	(Peristaltic)	Grundfos	(Other: PDB)	VOC Only
Duration of Pumping:	85 (min)	1020-1145			
Average Pumping Rate:	200 (ml/min)	Water-Quality Meter Type:	YSI/Lamotte 2020		
Total Volume Removed:	2.75 (gal)	Did well go dry:	Yes	(No)	

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
	1040	1045	1050	1055	1100	1105	1110	1115	1120	1125	1130	1135	
Volume Purged (gal)	0.5			1.0		1.5			2.0			2.5	
Rate (mL/min)	200	200	200	200	200	200	200	200	200	200	200	200	
Depth to Water (ft.)	19.02	19.05	19.08	19.10	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11	
pH	8.82	8.34	8.20	8.13	8.10	8.06	8.04	8.03	8.02	8.03	8.04	8.03	
Temp. (C)	11.6	11.4	11.2	11.1	11.3	11.3	11.1	11.3	11.4	11.6	11.7	11.9	
Conductivity (mS/cm)	6.99	7.09	7.52	7.82	7.93	8.05	8.04	7.96	7.85	7.71	7.60	7.53	
Dissolved Oxygen (mg/l)	2.29	0.44	0.31	0.28	0.24	0.16	0.15	0.12	0.10	0.09	0.08	0.07	
ORP (mV)	56.1	117.4	140.7	155.6	165.8	182.4	189.1	194.8	200.8	205.0	208.2	209.1	
Turbidity (NTU)	35.1	37.4	28.0	24.1	22.2	15.1	15.0	13.1	13.7	12.4	10.8	9.91	
Notes:												Begin Sampling	

Problems / Observations

Initial Purge: Odorless but contains brown/tan flocculents.

Final Purge: Odorless, contains some tan/brown flocculents.

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID: MW-10		Sample Time: 1135

GROUNDWATER SAMPLING LOG

Site ACSF — **Rochester, NY** — **Event:** Post Injection Testing (April 2015)

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-10I
Client / Job Number:	00266397.0000	**Date:**	2015-04-13
Weather:	Partly Sunny	**Time In:**	1200 **Time Out:** 1330

Well Information

Depth to Water:	18.20	(feet TIC)
Total Depth:	27.32	(feet TIC)
Length of Water Column:	9.12	(feet)
Volume of Water in Well:	1.49	(gal)
Screen Interval:		(feet)
Depth to pump Intake:	24.0'	(feet TIC)

Well Type:	(Flushmount)	Stick-Up	
Well Material:	Stainless Steel	(PVC)	
Well Locked:	Yes	(No)	
Measuring Point Marked:	(Yes)	No	
Well Diameter:	1"	(2")	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	Bailer	(Peristaltic)	Grundfos	(Other: PDB)	VOC Only
Duration of Pumping:	~~125~~ 80 (min)	1205 - 1325			
Average Pumping Rate:	150 (ml/min)	Water-Quality Meter Type:	YSI/Lamotte 2020		
Total Volume Removed:	3.0 (gal)	Did well go dry:	Yes	(No)	

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
	1215	1220	1225	1230	1235	1240	1245	1250	1255	1300	1305		
Volume Purged (gal)	0.75		1.0				2.0			2.5			
Rate (mL/min)	150	150	150	150	150	150	150	150	150	150	150		
Depth to Water (ft.)	18.92	18.95	18.97	19.00	19.00	19.00	19.01	19.01	19.01	19.01	19.01		
pH	7.02	6.87	6.88	6.87	6.88	6.88	6.89	6.88	6.89	6.89	6.90		
Temp. (C)	11.4	11.2	11.2	11.1	11.1	11.1	11.2	11.2	11.1	11.2	11.3		
Conductivity (mS/cm)	1.91	1.84	1.81	1.79	1.79	1.78	1.78	1.79	1.80	1.78	1.79		
Dissolved Oxygen (mg/l)	1.21	1.84	1.02	0.24	0.19	0.18	0.15	0.14	0.13	0.13	0.13		
ORP (mV)	-191.8	-169.1	-176.1	-181.9	-192.3	-201.6	-205.6	-204.2	-217.4	-222.8	-226.7		
Turbidity (NTU)	1.60	3.08	2.89	2.61	2.34	1.43	2.09	2.02	1.79	1.53	1.46		
Notes:											Begin Sampling		

Problems / Observations

Initial Purge: ~~Odorless~~ Initial purge had a strong odor, but was clear.

Final Purge: Final purge was clear, but had a strong odor.

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID: MW-10I		Sample Time: 1305

GROUNDWATER SAMPLING LOG

Site ACSF — **Rochester, NY** — **Event:** Post Injection Testing (April 2015)

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-16I
Client / Job Number:	00266397.0000	**Date:**	2015-04-13
Weather:	Partly Sunny	**Time In:**	1340 **Time Out:** 1515

Well Information

Depth to Water:	18.02	(feet TIC)
Total Depth:	40.64	(feet TIC)
Length of Water Column:	22.62	(feet)
Volume of Water in Well:	14.77	(gal)
Screen Interval:		(feet)
Depth to pump Intake:	36.0	(feet TIC)

Well Type:	(Flushmount)	Stick-Up	
Well Material:	(Stainless Steel)	PVC	
Well Locked:	Yes	(No)	
Measuring Point Marked:	(Yes)	No	
Well Diameter:	1"	2"	(Other: 4")

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	Bailer	(Peristaltic)	Grundfos	(Other: PDB)	VOC Only
Duration of Pumping:	85 (min)	1345 - 1510			
Average Pumping Rate:	175 (ml/min)	Water-Quality Meter Type:	YSI/Lamotte 2020		
Total Volume Removed:	4.0 (gal)	Did well go dry:	Yes	(No)	

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
	1410	1415	1420	1425	1430	1435	1440	1445	1450	1455	~~1500~~		
Volume Purged (gal)	1.0				2.0				3.0				
Rate (mL/min)	175	175	175	175	175	175	175	175	175	175			
Depth to Water (ft.)	18.95	19.16	19.26	19.48	19.62	19.74	19.88	19.95	20.08	20.16			
pH	8.32	8.37	8.37	8.31	8.32	8.31	8.30	8.29	8.27	8.29			
Temp. (C)	13.7	13.8	13.8	13.7	13.6	13.6	13.5	13.4	13.4	14.6			
Conductivity (mS/cm)	2.28	2.27	2.29	2.28	2.27	2.27	2.26	2.26	2.25	2.23			
Dissolved Oxygen (mg/l)	0.22	0.20	0.21	0.19	0.01	0.15	0.16	0.16	0.15	0.13			
ORP (mV)	-60.4	-71.8	-73.8	-78.9	-91.4	-96.9	-221.3	-226.0	-228.1	-231.2			
Turbidity (NTU)	36.5	36.2	35.5	36.1	32.5	30.6	29.0	27.8	27.3	25.8			
Notes:										Began Sampling			

Problems / Observations

Initial Purge: Intial purge was turbid and had a slight odor.

Final Purge: Final purge was slightly turbid and had a slight odor.

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID: MW-16I		Sample Time: ~~1455~~

GROUNDWATER SAMPLING LOG

Site ACSF — **Rochester, NY** — ***Event:*** *Post Injection Testing (April 2015)*

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-165
Client / Job Number:	00266397.0000	**Date:**	4.13.14
Weather:		**Time In:**	1340 **Time Out:**

Field Parameters

Well Information

Depth to Water:	(feet TIC)
Total Depth:	(feet TIC)
Length of Water Column:	(feet)
Volume of Water in Well:	(gal)
Screen Interval:	(feet)
Depth to pump Intake:	(feet TIC)

Well Type:	Flushmount	Stick-Up	
Well Material:	Stainless Steel	PVC	
Well Locked:	Yes	No	
Measuring Point Marked:	Yes	No	
Well Diameter:	1"	2"	Other:

Purging Information

Purging Method:	Bailer	Peristaltic	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	Polyethylene	Teflon	Other:	
Sampling Method:	Bailer	Peristaltic	Grundfos	Other: PDB	VOC Only
Duration of Pumping:	(min)				
Average Pumping Rate:	(ml/min)	Water-Quality Meter Type:	YSI/Lamotte 2020		
Total Volume Removed:	(gal)	Did well go dry:	Yes	No	

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
Volume Purged (gal)	-												
Rate (mL/min)	-												
Depth to Water (ft.)	-												
pH	7.13												
Temp. (C)	11.6												
Conductivity (mS/cm)	5.04												
Dissolved Oxygen (mg/l)	3.88												
ORP (mV)	-56.0												
Turbidity (NTU)	28.3												
Notes:													

Initial Purge:

Problems / Observations

Brown color, brown flocculants

Final Purge:

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID:		Sample Time:

GROUNDWATER SAMPLING LOG

Site ACSF — **Rochester, NY** — **Event:** Post Injection Testing (April 2015)

Sampling Personnel:	Quinn Carnhan/Nicholas (Klaus) Beyrle	**Well ID:**	MW-175
Client / Job Number:	00266397.0000	**Date:**	4.14.15
Weather:		**Time In:**	1005 **Time Out:**

Field Parameters

Well Information

Depth to Water:	(feet TIC)
Total Depth:	(feet TIC)
Length of Water Column:	(feet)
Volume of Water in Well:	(gal)
Screen Interval:	(feet)
Depth to pump intake:	(feet TIC)

Well Type:	Flushmount	Stick-Up	
Well Material:	Stainless Steel	PVC	
Well Locked:	Yes	No	
Measuring Point Marked:	Yes	No	
Well Diameter:	1"	2"	Other:

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:	
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:	
Sampling Method:	Bailer	(Peristaltic)	Grundfos	(Other: PDB)	VOC Only
Duration of Pumping:	(min)				
Average Pumping Rate:	(ml/min)	Water-Quality Meter Type:		YSI/Lamotte 2020	
Total Volume Removed:	(gal)	Did well go dry:	Yes	No	

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
Volume Purged (gal)	—												
Rate (mL/min)	—												
Depth to Water (ft.)	—												
pH	8.01												
Temp. (C)	11.5												
Conductivity (mS/cm)	110												
Dissolved Oxygen (mg/l)	8.73												
ORP (mV)	20.0												
Turbidity (NTU)	13.7												
Notes:													

Initial Purge:

Problems / Observations

Clear turbid, Light brown particles floating

Final Purge:

Sampling Information

Analyses	#	Laboratory
VOC		Buffalo-Test America
Other List		Buffalo-Test America
Sample ID:		Sample Time:

Appendix E

Analytical Laboratory Reports

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

April 24, 2014

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

Project Location: Gates NY
Client Job Number:
Project Number: 00266397.0000
Laboratory Work Order Number: 14D0636

Enclosed are results of analyses for samples received by the laboratory on April 17, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager

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: 4/24/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00266397.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0636

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

PROJECT LOCATION: Gates NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-08i	14D0636-01	Ground Water		SW-846 8260C	
MW-01	14D0636-02	Ground Water		SW-846 8260C	
MW-07	14D0636-03	Ground Water		SW-846 8260C	
MW-06i	14D0636-04	Ground Water		SW-846 8260C	
MW-06s	14D0636-05	Ground Water		SW-846 8260C	
MW-05	14D0636-06	Ground Water		SW-846 8260C	
MW-02	14D0636-07	Ground Water		SW-846 8260C	
MW-04	14D0636-08	Ground Water		SW-846 8260C	
MW-12	14D0636-09	Ground Water		SW-846 8260C	
Trip Blank	14D0636-10	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:

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

Analyte & Samples(s) Qualified:

1,4-Dioxane, Bromoform

B094168-BS1

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possiblity of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Bromomethane, Vinyl Chloride

14D0636-07[MW-02], B094168-MS1, B094168-MSD1

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, Acetone

B094168-MSD1

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

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, Chloromethane, Naphthalene

14D0636-01[MW-08i], 14D0636-02[MW-01], 14D0636-03[MW-07], 14D0636-04[MW-06i], 14D0636-05[MW-06s], 14D0636-06[MW-05], 14D0636-07[MW-02], 14D0636-08[MW-04], 14D0636-09[MW-12], 14D0636-10[Trip Blank], B094168-BLK1, B094168-BS1, B094168-BSD1, B094168-MS1, B094168-MSD1, S005828-CCV1

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Vinyl Chloride

14D0636-07[MW-02], B094168-MS1, B094168-MSD1

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

14D0636-01[MW-08i], 14D0636-07[MW-02], 14D0636-09[MW-12]

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

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), Naphthalene

14D0636-01[MW-08i], 14D0636-02[MW-01], 14D0636-03[MW-07], 14D0636-04[MW-06i], 14D0636-05[MW-06s], 14D0636-06[MW-05], 14D0636-07[MW-02], 14D0636-08[MW-04], 14D0636-09[MW-12], 14D0636-10[Trip Blank], B094168-BLK1, B094168-BS1, B094168-BSD1, B094168-MS1, B094168-MSD1, S005828-CCV1

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

Analyte & Samples(s) Qualified:

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

14D0636-01[MW-08i], 14D0636-02[MW-01], 14D0636-03[MW-07], 14D0636-04[MW-06i], 14D0636-05[MW-06s], 14D0636-06[MW-05], 14D0636-07[MW-02], 14D0636-08[MW-04], 14D0636-09[MW-12], 14D0636-10[Trip Blank], B094168-BLK1, B094168-BS1, B094168-BSD1, B094168-MS1, B094168-MSD1, S005828-CCV1

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

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:

Bromoform, Chloromethane

B094168-BS1, B094168-BSD1, B094168-MS1, B094168-MSD1, S005828-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.

Michael A. Erickson
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-08i

Sample ID: 14D0636-01 | Start Date/Time: 3/27/2014 12:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 12:30:00PM

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	230	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Acrylonitrile	ND	250	29	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	4.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Benzene	ND	50	4.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Bromobenzene	ND	50	2.2	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Bromochloromethane	ND	50	11	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Bromodichloromethane	ND	25	4.4	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Bromoform	ND	50	10	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Bromomethane	ND	100	47	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
2-Butanone (MEK)	ND	1000	120	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
tert-Butyl Alcohol (TBA)	ND	1000	110	µg/L	50	V-16	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
n-Butylbenzene	ND	50	2.7	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
sec-Butylbenzene	ND	50	4.2	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
tert-Butylbenzene	ND	50	4.8	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	3.8	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Carbon Disulfide	ND	200	51	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Carbon Tetrachloride	ND	250	5.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Chlorobenzene	ND	50	6.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Chlorodibromomethane	ND	25	2.7	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Chloroethane	ND	100	8.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Chloroform	ND	100	7.2	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Chloromethane	ND	100	16	µg/L	50	R-05	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
2-Chlorotoluene	ND	50	3.5	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
4-Chlorotoluene	ND	50	3.7	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	17	µg/L	50	V-05	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2-Dibromoethane (EDB)	ND	25	4.4	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Dibromomethane	ND	50	3.5	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2-Dichlorobenzene	ND	50	3.8	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,3-Dichlorobenzene	ND	50	4.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,4-Dichlorobenzene	ND	50	2.3	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
trans-1,4-Dichloro-2-butene	ND	100	6.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	6.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1-Dichloroethane	61	50	7.9	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2-Dichloroethane	ND	250	9.7	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1-Dichloroethylene	29	50	10	µg/L	50	J	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
cis-1,2-Dichloroethylene	4600	50	7.4	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
trans-1,2-Dichloroethylene	15	50	7.5	µg/L	50	J	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2-Dichloropropane	ND	50	5.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,3-Dichloropropane	ND	25	5.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
2,2-Dichloropropane	ND	50	3.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1-Dichloropropene	ND	100	6.4	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
cis-1,3-Dichloropropene	ND	25	3.1	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
trans-1,3-Dichloropropene	ND	25	2.8	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Diethyl Ether	ND	100	11	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-08i

Sample ID: 14D0636-01 | Start Date/Time: 3/27/2014 12:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 12:30:00PM

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	4/21/14	4/21/14 13:13	EEH
1,4-Dioxane	ND	2500	1300	µg/L	50	V-16	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Ethylbenzene	ND	50	4.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Hexachlorobutadiene	ND	25	8.5	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
2-Hexanone (MBK)	ND	500	76	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Isopropylbenzene (Cumene)	ND	50	5.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	6.2	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	4.5	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Methylene Chloride	ND	250	160	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	73	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Naphthalene	ND	100	6.0	µg/L	50	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
n-Propylbenzene	ND	50	4.7	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Styrene	ND	50	6.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1,1,2-Tetrachloroethane	ND	50	6.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1,2,2-Tetrachloroethane	ND	25	6.2	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Tetrachloroethylene	ND	50	4.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Tetrahydrofuran	ND	500	54	µg/L	50	V-16	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Toluene	ND	50	4.5	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2,3-Trichlorobenzene	ND	250	7.0	µg/L	50	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2,4-Trichlorobenzene	ND	50	5.9	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,3,5-Trichlorobenzene	ND	50	6.9	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1,1-Trichloroethane	10	50	4.7	µg/L	50	J	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1,2-Trichloroethane	ND	50	5.8	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Trichloroethylene	14	50	3.8	µg/L	50	J	SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Trichlorofluoromethane (Freon 11)	ND	100	7.4	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2,3-Trichloropropane	ND	100	6.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	4.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,2,4-Trimethylbenzene	ND	50	9.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
1,3,5-Trimethylbenzene	ND	50	5.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
Vinyl Chloride	680	100	6.6	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
m+p Xylene	ND	100	9.0	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH
o-Xylene	ND	50	5.5	µg/L	50		SW-846 8260C	4/21/14	4/21/14 13:13	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.6	70-130		4/21/14 13:13
Toluene-d8	101	70-130		4/21/14 13:13
4-Bromofluorobenzene	97.1	70-130		4/21/14 13:13

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-01

Sample ID: 14D0636-02 | Start Date/Time: 3/27/2014 12:30:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 12:45:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Benzene	0.27	1.0	0.079	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
n-Butylbenzene	3.1	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
sec-Butylbenzene	9.1	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
tert-Butylbenzene	3.1	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Chloroethane	27	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2-Dichlorobenzene	0.94	1.0	0.076	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,4-Dichlorobenzene	0.49	1.0	0.046	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1-Dichloroethane	5.5	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
cis-1,2-Dichloroethylene	0.95	1.0	0.15	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
trans-1,2-Dichloroethylene	1.0	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-01

Sample ID: 14D0636-02 | Start Date/Time: 3/27/2014 12:30:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 12:45:00PM

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	4/21/14	4/21/14 10:32	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Ethylbenzene	0.24	1.0	0.092	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Isopropylbenzene (Cumene)	18	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
n-Propylbenzene	41	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Tetrachloroethylene	16	1.0	0.080	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Toluene	0.13	1.0	0.090	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1,1-Trichloroethane	0.23	1.0	0.094	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Trichloroethylene	3.7	1.0	0.077	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
Vinyl Chloride	0.52	2.0	0.13	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:32	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:32	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.0	70-130		4/21/14 10:32
Toluene-d8	102	70-130		4/21/14 10:32
4-Bromofluorobenzene	99.1	70-130		4/21/14 10:32

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-07

Sample ID: 14D0636-03 | Start Date/Time: 3/27/2014 12:45:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:00:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-07

Sample ID: 14D0636-03 | Start Date/Time: 3/27/2014 12:45:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:00:00PM

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	4/21/14	4/21/14 10:59	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Tetrachloroethylene	0.51	1.0	0.080	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:59	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.3	70-130		4/21/14 10:59
Toluene-d8	100	70-130		4/21/14 10:59
4-Bromofluorobenzene	96.2	70-130		4/21/14 10:59

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-06i

Sample ID: 14D0636-04 | Start Date/Time: 3/27/2014 1:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:30:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Benzene	0.19	1.0	0.079	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1-Dichloroethane	6.9	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
cis-1,2-Dichloroethylene	10	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
trans-1,2-Dichloroethylene	0.41	1.0	0.15	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-06i

Sample ID: 14D0636-04 | Start Date/Time: 3/27/2014 1:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:30:00PM

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	4/21/14	4/21/14 11:26	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1,1-Trichloroethane	0.25	1.0	0.094	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Trichloroethylene	0.19	1.0	0.077	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
Vinyl Chloride	2.9	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:26	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.3	70-130		4/21/14 11:26
Toluene-d8	100	70-130		4/21/14 11:26
4-Bromofluorobenzene	98.4	70-130		4/21/14 11:26

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-06s

Sample ID: 14D0636-05 | Start Date/Time: 3/27/2014 1:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:30:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1-Dichloroethane	2.8	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
cis-1,2-Dichloroethylene	3.8	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
trans-1,2-Dichloroethylene	0.35	1.0	0.15	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-06s

Sample ID: 14D0636-05 | Start Date/Time: 3/27/2014 1:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:30:00PM

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	4/21/14	4/21/14 11:53	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Tetrachloroethylene	23	1.0	0.080	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1,1-Trichloroethane	3.0	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Trichloroethylene	14	1.0	0.077	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
Vinyl Chloride	2.0	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 11:53	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.2	70-130		4/21/14 11:53
Toluene-d8	99.3	70-130		4/21/14 11:53
4-Bromofluorobenzene	96.4	70-130		4/21/14 11:53

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-05

Sample ID: 14D0636-06 | Start Date/Time: 3/27/2014 1:30:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:45:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Benzene	0.28	1.0	0.079	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1-Dichloroethane	10	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
cis-1,2-Dichloroethylene	3.2	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
trans-1,2-Dichloroethylene	0.33	1.0	0.15	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-05

Sample ID: 14D0636-06 | Start Date/Time: 3/27/2014 1:30:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 1:45:00PM

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	4/21/14	4/21/14 12:20	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Tetrachloroethylene	0.12	1.0	0.080	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Trichloroethylene	0.29	1.0	0.077	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
Vinyl Chloride	1.5	2.0	0.13	µg/L	1	J	SW-846 8260C	4/21/14	4/21/14 12:20	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:20	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.8	70-130		4/21/14 12:20
Toluene-d8	102	70-130		4/21/14 12:20
4-Bromofluorobenzene	97.0	70-130		4/21/14 12:20

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-02

Sample ID: 14D0636-07 | Start Date/Time: 3/27/2014 2:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 2:15:00PM

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	47	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Acrylonitrile	ND	50	5.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.91	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Benzene	ND	10	0.79	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Bromobenzene	ND	10	0.44	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Bromochloromethane	ND	10	2.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Bromodichloromethane	ND	5.0	0.88	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Bromoform	ND	10	2.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Bromomethane	ND	20	9.4	µg/L	10	MS-07A	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
2-Butanone (MEK)	ND	200	24	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
tert-Butyl Alcohol (TBA)	ND	200	22	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
n-Butylbenzene	ND	10	0.54	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
sec-Butylbenzene	ND	10	0.84	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
tert-Butylbenzene	ND	10	0.96	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	0.75	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Carbon Disulfide	ND	40	10	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Carbon Tetrachloride	ND	50	1.0	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Chlorobenzene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Chlorodibromomethane	ND	5.0	0.54	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Chloroethane	ND	20	1.6	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Chloroform	ND	20	1.4	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Chloromethane	ND	20	3.2	µg/L	10	R-05	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
2-Chlorotoluene	ND	10	0.70	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
4-Chlorotoluene	ND	10	0.74	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	3.4	µg/L	10	V-05	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2-Dibromoethane (EDB)	ND	5.0	0.89	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Dibromomethane	ND	10	0.70	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2-Dichlorobenzene	ND	10	0.76	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,3-Dichlorobenzene	ND	10	0.79	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,4-Dichlorobenzene	ND	10	0.46	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
trans-1,4-Dichloro-2-butene	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1-Dichloroethane	4.9	10	1.6	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2-Dichloroethane	ND	50	1.9	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1-Dichloroethylene	2.5	10	2.1	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
cis-1,2-Dichloroethylene	400	10	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
trans-1,2-Dichloroethylene	ND	10	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2-Dichloropropane	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,3-Dichloropropane	ND	5.0	0.99	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
2,2-Dichloropropane	ND	10	0.72	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1-Dichloropropene	ND	20	1.3	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
cis-1,3-Dichloropropene	ND	5.0	0.62	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
trans-1,3-Dichloropropene	ND	5.0	0.56	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Diethyl Ether	ND	20	2.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-02

Sample ID: 14D0636-07 | Start Date/Time: 3/27/2014 2:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 2:15:00PM

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	4/21/14	4/21/14 13:40	EEH
1,4-Dioxane	ND	500	260	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Ethylbenzene	ND	10	0.92	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Hexachlorobutadiene	ND	5.0	1.7	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
2-Hexanone (MBK)	ND	100	15	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Isopropylbenzene (Cumene)	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	0.90	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Methylene Chloride	ND	50	32	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	15	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Naphthalene	ND	20	1.2	µg/L	10	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
n-Propylbenzene	ND	10	0.94	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Styrene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1,1,2-Tetrachloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1,2,2-Tetrachloroethane	ND	5.0	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Tetrachloroethylene	530	10	0.80	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Tetrahydrofuran	ND	100	11	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Toluene	ND	10	0.90	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2,3-Trichlorobenzene	ND	50	1.4	µg/L	10	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2,4-Trichlorobenzene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,3,5-Trichlorobenzene	ND	10	1.4	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1,1-Trichloroethane	3.2	10	0.94	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1,2-Trichloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Trichloroethylene	140	10	0.77	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Trichlorofluoromethane (Freon 11)	ND	20	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2,3-Trichloropropane	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	0.92	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,2,4-Trimethylbenzene	ND	10	1.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
1,3,5-Trimethylbenzene	ND	10	1.0	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
Vinyl Chloride	53	20	1.3	µg/L	10	MS-07A, R-06	SW-846 8260C	4/21/14	4/21/14 13:40	EEH
m+p Xylene	ND	20	1.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH
o-Xylene	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 13:40	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	86.5	70-130		4/21/14	13:40
Toluene-d8	102	70-130		4/21/14	13:40
4-Bromofluorobenzene	98.5	70-130		4/21/14	13:40

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-04

Sample ID: 14D0636-08 | Start Date/Time: 3/27/2014 2:30:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 3:00:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-04

Sample ID: 14D0636-08 | Start Date/Time: 3/27/2014 2:30:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 3:00:00PM

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	4/21/14	4/21/14 12:46	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 12:46	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.3	70-130		4/21/14 12:46
Toluene-d8	103	70-130		4/21/14 12:46
4-Bromofluorobenzene	98.2	70-130		4/21/14 12:46

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-12

Sample ID: 14D0636-09 | Start Date/Time: 3/27/2014 3:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 3:15:00PM

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	94	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Acrylonitrile	ND	100	12	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
tert-Amyl Methyl Ether (TAME)	ND	10	1.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Benzene	ND	20	1.6	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Bromobenzene	ND	20	0.88	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Bromochloromethane	ND	20	4.5	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Bromodichloromethane	ND	10	1.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Bromoform	ND	20	4.2	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Bromomethane	ND	40	19	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
2-Butanone (MEK)	ND	400	47	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
tert-Butyl Alcohol (TBA)	ND	400	43	µg/L	20	V-16	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
n-Butylbenzene	ND	20	1.1	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
sec-Butylbenzene	ND	20	1.7	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
tert-Butylbenzene	ND	20	1.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	10	1.5	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Carbon Disulfide	ND	80	20	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Carbon Tetrachloride	ND	100	2.0	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Chlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Chlorodibromomethane	ND	10	1.1	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Chloroethane	15	40	3.2	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Chloroform	ND	40	2.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Chloromethane	ND	40	6.5	µg/L	20	R-05	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
2-Chlorotoluene	ND	20	1.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
4-Chlorotoluene	ND	20	1.5	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	6.8	µg/L	20	V-05	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2-Dibromoethane (EDB)	ND	10	1.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Dibromomethane	ND	20	1.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2-Dichlorobenzene	ND	20	1.5	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,3-Dichlorobenzene	ND	20	1.6	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,4-Dichlorobenzene	ND	20	0.92	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
trans-1,4-Dichloro-2-butene	ND	40	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Dichlorodifluoromethane (Freon 12)	ND	40	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1-Dichloroethane	67	20	3.2	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2-Dichloroethane	ND	100	3.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1-Dichloroethylene	ND	20	4.2	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
cis-1,2-Dichloroethylene	900	20	2.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
trans-1,2-Dichloroethylene	22	20	3.0	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2-Dichloropropane	ND	20	2.2	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,3-Dichloropropane	ND	10	2.0	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
2,2-Dichloropropane	ND	20	1.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1-Dichloropropene	ND	40	2.6	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
cis-1,3-Dichloropropene	ND	10	1.2	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
trans-1,3-Dichloropropene	ND	10	1.1	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Diethyl Ether	ND	40	4.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: MW-12

Sample ID: 14D0636-09 | Start Date/Time: 3/27/2014 3:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/16/2014 3:15:00PM

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	4/21/14	4/21/14 14:07	EEH
1,4-Dioxane	ND	1000	530	µg/L	20	V-16	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Ethylbenzene	11	20	1.8	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Hexachlorobutadiene	ND	10	3.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
2-Hexanone (MBK)	ND	200	30	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Isopropylbenzene (Cumene)	ND	20	2.3	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
p-Isopropyltoluene (p-Cymene)	ND	20	2.5	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Methyl tert-Butyl Ether (MTBE)	ND	20	1.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Methylene Chloride	ND	100	64	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
4-Methyl-2-pentanone (MIBK)	ND	200	29	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Naphthalene	5.0	40	2.4	µg/L	20	R-05, V-05, J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
n-Propylbenzene	ND	20	1.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Styrene	ND	20	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1,1,2-Tetrachloroethane	ND	20	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1,2,2-Tetrachloroethane	ND	10	2.5	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Tetrachloroethylene	4.6	20	1.6	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Tetrahydrofuran	ND	200	21	µg/L	20	V-16	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Toluene	21	20	1.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2,3-Trichlorobenzene	ND	100	2.8	µg/L	20	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2,4-Trichlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,3,5-Trichlorobenzene	ND	20	2.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1,1-Trichloroethane	34	20	1.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1,2-Trichloroethane	ND	20	2.3	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Trichloroethylene	9.0	20	1.5	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Trichlorofluoromethane (Freon 11)	ND	40	2.9	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2,3-Trichloropropane	ND	40	2.4	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	1.8	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,2,4-Trimethylbenzene	6.8	20	3.6	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
1,3,5-Trimethylbenzene	ND	20	2.0	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
Vinyl Chloride	180	40	2.7	µg/L	20		SW-846 8260C	4/21/14	4/21/14 14:07	EEH
m+p Xylene	12	40	3.6	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH
o-Xylene	10	20	2.2	µg/L	20	J	SW-846 8260C	4/21/14	4/21/14 14:07	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.3	70-130		4/21/14 14:07
Toluene-d8	101	70-130		4/21/14 14:07
4-Bromofluorobenzene	96.1	70-130		4/21/14 14:07

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: Trip Blank | Sampled: 4/16/2014 00:00

Sample ID: 14D0636-10

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	ND	50	4.7	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Chloromethane	ND	2.0	0.32	µg/L	1	R-05	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1	V-05	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH

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Project Location: Gates NY | Sample Description: | Work Order: 14D0636

Date Received: 4/17/2014

Field Sample #: Trip Blank | Sampled: 4/16/2014 00:00

Sample ID: 14D0636-10

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	4/21/14	4/21/14 10:05	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Naphthalene	ND	2.0	0.12	µg/L	1	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	V-05, R-05	SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/21/14	4/21/14 10:05	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.1	70-130		4/21/14 10:05
Toluene-d8	105	70-130		4/21/14 10:05
4-Bromofluorobenzene	99.2	70-130		4/21/14 10:05

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Sample Extraction Data

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0636-01 [MW-08i]	B094168	0.1	5.00	04/21/14
14D0636-02 [MW-01]	B094168	5	5.00	04/21/14
14D0636-03 [MW-07]	B094168	5	5.00	04/21/14
14D0636-04 [MW-06i]	B094168	5	5.00	04/21/14
14D0636-05 [MW-06s]	B094168	5	5.00	04/21/14
14D0636-06 [MW-05]	B094168	5	5.00	04/21/14
14D0636-07 [MW-02]	B094168	0.5	5.00	04/21/14
14D0636-08 [MW-04]	B094168	5	5.00	04/21/14
14D0636-09 [MW-12]	B094168	0.25	5.00	04/21/14
14D0636-10 [Trip Blank]	B094168	5	5.00	04/21/14

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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 B094168 - SW-846 5030B										
Blank (B094168-BLK1)				Prepared & Analyzed: 04/21/14						
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							R-05
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	5.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

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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 B094168 - SW-846 5030B												
Blank (B094168-BLK1)				Prepared & Analyzed: 04/21/14								
Methylene Chloride	ND	5.0	µg/L									
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L									
Naphthalene	ND	2.0	µg/L								R-05, V-05	
n-Propylbenzene	ND	1.0	µg/L									
Styrene	ND	1.0	µg/L									
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L									
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L									
Tetrachloroethylene	ND	1.0	µg/L									
Tetrahydrofuran	ND	10	µg/L								V-16	
Toluene	ND	1.0	µg/L									
1,2,3-Trichlorobenzene	ND	5.0	µg/L								R-05, V-05	
1,2,4-Trichlorobenzene	ND	1.0	µg/L									
1,3,5-Trichlorobenzene	ND	1.0	µg/L									
1,1,1-Trichloroethane	ND	1.0	µg/L									
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	*21.8*		µg/L	25.0		87.1		70-130				
Surrogate: Toluene-d8	*25.9*		µg/L	25.0		103		70-130				
Surrogate: 4-Bromofluorobenzene	*25.0*		µg/L	25.0		100		70-130				
LCS (B094168-BS1)				Prepared & Analyzed: 04/21/14								
Acetone	81.6	50	µg/L	100		81.6		70-160				†
Acrylonitrile	10.1	5.0	µg/L	10.0		101		70-130				
tert-Amyl Methyl Ether (TAME)	10.3	0.50	µg/L	10.0		103		70-130				
Benzene	11.8	1.0	µg/L	10.0		118		70-130				
Bromobenzene	10.8	1.0	µg/L	10.0		108		70-130				
Bromochloromethane	11.9	1.0	µg/L	10.0		119		70-130				
Bromodichloromethane	10.3	0.50	µg/L	10.0		103		70-130				
Bromoform	13.7	1.0	µg/L	10.0		**137**	*	70-130			L-07, V-20	
Bromomethane	7.19	2.0	µg/L	10.0		71.9		40-160				†
2-Butanone (MEK)	109	20	µg/L	100		109		40-160				†
tert-Butyl Alcohol (TBA)	100	20	µg/L	100		100		40-160			V-16	†
n-Butylbenzene	11.6	1.0	µg/L	10.0		116		70-130				
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109		70-130				
tert-Butylbenzene	10.8	1.0	µg/L	10.0		108		70-130				
tert-Butyl Ethyl Ether (TBEE)	11.4	0.50	µg/L	10.0		114		70-130				
Carbon Disulfide	12.7	4.0	µg/L	10.0		127		70-130				
Carbon Tetrachloride	11.0	5.0	µg/L	10.0		110		70-130				
Chlorobenzene	10.4	1.0	µg/L	10.0		104		70-130				
Chlorodibromomethane	10.0	0.50	µg/L	10.0		100		70-130				
Chloroethane	10.9	2.0	µg/L	10.0		109		70-130				
Chloroform	10.6	2.0	µg/L	10.0		106		70-130				
Chloromethane	9.64	2.0	µg/L	10.0		96.4		40-160			R-05, V-20	†
2-Chlorotoluene	9.68	1.0	µg/L	10.0		96.8		70-130				

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B094168 - SW-846 5030B												
LCS (B094168-BS1)				Prepared & Analyzed: 04/21/14								
4-Chlorotoluene	10.7	1.0	µg/L	10.0		107		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	11.1	5.0	µg/L	10.0		111		70-130			V-05	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110		70-130				
Dibromomethane	10.6	1.0	µg/L	10.0		106		70-130				
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106		70-130				
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105		70-130				
1,4-Dichlorobenzene	10.8	1.0	µg/L	10.0		108		70-130				
trans-1,4-Dichloro-2-butene	10.5	2.0	µg/L	10.0		105		70-130				
Dichlorodifluoromethane (Freon 12)	9.94	2.0	µg/L	10.0		99.4		40-160				†
1,1-Dichloroethane	12.0	1.0	µg/L	10.0		120		70-130				
1,2-Dichloroethane	9.47	5.0	µg/L	10.0		94.7		70-130				
1,1-Dichloroethylene	9.25	1.0	µg/L	10.0		92.5		70-130				
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108		70-130				
trans-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0		114		70-130				
1,2-Dichloropropane	11.8	1.0	µg/L	10.0		118		70-130				
1,3-Dichloropropane	11.2	0.50	µg/L	10.0		112		70-130				
2,2-Dichloropropane	11.3	1.0	µg/L	10.0		113		40-130				†
1,1-Dichloropropene	11.6	2.0	µg/L	10.0		116		70-130				
cis-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109		70-130				
trans-1,3-Dichloropropene	11.4	0.50	µg/L	10.0		114		70-130				
Diethyl Ether	10.7	2.0	µg/L	10.0		107		70-130				
Diisopropyl Ether (DIPE)	11.1	0.50	µg/L	10.0		111		70-130				
1,4-Dioxane	147	50	µg/L	100		**147**	*	40-130			L-07, V-16	†
Ethylbenzene	11.2	1.0	µg/L	10.0		112		70-130				
Hexachlorobutadiene	11.8	0.50	µg/L	10.0		118		70-130				
2-Hexanone (MBK)	110	10	µg/L	100		110		70-160				†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0		103		70-130				
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114		70-130				
Methyl tert-Butyl Ether (MTBE)	11.4	1.0	µg/L	10.0		114		70-130				
Methylene Chloride	11.0	5.0	µg/L	10.0		110		70-130				
4-Methyl-2-pentanone (MIBK)	110	10	µg/L	100		110		70-160				†
Naphthalene	11.7	2.0	µg/L	10.0		117		40-130			R-05, V-05	†
n-Propylbenzene	11.0	1.0	µg/L	10.0		110		70-130				
Styrene	11.2	1.0	µg/L	10.0		112		70-130				
1,1,1,2-Tetrachloroethane	11.0	1.0	µg/L	10.0		110		70-130				
1,1,2,2-Tetrachloroethane	11.9	0.50	µg/L	10.0		119		70-130				
Tetrachloroethylene	11.0	1.0	µg/L	10.0		110		70-130				
Tetrahydrofuran	12.5	10	µg/L	10.0		125		70-130			V-16	
Toluene	10.6	1.0	µg/L	10.0		106		70-130				
1,2,3-Trichlorobenzene	11.1	5.0	µg/L	10.0		111		70-130			R-05, V-05	
1,2,4-Trichlorobenzene	11.3	1.0	µg/L	10.0		113		70-130				
1,3,5-Trichlorobenzene	11.1	1.0	µg/L	10.0		111		70-130				
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108		70-130				
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0		110		70-130				
Trichloroethylene	10.9	1.0	µg/L	10.0		109		70-130				
Trichlorofluoromethane (Freon 11)	8.37	2.0	µg/L	10.0		83.7		70-130				
1,2,3-Trichloropropane	11.4	2.0	µg/L	10.0		114		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	µg/L	10.0		112		70-130				
1,2,4-Trimethylbenzene	11.2	1.0	µg/L	10.0		112		70-130				
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.0		107		70-130				
Vinyl Chloride	6.90	2.0	µg/L	10.0		69.0		40-160				†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes	
Batch B094168 - SW-846 5030B												
LCS (B094168-BS1)				Prepared & Analyzed: 04/21/14								
m+p Xylene	21.1	2.0	µg/L	20.0		105	70-130					
o-Xylene	10.5	1.0	µg/L	10.0		105	70-130					
Surrogate: 1,2-Dichloroethane-d4	*22.3*		µg/L	25.0		89.1	70-130					
Surrogate: Toluene-d8	*24.4*		µg/L	25.0		97.5	70-130					
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/L	25.0		96.8	70-130					
LCS Dup (B094168-BSD1)				Prepared & Analyzed: 04/21/14								
Acetone	77.9	50	µg/L	100		77.9	70-160	4.68		25		†
Acrylonitrile	9.46	5.0	µg/L	10.0		94.6	70-130	6.15		25		
tert-Amyl Methyl Ether (TAME)	9.85	0.50	µg/L	10.0		98.5	70-130	4.76		25		
Benzene	11.7	1.0	µg/L	10.0		117	70-130	1.45		25		
Bromobenzene	11.0	1.0	µg/L	10.0		110	70-130	2.01		25		
Bromochloromethane	12.8	1.0	µg/L	10.0		128	70-130	7.38		25		
Bromodichloromethane	10.7	0.50	µg/L	10.0		107	70-130	3.52		25		
Bromoform	12.9	1.0	µg/L	10.0		129	70-130	5.86		25	V-20	
Bromomethane	7.90	2.0	µg/L	10.0		79.0	40-160	9.41		25		†
2-Butanone (MEK)	88.7	20	µg/L	100		88.7	40-160	20.4		25		†
tert-Butyl Alcohol (TBA)	91.2	20	µg/L	100		91.2	40-160	9.61		25	V-16	†
n-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130	1.04		25		
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	0.183		25		
tert-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	1.48		25		
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130	6.50		25		
Carbon Disulfide	12.7	4.0	µg/L	10.0		127	70-130	0.0785		25		
Carbon Tetrachloride	11.1	5.0	µg/L	10.0		111	70-130	0.724		25		
Chlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.36		25		
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130	2.85		25		
Chloroethane	11.3	2.0	µg/L	10.0		113	70-130	3.07		25		
Chloroform	11.0	2.0	µg/L	10.0		110	70-130	3.41		25		
Chloromethane	12.4	2.0	µg/L	10.0		124	40-160	**25.2**	*	25	V-20, R-05	†
2-Chlorotoluene	9.71	1.0	µg/L	10.0		97.1	70-130	0.309		25		
4-Chlorotoluene	10.7	1.0	µg/L	10.0		107	70-130	0.468		25		
1,2-Dibromo-3-chloropropane (DBCP)	8.64	5.0	µg/L	10.0		86.4	70-130	24.7		25	V-05	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110	70-130	0.182		25		
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130	4.41		25		
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	1.72		25		
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.190		25		
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	1.30		25		
trans-1,4-Dichloro-2-butene	9.62	2.0	µg/L	10.0		96.2	70-130	9.13		25		
Dichlorodifluoromethane (Freon 12)	10.7	2.0	µg/L	10.0		107	40-160	6.99		25		†
1,1-Dichloroethane	12.6	1.0	µg/L	10.0		126	70-130	4.62		25		
1,2-Dichloroethane	9.90	5.0	µg/L	10.0		99.0	70-130	4.44		25		
1,1-Dichloroethylene	9.92	1.0	µg/L	10.0		99.2	70-130	6.99		25		
cis-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0		115	70-130	5.75		25		
trans-1,2-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130	4.62		25		
1,2-Dichloropropane	11.8	1.0	µg/L	10.0		118	70-130	0.677		25		
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110	70-130	2.34		25		
2,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	40-130	1.06		25		†
1,1-Dichloropropene	11.4	2.0	µg/L	10.0		114	70-130	1.13		25		
cis-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130	0.275		25		
trans-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116	70-130	1.30		25		
Diethyl Ether	9.94	2.0	µg/L	10.0		99.4	70-130	7.46		25		
Diisopropyl Ether (DIPE)	10.8	0.50	µg/L	10.0		108	70-130	2.84		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 B094168 - SW-846 5030B											
LCS Dup (B094168-BSD1)				Prepared & Analyzed: 04/21/14							
1,4-Dioxane	127	50	µg/L	100		127	40-130	14.5	50	V-16	† ‡
Ethylbenzene	11.2	1.0	µg/L	10.0		112	70-130	0.0896	25		
Hexachlorobutadiene	11.5	0.50	µg/L	10.0		115	70-130	2.82	25		
2-Hexanone (MBK)	97.2	10	µg/L	100		97.2	70-160	12.2	25		†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0		104	70-130	1.16	25		
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130	0.527	25		
Methyl tert-Butyl Ether (MTBE)	10.4	1.0	µg/L	10.0		104	70-130	8.98	25		
Methylene Chloride	12.6	5.0	µg/L	10.0		126	70-130	13.6	25		
4-Methyl-2-pentanone (MIBK)	96.0	10	µg/L	100		96.0	70-160	13.2	25		†
Naphthalene	8.71	2.0	µg/L	10.0		87.1	40-130	**29.3** *	25	R-05, V-05	†
n-Propylbenzene	11.0	1.0	µg/L	10.0		110	70-130	0.182	25		
Styrene	11.1	1.0	µg/L	10.0		111	70-130	0.810	25		
1,1,1,2-Tetrachloroethane	10.5	1.0	µg/L	10.0		105	70-130	4.37	25		
1,1,2,2-Tetrachloroethane	10.5	0.50	µg/L	10.0		105	70-130	12.7	25		
Tetrachloroethylene	11.4	1.0	µg/L	10.0		114	70-130	3.49	25		
Tetrahydrofuran	11.6	10	µg/L	10.0		116	70-130	7.79	25	V-16	
Toluene	11.3	1.0	µg/L	10.0		113	70-130	6.58	25		
1,2,3-Trichlorobenzene	8.50	5.0	µg/L	10.0		85.0	70-130	**26.5** *	25	R-05, V-05	
1,2,4-Trichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130	16.0	25		
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	4.69	25		
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	0.649	25		
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130	3.32	25		
Trichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	0.183	25		
Trichlorofluoromethane (Freon 11)	9.03	2.0	µg/L	10.0		90.3	70-130	7.59	25		
1,2,3-Trichloropropane	10.4	2.0	µg/L	10.0		104	70-130	9.17	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.4	1.0	µg/L	10.0		114	70-130	2.65	25		
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130	1.72	25		
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	1.89	25		
Vinyl Chloride	8.01	2.0	µg/L	10.0		80.1	40-160	14.9	25		†
m+p Xylene	20.7	2.0	µg/L	20.0		103	70-130	1.87	25		
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130	0.575	25		
Surrogate: 1,2-Dichloroethane-d4	*22.2*		µg/L	25.0		88.9	70-130				
Surrogate: Toluene-d8	*25.6*		µg/L	25.0		102	70-130				
Surrogate: 4-Bromofluorobenzene	*24.5*		µg/L	25.0		98.2	70-130				
Matrix Spike (B094168-MS1)		**Source: 14D0636-07**		Prepared & Analyzed: 04/21/14							
Acetone	1500	500	µg/L	2000	ND	74.9	70-130				
Acrylonitrile	189	50	µg/L	200	ND	94.5	70-130				
tert-Amyl Methyl Ether (TAME)	180	5.0	µg/L	200	ND	89.9	70-130				
Benzene	191	10	µg/L	200	ND	95.4	70-130				
Bromobenzene	171	10	µg/L	200	ND	85.3	70-130				
Bromochloromethane	205	10	µg/L	200	ND	102	70-130				
Bromodichloromethane	169	5.0	µg/L	200	ND	84.6	70-130				
Bromoform	215	10	µg/L	200	ND	107	70-130			V-20	
Bromomethane	130	20	µg/L	200	ND	**65.0** *	70-130			MS-07A	
2-Butanone (MEK)	1840	200	µg/L	2000	ND	92.1	70-130				
tert-Butyl Alcohol (TBA)	1920	200	µg/L	2000	ND	95.8	70-130			V-16	
n-Butylbenzene	162	10	µg/L	200	ND	81.2	70-130				
sec-Butylbenzene	158	10	µg/L	200	ND	79.2	70-130				
tert-Butylbenzene	166	10	µg/L	200	ND	83.0	70-130				
tert-Butyl Ethyl Ether (TBEE)	196	5.0	µg/L	200	ND	97.8	70-130				
Carbon Disulfide	175	40	µg/L	200	ND	87.5	70-130				

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094168 - SW-846 5030B										
Matrix Spike (B094168-MS1)	**Source: 14D0636-07**			Prepared & Analyzed: 04/21/14						
Carbon Tetrachloride	184	50	µg/L	200	ND	92.2	70-130			
Chlorobenzene	162	10	µg/L	200	ND	81.0	70-130			
Chlorodibromomethane	165	5.0	µg/L	200	ND	82.4	70-130			
Chloroethane	187	20	µg/L	200	ND	93.3	70-130			
Chloroform	176	20	µg/L	200	ND	87.8	70-130			
Chloromethane	144	20	µg/L	200	ND	72.0	70-130			V-20, R-05
2-Chlorotoluene	149	10	µg/L	200	ND	74.7	70-130			
4-Chlorotoluene	161	10	µg/L	200	ND	80.4	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	190	50	µg/L	200	ND	95.0	70-130			V-05
1,2-Dibromoethane (EDB)	181	5.0	µg/L	200	ND	90.6	70-130			
Dibromomethane	181	10	µg/L	200	ND	90.3	70-130			
1,2-Dichlorobenzene	160	10	µg/L	200	ND	80.0	70-130			
1,3-Dichlorobenzene	153	10	µg/L	200	ND	76.6	70-130			
1,4-Dichlorobenzene	156	10	µg/L	200	ND	78.2	70-130			
trans-1,4-Dichloro-2-butene	160	20	µg/L	200	ND	80.0	70-130			
Dichlorodifluoromethane (Freon 12)	159	20	µg/L	200	ND	79.3	70-130			
1,1-Dichloroethane	210	10	µg/L	200	4.90	103	70-130			
1,2-Dichloroethane	157	50	µg/L	200	ND	78.3	70-130			
1,1-Dichloroethylene	164	10	µg/L	200	2.50	80.5	70-130			
cis-1,2-Dichloroethylene	608	10	µg/L	200	400	104	70-130			
trans-1,2-Dichloroethylene	195	10	µg/L	200	ND	97.4	70-130			
1,2-Dichloropropane	193	10	µg/L	200	ND	96.4	70-130			
1,3-Dichloropropane	184	5.0	µg/L	200	ND	91.9	70-130			
2,2-Dichloropropane	178	10	µg/L	200	ND	89.2	70-130			
1,1-Dichloropropene	188	20	µg/L	200	ND	93.8	70-130			
cis-1,3-Dichloropropene	174	5.0	µg/L	200	ND	86.9	70-130			
trans-1,3-Dichloropropene	185	5.0	µg/L	200	ND	92.6	70-130			
Diethyl Ether	179	20	µg/L	200	ND	89.7	70-130			
Diisopropyl Ether (DIPE)	181	5.0	µg/L	200	ND	90.6	70-130			
1,4-Dioxane	2040	500	µg/L	2000	ND	102	70-130			V-16
Ethylbenzene	173	10	µg/L	200	ND	86.6	70-130			
Hexachlorobutadiene	164	5.0	µg/L	200	ND	82.0	70-130			
2-Hexanone (MBK)	1930	100	µg/L	2000	ND	96.3	70-130			
Isopropylbenzene (Cumene)	158	10	µg/L	200	ND	79.2	70-130			
p-Isopropyltoluene (p-Cymene)	166	10	µg/L	200	ND	83.0	70-130			
Methyl tert-Butyl Ether (MTBE)	194	10	µg/L	200	ND	97.0	70-130			
Methylene Chloride	179	50	µg/L	200	ND	89.7	70-130			
4-Methyl-2-pentanone (MIBK)	1820	100	µg/L	2000	ND	91.0	70-130			
Naphthalene	196	20	µg/L	200	ND	97.8	70-130			R-05, V-05
n-Propylbenzene	164	10	µg/L	200	ND	82.0	70-130			
Styrene	172	10	µg/L	200	ND	85.8	70-130			
1,1,1,2-Tetrachloroethane	164	10	µg/L	200	ND	82.2	70-130			
1,1,2,2-Tetrachloroethane	192	5.0	µg/L	200	ND	95.8	70-130			
Tetrachloroethylene	692	10	µg/L	200	532	80.0	70-130			
Tetrahydrofuran	242	100	µg/L	200	ND	121	70-130			V-16
Toluene	171	10	µg/L	200	ND	85.4	70-130			
1,2,3-Trichlorobenzene	163	50	µg/L	200	ND	81.3	70-130			R-05, V-05
1,2,4-Trichlorobenzene	161	10	µg/L	200	ND	80.4	70-130			
1,3,5-Trichlorobenzene	154	10	µg/L	200	ND	77.0	70-130			
1,1,1-Trichloroethane	190	10	µg/L	200	3.20	93.4	70-130			
1,1,2-Trichloroethane	180	10	µg/L	200	ND	90.0	70-130			
Trichloroethylene	330	10	µg/L	200	143	93.6	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 B094168 - SW-846 5030B											
Matrix Spike (B094168-MS1)	**Source: 14D0636-07**			Prepared & Analyzed: 04/21/14							
Trichlorofluoromethane (Freon 11)	142	20	µg/L	200	ND	71.0		70-130			
1,2,3-Trichloropropane	191	20	µg/L	200	ND	95.3		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	178	10	µg/L	200	ND	88.9		70-130			
1,2,4-Trimethylbenzene	165	10	µg/L	200	ND	82.6		70-130			
1,3,5-Trimethylbenzene	158	10	µg/L	200	ND	78.9		70-130			
Vinyl Chloride	100	20	µg/L	200	52.8	**23.7**	*	70-130			MS-07A, R-06
m+p Xylene	327	20	µg/L	400	ND	81.7		70-130			
o-Xylene	165	10	µg/L	200	ND	82.4		70-130			
Surrogate: 1,2-Dichloroethane-d4	*23.0*		µg/L	25.0		92.1		70-130			
Surrogate: Toluene-d8	*24.7*		µg/L	25.0		98.9		70-130			
Surrogate: 4-Bromofluorobenzene	*24.7*		µg/L	25.0		98.8		70-130			
Matrix Spike Dup (B094168-MSD1)	**Source: 14D0636-07**			Prepared & Analyzed: 04/21/14							
Acetone	1370	500	µg/L	2000	ND	**68.5**	*	70-130	8.93	30	MS-22
Acrylonitrile	159	50	µg/L	200	ND	79.4		70-130	17.4	30	
tert-Amyl Methyl Ether (TAME)	176	5.0	µg/L	200	ND	88.2		70-130	1.97	30	
Benzene	195	10	µg/L	200	ND	97.6		70-130	2.23	30	
Bromobenzene	171	10	µg/L	200	ND	85.4		70-130	0.176	30	
Bromochloromethane	199	10	µg/L	200	ND	99.6		70-130	2.72	30	
Bromodichloromethane	171	5.0	µg/L	200	ND	85.4		70-130	1.00	30	
Bromoform	202	10	µg/L	200	ND	101		70-130	6.14	30	V-20
Bromomethane	129	20	µg/L	200	ND	**64.6**	*	70-130	0.463	30	MS-07A
2-Butanone (MEK)	1540	200	µg/L	2000	ND	76.8		70-130	18.2	30	
tert-Butyl Alcohol (TBA)	1620	200	µg/L	2000	ND	81.1		70-130	16.6	30	V-16
n-Butylbenzene	163	10	µg/L	200	ND	81.5		70-130	0.307	30	
sec-Butylbenzene	163	10	µg/L	200	ND	81.3		70-130	2.55	30	
tert-Butylbenzene	170	10	µg/L	200	ND	85.1		70-130	2.56	30	
tert-Butyl Ethyl Ether (TBEE)	190	5.0	µg/L	200	ND	95.2		70-130	2.69	30	
Carbon Disulfide	179	40	µg/L	200	ND	89.6		70-130	2.37	30	
Carbon Tetrachloride	189	50	µg/L	200	ND	94.4		70-130	2.41	30	
Chlorobenzene	165	10	µg/L	200	ND	82.3		70-130	1.59	30	
Chlorodibromomethane	165	5.0	µg/L	200	ND	82.7		70-130	0.424	30	
Chloroethane	188	20	µg/L	200	ND	94.2		70-130	0.907	30	
Chloroform	177	20	µg/L	200	ND	88.6		70-130	0.963	30	
Chloromethane	177	20	µg/L	200	ND	88.4		70-130	20.4	30	R-05, V-20
2-Chlorotoluene	152	10	µg/L	200	ND	75.8		70-130	1.53	30	
4-Chlorotoluene	164	10	µg/L	200	ND	82.2		70-130	2.15	30	
1,2-Dibromo-3-chloropropane (DBCP)	154	50	µg/L	200	ND	77.0		70-130	20.9	30	V-05
1,2-Dibromoethane (EDB)	177	5.0	µg/L	200	ND	88.3		70-130	2.63	30	
Dibromomethane	173	10	µg/L	200	ND	86.6		70-130	4.18	30	
1,2-Dichlorobenzene	161	10	µg/L	200	ND	80.3		70-130	0.437	30	
1,3-Dichlorobenzene	159	10	µg/L	200	ND	79.6		70-130	3.78	30	
1,4-Dichlorobenzene	161	10	µg/L	200	ND	80.4		70-130	2.84	30	
trans-1,4-Dichloro-2-butene	143	20	µg/L	200	ND	71.4		70-130	11.5	30	
Dichlorodifluoromethane (Freon 12)	164	20	µg/L	200	ND	82.2		70-130	3.65	30	
1,1-Dichloroethane	213	10	µg/L	200	4.90	104		70-130	1.42	30	
1,2-Dichloroethane	152	50	µg/L	200	ND	76.0		70-130	3.05	30	
1,1-Dichloroethylene	167	10	µg/L	200	2.50	82.0		70-130	1.88	30	
cis-1,2-Dichloroethylene	611	10	µg/L	200	400	106		70-130	0.492	30	
trans-1,2-Dichloroethylene	196	10	µg/L	200	ND	98.1		70-130	0.665	30	
1,2-Dichloropropane	184	10	µg/L	200	ND	92.0		70-130	4.72	30	
1,3-Dichloropropane	181	5.0	µg/L	200	ND	90.4		70-130	1.70	30	

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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 B094168 - SW-846 5030B												
Matrix Spike Dup (B094168-MSD1)	**Source: 14D0636-07**			Prepared & Analyzed: 04/21/14								
2,2-Dichloropropane	176	10	µg/L	200	ND	87.8		70-130	1.64		30	
1,1-Dichloropropene	195	20	µg/L	200	ND	97.5		70-130	3.82		30	
cis-1,3-Dichloropropene	178	5.0	µg/L	200	ND	88.8		70-130	2.11		30	
trans-1,3-Dichloropropene	184	5.0	µg/L	200	ND	92.0		70-130	0.650		30	
Diethyl Ether	177	20	µg/L	200	ND	88.6		70-130	1.29		30	
Diisopropyl Ether (DIPE)	184	5.0	µg/L	200	ND	91.8		70-130	1.43		30	
1,4-Dioxane	1870	500	µg/L	2000	ND	93.3		70-130	9.11		30	V-16
Ethylbenzene	178	10	µg/L	200	ND	88.9		70-130	2.62		30	
Hexachlorobutadiene	166	5.0	µg/L	200	ND	83.0		70-130	1.15		30	
2-Hexanone (MBK)	1600	100	µg/L	2000	ND	80.1		70-130	18.3		30	
Isopropylbenzene (Cumene)	164	10	µg/L	200	ND	82.0		70-130	3.35		30	
p-Isopropyltoluene (p-Cymene)	168	10	µg/L	200	ND	83.8		70-130	0.959		30	
Methyl tert-Butyl Ether (MTBE)	189	10	µg/L	200	ND	94.4		70-130	2.77		30	
Methylene Chloride	178	50	µg/L	200	ND	88.8		70-130	0.952		30	
4-Methyl-2-pentanone (MIBK)	1580	100	µg/L	2000	ND	79.2		70-130	13.8		30	
Naphthalene	156	20	µg/L	200	ND	78.0		70-130	22.4		30	V-05, R-05
n-Propylbenzene	165	10	µg/L	200	ND	82.6		70-130	0.729		30	
Styrene	178	10	µg/L	200	ND	88.9		70-130	3.61		30	
1,1,1,2-Tetrachloroethane	174	10	µg/L	200	ND	86.8		70-130	5.44		30	
1,1,2,2-Tetrachloroethane	174	5.0	µg/L	200	ND	87.2		70-130	9.46		30	
Tetrachloroethylene	711	10	µg/L	200	532	89.6		70-130	2.75		30	
Tetrahydrofuran	200	100	µg/L	200	ND	100		70-130	18.6		30	V-16
Toluene	174	10	µg/L	200	ND	86.8		70-130	1.57		30	
1,2,3-Trichlorobenzene	138	50	µg/L	200	ND	**69.2**	*	70-130	16.0		30	MS-22, R-05, V-05
1,2,4-Trichlorobenzene	149	10	µg/L	200	ND	74.7		70-130	7.35		30	
1,3,5-Trichlorobenzene	149	10	µg/L	200	ND	74.7		70-130	3.03		30	
1,1,1-Trichloroethane	189	10	µg/L	200	3.20	92.7		70-130	0.687		30	
1,1,2-Trichloroethane	174	10	µg/L	200	ND	87.1		70-130	3.33		30	
Trichloroethylene	338	10	µg/L	200	143	97.8		70-130	2.54		30	
Trichlorofluoromethane (Freon 11)	144	20	µg/L	200	ND	71.8		70-130	1.05		30	
1,2,3-Trichloropropane	171	20	µg/L	200	ND	85.4		70-130	11.0		30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	185	10	µg/L	200	ND	92.6		70-130	4.08		30	
1,2,4-Trimethylbenzene	172	10	µg/L	200	ND	85.9		70-130	3.92		30	
1,3,5-Trimethylbenzene	163	10	µg/L	200	ND	81.4		70-130	3.12		30	
Vinyl Chloride	168	20	µg/L	200	52.8	**57.8**	*	70-130	**50.8**	*	30	MS-07A, R-06
m+p Xylene	335	20	µg/L	400	ND	83.8		70-130	2.57		20	
o-Xylene	166	10	µg/L	200	ND	83.0		70-130	0.786		30	
Surrogate: 1,2-Dichloroethane-d4	*22.0*		µg/L	25.0		88.0		70-130				
Surrogate: Toluene-d8	*24.6*		µg/L	25.0		98.4		70-130				
Surrogate: 4-Bromofluorobenzene	*24.4*		µg/L	25.0		97.7		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).
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.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possiblity of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS

Certified Analyses included in this Report

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

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CERTIFICATIONS

Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

con-test ANALYTICAL LABORATORY
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Email: info@contestlabs.com
www.contestlabs.com
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East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

14D0636

Rev 04.05.12

Page 1 of 1

Company Name: Arcadis - US
Address: 855 rt. 146
Clifton Park NY
Attention:
Project Location: GATES NY
Sampled By: D. Symonds

Telephone: 518-250-7300
Project #: 0266397
Client PO#:

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #:
Email:
Format: ○ PDF ○ EXCEL ○ GIS ○ OTHER
○ "Enhanced Data Package"

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

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	8260	# of Containers	** Preservation	***Container Co
1	MW-08i	3/27 1200	4/16 1230		✓	GW		✓			
2	MW-01	3/27 1230	4/16 1245		✓	GW		✓			
3	MW-07	3/27 1245	4/16 1300		✓	GW		✓			
4	MW-06i	3/27 1300	4/16 1330		✓	GW		✓			
5	MW-06s	3/27 1380	4/16 1330		✓	GW		✓			
6	MW-05	3/27 1330	4/16 1345		✓	GW		✓			
7	MW-02	3/27 1400	4/16 1415		✓	GW		✓			
8	MW-04	3/27 1430	4/16 1500		✓	GW		✓			
9	MW-12	3/27 1500	4/16 1515		✓	GW		✓			
10	Trip Blank										

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=tedlar bag
O=Other

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

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

Comments:

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

Relinquished by: (signature)		Date/Time: 4/16/14 1712
Received by: (signature)	Courier 2.0 ~ 4.17.14	Date/Time: 09:26
Relinquished by: (signature)		Date/Time:
Received by: (signature)		Date/Time:

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

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

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

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

FedEx

805051899620

Ship (P/U) date :
Wed 4/16/2014 5:25 pm
CLI US

Delivered
Signed for by: C.COLLINS

Actual delivery :
Thur 4/17/2014 9:26 am
MA US

Let us tell you when your shipment arrives. Sign up for delivery notifications

Travel History

Date/Time	Activity	Location
- 4/17/2014 - Thursday		
9:26 am	Delivered	MA
7:50 am	On FedEx vehicle for delivery	WINDSOR LOCKS, CT
7:44 am	At local FedEx facility	WINDSOR LOCKS, CT
6:19 am	At destination sort facility	EAST GRANBY, CT
3:11 am	Departed FedEx location	MEMPHIS, TN
- 4/16/2014 - Wednesday		
10:58 pm	Arrived at FedEx location	MEMPHIS, TN
7:50 pm	Left FedEx origin facility	ROCHESTER, NY
5:25 pm	Picked up Tendered at FedEx Office	VICTOR, NY

Local Scan Time

Shipment Facts

Tracking number	805051899620	**Service**	FedEx Priority Overnight
Dimensions	16x13x12 in	**Delivered To**	Receptionist/Front Desk
Total pieces	1	**Packaging**	Your Packaging
Special handling section	Deliver Weekday		

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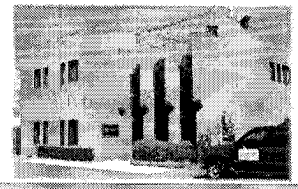

Sample Receipt Checklist

CLIENT NAME: Arcadis US **RECEIVED BY:** CC **DATE:** 4/17/14

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°C 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:** 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	36*	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments: * Sample ID MW-02 has 9 total (3x MW-02, 3x MW-02 MS, and 3x MW-02 MSD), instead of just 3.

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

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

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

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

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** CC **Date/Time:** 4.17.14 9:26

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April 25, 2014

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

Project Location: Gates NY
Client Job Number:
Project Number: 04124094
Laboratory Work Order Number: 14D0694

Enclosed are results of analyses for samples received by the laboratory on April 18, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager

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: 4/25/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 04124094

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0694

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

PROJECT LOCATION: Gates NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-10i	14D0694-01	Ground Water		3810/RSK175	
				ASTM D516-90, 02	
				SM 5310C	
				SM18-20 2320B	
				SM18-20 4500 CL B	
				SM18-20 4500S-F	
				SW-846 6010C	
				SW-846 7470A	
				SW-846 8260C	
MW-10s	14D0694-02	Ground Water		3810/RSK175	
				ASTM D516-90, 02	
				SM 5310C	
				SM18-20 2320B	
				SM18-20 4500 CL B	
				SM18-20 4500S-F	
				SW-846 6010C	
				SW-846 7470A	
				SW-846 8260C	
MW-17s	14D0694-03	Ground Water		SW-846 8260C	
MW-17i	14D0694-04	Ground Water		SW-846 8260C	
MW-03	14D0694-05	Ground Water		3810/RSK175	
				ASTM D516-90, 02	
				SM 5310C	
				SM18-20 2320B	
				SM18-20 4500 CL B	
				SM18-20 4500S-F	
				SW-846 6010C	
				SW-846 7470A	
				SW-846 8260C	
Duplicate	14D0694-06	Ground Water		SW-846 8260C	

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

CASE NARRATIVE SUMMARY

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

SW-846 8260C

Qualifications:

Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:

Vinyl Chloride

14D0694-05[MW-03]

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

Analyte & Samples(s) Qualified:

1,4-Dioxane, Bromoform

B094168-BS1, B094229-BSD1

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

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, Chloromethane, Naphthalene, tert-Butyl Alcohol (TBA)

14D0694-01[MW-10i], 14D0694-02[MW-10s], 14D0694-03[MW-17s], 14D0694-04[MW-17i], 14D0694-05[MW-03], 14D0694-06[Duplicate], B094168-BLK1, B094168-BS1, B094168-BSD1, S005828-CCV1, B094229-BLK1, B094229-BS1, B094229-BSD1, S005833-CCV1

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

14D0694-01[MW-10i], 14D0694-02[MW-10s], 14D0694-03[MW-17s], 14D0694-04[MW-17i], 14D0694-05[MW-03], 14D0694-06[Duplicate]

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

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), Naphthalene

14D0694-01[MW-10i], 14D0694-02[MW-10s], 14D0694-03[MW-17s], 14D0694-04[MW-17i], 14D0694-05[MW-03], 14D0694-06[Duplicate], B094168-BLK1, B094168-BS1, B094168-BSD1, B094229-BLK1, B094229-BS1, B094229-BSD1, S005828-CCV1, S005833-CCV1

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

Analyte & Samples(s) Qualified:

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

14D0694-01[MW-10i], 14D0694-02[MW-10s], 14D0694-03[MW-17s], 14D0694-04[MW-17i], 14D0694-05[MW-03], 14D0694-06[Duplicate], B094168-BLK1, B094168-BS1, B094168-BSD1, B094229-BLK1, B094229-BS1, B094229-BSD1, S005828-CCV1, S005833-CCV1

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:

Bromoform, Bromomethane, Chloromethane

B094168-BS1, B094168-BSD1, B094229-BS1, B094229-BSD1, S005828-CCV1, S005833-CCV1

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10i

Sample ID: 14D0694-01 | Start Date/Time: 3/27/2014 11:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 1:40:00PM

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	25000	2300	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Acrylonitrile	ND	2500	290	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
tert-Amyl Methyl Ether (TAME)	ND	250	46	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Benzene	ND	500	40	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Bromobenzene	ND	500	22	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Bromochloromethane	ND	500	110	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Bromodichloromethane	ND	250	44	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Bromoform	ND	500	100	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Bromomethane	ND	1000	470	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
2-Butanone (MEK)	ND	10000	1200	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
tert-Butyl Alcohol (TBA)	ND	10000	1100	µg/L	500	V-16	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
n-Butylbenzene	ND	500	27	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
sec-Butylbenzene	ND	500	42	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
tert-Butylbenzene	ND	500	48	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	250	38	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Carbon Disulfide	ND	2000	510	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Carbon Tetrachloride	ND	2500	50	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Chlorobenzene	ND	500	60	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Chlorodibromomethane	ND	250	27	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Chloroethane	ND	1000	80	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Chloroform	ND	1000	72	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Chloromethane	ND	1000	160	µg/L	500	R-05	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
2-Chlorotoluene	ND	500	35	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
4-Chlorotoluene	ND	500	37	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	170	µg/L	500	V-05	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2-Dibromoethane (EDB)	ND	250	44	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Dibromomethane	ND	500	35	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2-Dichlorobenzene	ND	500	38	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,3-Dichlorobenzene	ND	500	40	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,4-Dichlorobenzene	ND	500	23	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
trans-1,4-Dichloro-2-butene	ND	1000	60	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Dichlorodifluoromethane (Freon 12)	ND	1000	60	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1-Dichloroethane	2200	500	79	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2-Dichloroethane	ND	2500	97	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1-Dichloroethylene	600	500	100	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
cis-1,2-Dichloroethylene	60000	500	74	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
trans-1,2-Dichloroethylene	ND	500	75	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2-Dichloropropane	ND	500	56	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,3-Dichloropropane	ND	250	50	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
2,2-Dichloropropane	ND	500	36	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1-Dichloropropene	ND	1000	64	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
cis-1,3-Dichloropropene	ND	250	31	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
trans-1,3-Dichloropropene	ND	250	28	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Diethyl Ether	ND	1000	110	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10i

Sample ID: 14D0694-01 | Start Date/Time: 3/27/2014 11:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 1:40:00PM

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	250	90	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,4-Dioxane	ND	25000	13000	µg/L	500	V-16	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Ethylbenzene	75	500	46	µg/L	500	J	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Hexachlorobutadiene	ND	250	85	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
2-Hexanone (MBK)	ND	5000	760	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Isopropylbenzene (Cumene)	ND	500	56	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
p-Isopropyltoluene (p-Cymene)	ND	500	62	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Methyl tert-Butyl Ether (MTBE)	ND	500	45	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Methylene Chloride	ND	2500	1600	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
4-Methyl-2-pentanone (MIBK)	ND	5000	730	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Naphthalene	ND	1000	60	µg/L	500	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
n-Propylbenzene	ND	500	47	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Styrene	ND	500	60	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1,1,2-Tetrachloroethane	ND	500	60	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1,2,2-Tetrachloroethane	ND	250	62	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Tetrachloroethylene	1500	500	40	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Tetrahydrofuran	ND	5000	540	µg/L	500	V-16	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Toluene	2000	500	45	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2,3-Trichlorobenzene	ND	2500	70	µg/L	500	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2,4-Trichlorobenzene	ND	500	59	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,3,5-Trichlorobenzene	ND	500	69	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1,1-Trichloroethane	26000	500	47	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1,2-Trichloroethane	ND	500	58	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Trichloroethylene	8700	500	38	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Trichlorofluoromethane (Freon 11)	ND	1000	74	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2,3-Trichloropropane	ND	1000	60	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	46	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,2,4-Trimethylbenzene	ND	500	90	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
1,3,5-Trimethylbenzene	ND	500	50	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
Vinyl Chloride	1400	1000	66	µg/L	500		SW-846 8260C	4/21/14	4/21/14 14:34	EEH
m+p Xylene	240	1000	90	µg/L	500	J	SW-846 8260C	4/21/14	4/21/14 14:34	EEH
o-Xylene	90	500	55	µg/L	500	J	SW-846 8260C	4/21/14	4/21/14 14:34	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.2	70-130		4/21/14 14:34
Toluene-d8	101	70-130		4/21/14 14:34
4-Bromofluorobenzene	97.7	70-130		4/21/14 14:34

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

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10i

Sample ID: 14D0694-01 | Start Date/Time: 3/27/2014 11:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 1:40:00PM

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.045	0.0028	0.00088	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:18	WSD
Ethene	0.072	0.0038	0.00099	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:18	WSD
Methane	0.86	0.0026	0.0011	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:18	WSD

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

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10i

Sample ID: 14D0694-01 | Start Date/Time: 3/27/2014 11:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 1:40:00PM

Metals Analyses (Dissolved)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.026	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Antimony	ND	0.050	0.030	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:49	OP
Arsenic	ND	0.010	0.0086	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:49	OP
Barium	0.035	0.050	0.015	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 15:32	OP
Beryllium	0.0015	0.0040	0.0010	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 15:32	OP
Cadmium	ND	0.0040	0.0018	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Calcium	320	0.15	0.088	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Chromium	ND	0.010	0.0034	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Cobalt	ND	0.050	0.0075	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Copper	0.032	0.010	0.0050	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Iron	0.070	0.050	0.026	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Lead	ND	0.010	0.0027	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Magnesium	54	0.15	0.037	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Manganese	0.0047	0.010	0.0020	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 15:32	OP
Mercury	ND	0.00010	0.000039	mg/L	1		SW-846 7470A	4/22/14	4/23/14 11:45	JMP
Nickel	ND	0.010	0.0017	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Potassium	12	2.0	0.46	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Selenium	ND	0.050	0.016	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:49	OP
Silver	ND	0.0050	0.0040	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:49	OP
Sodium	88	2.0	1.9	mg/L	1		SW-846 6010C	4/21/14	4/23/14 9:57	OP
Thallium	ND	0.050	0.020	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Vanadium	ND	0.010	0.0040	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP
Zinc	ND	0.020	0.0071	mg/L	1		SW-846 6010C	4/21/14	4/22/14 15:32	OP

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

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10i

Sample ID: 14D0694-01 | Start Date/Time: 3/27/2014 11:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 1:40:00PM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	420	1.0	0.79	mg/L	1		SM18-20 2320B	4/22/14	4/22/14 10:35	VAK
Chloride	150	5.0	3.5	mg/L	5		SM18-20 4500 CL B	4/24/14	4/24/14 14:15	VAK
Sulfate	210	20	16	mg/L	10		ASTM D516-90, 02	4/22/14	4/22/14 12:00	ABH
Sulfide	ND	2.0	1.9	mg/L	1		SM18-20 4500S-F	4/24/14	4/24/14 9:30	LL
Total Organic Carbon	3.6	0.50	0.20	mg/L	1		SM 5310C	4/22/14	4/22/14 9:59	LL

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Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10s

Sample ID: 14D0694-02 | Start Date/Time: 3/27/2014 11:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:45:00PM

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	50000	4700	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Acrylonitrile	ND	5000	580	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	500	91	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Benzene	ND	1000	79	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Bromobenzene	ND	1000	44	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Bromochloromethane	ND	1000	220	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Bromodichloromethane	ND	500	88	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Bromoform	ND	1000	210	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Bromomethane	ND	2000	940	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
2-Butanone (MEK)	ND	20000	2400	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
tert-Butyl Alcohol (TBA)	ND	20000	2200	µg/L	1000	V-16	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
n-Butylbenzene	ND	1000	54	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
sec-Butylbenzene	ND	1000	84	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
tert-Butylbenzene	ND	1000	96	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	500	75	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Carbon Disulfide	ND	4000	1000	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Carbon Tetrachloride	ND	5000	100	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Chlorobenzene	ND	1000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Chlorodibromomethane	ND	500	54	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Chloroethane	ND	2000	160	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Chloroform	ND	2000	140	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Chloromethane	ND	2000	320	µg/L	1000	R-05	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
2-Chlorotoluene	ND	1000	70	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
4-Chlorotoluene	ND	1000	74	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5000	340	µg/L	1000	V-05	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2-Dibromoethane (EDB)	ND	500	89	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Dibromomethane	ND	1000	70	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2-Dichlorobenzene	ND	1000	76	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,3-Dichlorobenzene	ND	1000	79	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,4-Dichlorobenzene	ND	1000	46	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
trans-1,4-Dichloro-2-butene	ND	2000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	2000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1-Dichloroethane	4900	1000	160	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2-Dichloroethane	ND	5000	190	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1-Dichloroethylene	1200	1000	210	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
cis-1,2-Dichloroethylene	82000	1000	150	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
trans-1,2-Dichloroethylene	ND	1000	150	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2-Dichloropropane	ND	1000	110	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,3-Dichloropropane	ND	500	99	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
2,2-Dichloropropane	ND	1000	72	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1-Dichloropropene	ND	2000	130	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
cis-1,3-Dichloropropene	ND	500	62	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
trans-1,3-Dichloropropene	ND	500	56	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Diethyl Ether	ND	2000	220	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10s

Sample ID: 14D0694-02 | Start Date/Time: 3/27/2014 11:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:45:00PM

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	500	180	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,4-Dioxane	ND	50000	26000	µg/L	1000	V-16	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Ethylbenzene	130	1000	92	µg/L	1000	J	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Hexachlorobutadiene	ND	500	170	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
2-Hexanone (MBK)	ND	10000	1500	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Isopropylbenzene (Cumene)	ND	1000	110	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	1000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1000	90	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Methylene Chloride	ND	5000	3200	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	10000	1500	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Naphthalene	ND	2000	120	µg/L	1000	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
n-Propylbenzene	ND	1000	94	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Styrene	ND	1000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1,1,2-Tetrachloroethane	ND	1000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1,2,2-Tetrachloroethane	ND	500	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Tetrachloroethylene	7500	1000	80	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Tetrahydrofuran	ND	10000	1100	µg/L	1000	V-16	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Toluene	6100	1000	90	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2,3-Trichlorobenzene	ND	5000	140	µg/L	1000	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2,4-Trichlorobenzene	ND	1000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,3,5-Trichlorobenzene	ND	1000	140	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1,1-Trichloroethane	63000	1000	94	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1,2-Trichloroethane	ND	1000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Trichloroethylene	61000	1000	77	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Trichlorofluoromethane (Freon 11)	ND	2000	150	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2,3-Trichloropropane	ND	2000	120	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1000	92	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,2,4-Trimethylbenzene	ND	1000	180	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
1,3,5-Trimethylbenzene	ND	1000	100	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
Vinyl Chloride	2100	2000	130	µg/L	1000		SW-846 8260C	4/21/14	4/21/14 15:01	EEH
m+p Xylene	440	2000	180	µg/L	1000	J	SW-846 8260C	4/21/14	4/21/14 15:01	EEH
o-Xylene	140	1000	110	µg/L	1000	J	SW-846 8260C	4/21/14	4/21/14 15:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.7	70-130		4/21/14 15:01
Toluene-d8	100	70-130		4/21/14 15:01
4-Bromofluorobenzene	98.6	70-130		4/21/14 15:01

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10s

Sample ID: 14D0694-02 | Start Date/Time: 3/27/2014 11:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:45:00PM

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.021	0.0028	0.00088	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:31	WSD
Ethene	0.19	0.0038	0.00099	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:31	WSD
Methane	1.3	0.0026	0.0011	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:31	WSD

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

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10s

Sample ID: 14D0694-02 | Start Date/Time: 3/27/2014 11:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:45:00PM

Metals Analyses (Dissolved)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.026	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Antimony	ND	0.050	0.030	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:55	OP
Arsenic	ND	0.010	0.0086	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:55	OP
Barium	0.055	0.050	0.015	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Beryllium	0.0013	0.0040	0.0010	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 14:09	OP
Cadmium	ND	0.0040	0.0018	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Calcium	150	0.15	0.088	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Chromium	ND	0.010	0.0034	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Cobalt	ND	0.050	0.0075	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Copper	0.019	0.010	0.0050	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Iron	ND	0.050	0.026	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Lead	ND	0.010	0.0027	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Magnesium	52	0.15	0.037	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Manganese	0.0071	0.010	0.0020	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 14:09	OP
Mercury	ND	0.00010	0.000039	mg/L	1		SW-846 7470A	4/22/14	4/23/14 11:46	JMP
Nickel	ND	0.010	0.0017	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Potassium	8.5	2.0	0.46	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Selenium	ND	0.050	0.016	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:55	OP
Silver	ND	0.0050	0.0040	mg/L	1		SW-846 6010C	4/21/14	4/22/14 13:55	OP
Sodium	50	2.0	1.9	mg/L	1		SW-846 6010C	4/21/14	4/23/14 10:02	OP
Thallium	ND	0.050	0.020	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Vanadium	0.011	0.010	0.0040	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP
Zinc	ND	0.020	0.0071	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:09	OP

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

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-10s

Sample ID: 14D0694-02 | Start Date/Time: 3/27/2014 11:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:45:00PM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	460	1.0	0.79	mg/L	1		SM18-20 2320B	4/22/14	4/22/14 10:35	VAK
Chloride	140	5.0	3.5	mg/L	5		SM18-20 4500 CL B	4/24/14	4/24/14 14:15	VAK
Sulfate	65	10	8.0	mg/L	5		ASTM D516-90, 02	4/22/14	4/22/14 12:00	ABH
Sulfide	ND	2.0	1.9	mg/L	1		SM18-20 4500S-F	4/24/14	4/24/14 9:30	LL
Total Organic Carbon	6.2	0.50	0.20	mg/L	1		SM 5310C	4/22/14	4/22/14 9:59	LL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-17s

Sample ID: 14D0694-03 | Start Date/Time: 3/27/2014 11:40:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:00:00PM

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	10000	940	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Acrylonitrile	ND	1000	120	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
tert-Amyl Methyl Ether (TAME)	ND	100	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Benzene	ND	200	16	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Bromobenzene	ND	200	8.8	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Bromochloromethane	ND	200	45	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Bromodichloromethane	ND	100	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Bromoform	ND	200	42	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Bromomethane	ND	400	190	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
2-Butanone (MEK)	ND	4000	470	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
tert-Butyl Alcohol (TBA)	ND	4000	430	µg/L	200	V-16	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
n-Butylbenzene	ND	200	11	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
sec-Butylbenzene	ND	200	17	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
tert-Butylbenzene	ND	200	19	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	100	15	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Carbon Disulfide	ND	800	200	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Carbon Tetrachloride	ND	1000	20	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Chlorobenzene	ND	200	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Chlorodibromomethane	ND	100	11	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Chloroethane	ND	400	32	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Chloroform	ND	400	29	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Chloromethane	ND	400	65	µg/L	200	R-05	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
2-Chlorotoluene	ND	200	14	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
4-Chlorotoluene	ND	200	15	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	68	µg/L	200	V-05	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2-Dibromoethane (EDB)	ND	100	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Dibromomethane	ND	200	14	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2-Dichlorobenzene	ND	200	15	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,3-Dichlorobenzene	ND	200	16	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,4-Dichlorobenzene	ND	200	9.2	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
trans-1,4-Dichloro-2-butene	ND	400	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Dichlorodifluoromethane (Freon 12)	ND	400	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1-Dichloroethane	1700	200	32	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2-Dichloroethane	ND	1000	39	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1-Dichloroethylene	350	200	42	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
cis-1,2-Dichloroethylene	27000	200	29	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
trans-1,2-Dichloroethylene	ND	200	30	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2-Dichloropropane	ND	200	22	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,3-Dichloropropane	ND	100	20	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
2,2-Dichloropropane	ND	200	14	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1-Dichloropropene	ND	400	26	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
cis-1,3-Dichloropropene	ND	100	12	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
trans-1,3-Dichloropropene	ND	100	11	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Diethyl Ether	ND	400	44	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-17s

Sample ID: 14D0694-03 | Start Date/Time: 3/27/2014 11:40:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 2:00:00PM

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	100	36	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,4-Dioxane	ND	10000	5300	µg/L	200	V-16	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Ethylbenzene	ND	200	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Hexachlorobutadiene	ND	100	34	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
2-Hexanone (MBK)	ND	2000	300	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Isopropylbenzene (Cumene)	ND	200	23	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
p-Isopropyltoluene (p-Cymene)	ND	200	25	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Methyl tert-Butyl Ether (MTBE)	ND	200	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Methylene Chloride	ND	1000	640	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
4-Methyl-2-pentanone (MIBK)	ND	2000	290	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Naphthalene	ND	400	24	µg/L	200	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
n-Propylbenzene	ND	200	19	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Styrene	ND	200	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1,1,2-Tetrachloroethane	ND	200	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1,2,2-Tetrachloroethane	ND	100	25	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Tetrachloroethylene	ND	200	16	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Tetrahydrofuran	ND	2000	210	µg/L	200	V-16	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Toluene	580	200	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2,3-Trichlorobenzene	ND	1000	28	µg/L	200	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2,4-Trichlorobenzene	ND	200	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,3,5-Trichlorobenzene	ND	200	28	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1,1-Trichloroethane	5100	200	19	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1,2-Trichloroethane	ND	200	23	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Trichloroethylene	130	200	15	µg/L	200	J	SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Trichlorofluoromethane (Freon 11)	ND	400	29	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2,3-Trichloropropane	ND	400	24	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	200	18	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,2,4-Trimethylbenzene	ND	200	36	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
1,3,5-Trimethylbenzene	ND	200	20	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
Vinyl Chloride	410	400	27	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
m+p Xylene	ND	400	36	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH
o-Xylene	ND	200	22	µg/L	200		SW-846 8260C	4/21/14	4/21/14 15:28	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	86.5	70-130		4/21/14 15:28
Toluene-d8	99.7	70-130		4/21/14 15:28
4-Bromofluorobenzene	97.0	70-130		4/21/14 15:28

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-17i

Sample ID: 14D0694-04 | Start Date/Time: 3/27/2014 12:15:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 3:00:00PM

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	47	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Acrylonitrile	ND	50	5.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.91	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Benzene	ND	10	0.79	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Bromobenzene	ND	10	0.44	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Bromochloromethane	ND	10	2.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Bromodichloromethane	ND	5.0	0.88	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Bromoform	ND	10	2.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Bromomethane	ND	20	9.4	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
2-Butanone (MEK)	ND	200	24	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
tert-Butyl Alcohol (TBA)	ND	200	22	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
n-Butylbenzene	ND	10	0.54	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
sec-Butylbenzene	ND	10	0.84	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
tert-Butylbenzene	ND	10	0.96	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	0.75	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Carbon Disulfide	ND	40	10	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Carbon Tetrachloride	ND	50	1.0	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Chlorobenzene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Chlorodibromomethane	ND	5.0	0.54	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Chloroethane	ND	20	1.6	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Chloroform	3.7	20	1.4	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Chloromethane	ND	20	3.2	µg/L	10	R-05	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
2-Chlorotoluene	ND	10	0.70	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
4-Chlorotoluene	ND	10	0.74	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	3.4	µg/L	10	V-05	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2-Dibromoethane (EDB)	ND	5.0	0.89	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Dibromomethane	ND	10	0.70	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2-Dichlorobenzene	ND	10	0.76	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,3-Dichlorobenzene	ND	10	0.79	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,4-Dichlorobenzene	ND	10	0.46	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
trans-1,4-Dichloro-2-butene	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1-Dichloroethane	77	10	1.6	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2-Dichloroethane	ND	50	1.9	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1-Dichloroethylene	11	10	2.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
cis-1,2-Dichloroethylene	1200	10	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
trans-1,2-Dichloroethylene	ND	10	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2-Dichloropropane	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,3-Dichloropropane	ND	5.0	0.99	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
2,2-Dichloropropane	ND	10	0.72	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1-Dichloropropene	ND	20	1.3	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
cis-1,3-Dichloropropene	ND	5.0	0.62	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
trans-1,3-Dichloropropene	ND	5.0	0.56	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Diethyl Ether	ND	20	2.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-17i

Sample ID: 14D0694-04 | Start Date/Time: 3/27/2014 12:15:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 3:00:00PM

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	4/21/14	4/21/14 15:54	EEH
1,4-Dioxane	ND	500	260	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Ethylbenzene	2.6	10	0.92	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Hexachlorobutadiene	ND	5.0	1.7	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
2-Hexanone (MBK)	ND	100	15	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Isopropylbenzene (Cumene)	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	0.90	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Methylene Chloride	ND	50	32	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	15	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Naphthalene	ND	20	1.2	µg/L	10	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
n-Propylbenzene	ND	10	0.94	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Styrene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1,1,2-Tetrachloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1,2,2-Tetrachloroethane	ND	5.0	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Tetrachloroethylene	83	10	0.80	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Tetrahydrofuran	ND	100	11	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Toluene	64	10	0.90	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2,3-Trichlorobenzene	ND	50	1.4	µg/L	10	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2,4-Trichlorobenzene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,3,5-Trichlorobenzene	ND	10	1.4	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1,1-Trichloroethane	230	10	0.94	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1,2-Trichloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Trichloroethylene	110	10	0.77	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Trichlorofluoromethane (Freon 11)	ND	20	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2,3-Trichloropropane	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	0.92	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,2,4-Trimethylbenzene	ND	10	1.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
1,3,5-Trimethylbenzene	ND	10	1.0	µg/L	10		SW-846 8260C	4/21/14	4/21/14 15:54	EEH
Vinyl Chloride	17	20	1.3	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
m+p Xylene	8.8	20	1.8	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 15:54	EEH
o-Xylene	3.2	10	1.1	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 15:54	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	86.8	70-130		4/21/14 15:54
Toluene-d8	98.6	70-130		4/21/14 15:54
4-Bromofluorobenzene	96.2	70-130		4/21/14 15:54

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-03

Sample ID: 14D0694-05 | Start Date/Time: 3/27/2014 10:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 4:00:00PM

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	9.4	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Acrylonitrile	ND	10	1.2	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.18	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Benzene	0.46	2.0	0.16	µg/L	2	J	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Bromobenzene	ND	2.0	0.088	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Bromochloromethane	ND	2.0	0.45	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Bromodichloromethane	ND	1.0	0.18	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Bromoform	ND	2.0	0.42	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Bromomethane	ND	4.0	1.9	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
2-Butanone (MEK)	ND	40	4.7	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
tert-Butyl Alcohol (TBA)	ND	40	4.3	µg/L	2	V-16	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
n-Butylbenzene	ND	2.0	0.11	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
sec-Butylbenzene	ND	2.0	0.17	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
tert-Butylbenzene	ND	2.0	0.19	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.15	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Carbon Disulfide	2.4	8.0	2.0	µg/L	2	J	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Carbon Tetrachloride	ND	10	0.20	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Chlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Chlorodibromomethane	ND	1.0	0.11	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Chloroethane	27	4.0	0.32	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Chloroform	ND	4.0	0.29	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Chloromethane	ND	4.0	0.65	µg/L	2	R-05	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
2-Chlorotoluene	ND	2.0	0.14	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
4-Chlorotoluene	ND	2.0	0.15	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	0.68	µg/L	2	V-05	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.18	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Dibromomethane	ND	2.0	0.14	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2-Dichlorobenzene	ND	2.0	0.15	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,3-Dichlorobenzene	ND	2.0	0.16	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,4-Dichlorobenzene	ND	2.0	0.092	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
trans-1,4-Dichloro-2-butene	ND	4.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1-Dichloroethane	320	2.0	0.32	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2-Dichloroethane	ND	10	0.39	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1-Dichloroethylene	3.1	2.0	0.42	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
cis-1,2-Dichloroethylene	390	2.0	0.29	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
trans-1,2-Dichloroethylene	6.6	2.0	0.30	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2-Dichloropropane	ND	2.0	0.22	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,3-Dichloropropane	ND	1.0	0.20	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
2,2-Dichloropropane	ND	2.0	0.14	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1-Dichloropropene	ND	4.0	0.26	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
cis-1,3-Dichloropropene	ND	1.0	0.12	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
trans-1,3-Dichloropropene	ND	1.0	0.11	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Diethyl Ether	ND	4.0	0.44	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-03

Sample ID: 14D0694-05 | Start Date/Time: 3/27/2014 10:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 4:00:00PM

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	4/21/14	4/21/14 16:22	EEH
1,4-Dioxane	ND	100	53	µg/L	2	V-16	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Ethylbenzene	1.2	2.0	0.18	µg/L	2	J	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Hexachlorobutadiene	ND	1.0	0.34	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
2-Hexanone (MBK)	ND	20	3.0	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.23	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
p-Isopropyltoluene (p-Cymene)	ND	2.0	0.25	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.18	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Methylene Chloride	ND	10	6.4	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.9	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Naphthalene	ND	4.0	0.24	µg/L	2	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
n-Propylbenzene	ND	2.0	0.19	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Styrene	ND	2.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1,1,2-Tetrachloroethane	ND	2.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Tetrachloroethylene	ND	2.0	0.16	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Tetrahydrofuran	ND	20	2.1	µg/L	2	V-16	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Toluene	20	2.0	0.18	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2,3-Trichlorobenzene	ND	10	0.28	µg/L	2	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,3,5-Trichlorobenzene	ND	2.0	0.28	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1,1-Trichloroethane	6.0	2.0	0.19	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1,2-Trichloroethane	ND	2.0	0.23	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Trichloroethylene	1.4	2.0	0.15	µg/L	2	J	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.29	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2,3-Trichloropropane	ND	4.0	0.24	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.18	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,2,4-Trimethylbenzene	ND	2.0	0.36	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
1,3,5-Trimethylbenzene	ND	2.0	0.20	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Vinyl Chloride	390	4.0	0.27	µg/L	2	E	SW-846 8260C	4/21/14	4/21/14 16:22	EEH
Vinyl Chloride	260	40	2.7	µg/L	20		SW-846 8260C	4/22/14	4/22/14 12:53	EEH
m+p Xylene	5.1	4.0	0.36	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH
o-Xylene	2.1	2.0	0.22	µg/L	2		SW-846 8260C	4/21/14	4/21/14 16:22	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.9	70-130		4/21/14 16:22
1,2-Dichloroethane-d4	88.6	70-130		4/22/14 12:53
Toluene-d8	98.0	70-130		4/22/14 12:53
Toluene-d8	99.2	70-130		4/21/14 16:22
4-Bromofluorobenzene	98.5	70-130		4/21/14 16:22
4-Bromofluorobenzene	99.5	70-130		4/22/14 12:53

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-03

Sample ID: 14D0694-05 | Start Date/Time: 3/27/2014 10:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 4:00:00PM

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.022	0.0028	0.00088	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:44	WSD
Ethene	0.29	0.0038	0.00099	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:44	WSD
Methane	0.41	0.0026	0.0011	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:44	WSD

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

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-03

Sample ID: 14D0694-05 | Start Date/Time: 3/27/2014 10:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 4:00:00PM

Metals Analyses (Dissolved)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.026	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Antimony	ND	0.050	0.030	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:01	OP
Arsenic	ND	0.010	0.0086	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:01	OP
Barium	0.089	0.050	0.015	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Beryllium	0.0012	0.0040	0.0010	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 14:15	OP
Cadmium	ND	0.0040	0.0018	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Calcium	96	0.15	0.088	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Chromium	ND	0.010	0.0034	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Cobalt	ND	0.050	0.0075	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Copper	0.014	0.010	0.0050	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Iron	4.5	0.050	0.026	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Lead	ND	0.010	0.0027	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Magnesium	27	0.15	0.037	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Manganese	0.12	0.010	0.0020	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Mercury	ND	0.00010	0.000039	mg/L	1		SW-846 7470A	4/22/14	4/23/14 11:48	JMP
Nickel	ND	0.010	0.0017	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Potassium	1.5	2.0	0.46	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 14:15	OP
Selenium	ND	0.050	0.016	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:01	OP
Silver	ND	0.0050	0.0040	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:01	OP
Sodium	71	2.0	1.9	mg/L	1		SW-846 6010C	4/21/14	4/23/14 10:08	OP
Thallium	ND	0.050	0.020	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Vanadium	0.013	0.010	0.0040	mg/L	1		SW-846 6010C	4/21/14	4/22/14 14:15	OP
Zinc	0.017	0.020	0.0071	mg/L	1	J	SW-846 6010C	4/21/14	4/22/14 14:15	OP

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: MW-03

Sample ID: 14D0694-05 | Start Date/Time: 3/27/2014 10:20:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 4:00:00PM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	340	1.0	0.79	mg/L	1		SM18-20 2320B	4/22/14	4/22/14 10:35	VAK
Chloride	140	5.0	3.5	mg/L	5		SM18-20 4500 CL B	4/24/14	4/24/14 14:15	VAK
Sulfate	42	10	8.0	mg/L	5		ASTM D516-90, 02	4/22/14	4/22/14 12:00	ABH
Sulfide	ND	2.0	1.9	mg/L	1		SM18-20 4500S-F	4/24/14	4/24/14 9:30	LL
Total Organic Carbon	4.1	0.50	0.20	mg/L	1		SM 5310C	4/22/14	4/22/14 9:59	LL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: Duplicate

Sample ID: 14D0694-06 | Start Date/Time: 3/27/2014 12:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 12:00:00AM

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	47	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Acrylonitrile	ND	50	5.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.91	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Benzene	ND	10	0.79	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Bromobenzene	ND	10	0.44	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Bromochloromethane	ND	10	2.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Bromodichloromethane	ND	5.0	0.88	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Bromoform	ND	10	2.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Bromomethane	ND	20	9.4	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
2-Butanone (MEK)	ND	200	24	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
tert-Butyl Alcohol (TBA)	ND	200	22	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
n-Butylbenzene	ND	10	0.54	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
sec-Butylbenzene	ND	10	0.84	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
tert-Butylbenzene	ND	10	0.96	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	0.75	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Carbon Disulfide	ND	40	10	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Carbon Tetrachloride	ND	50	1.0	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Chlorobenzene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Chlorodibromomethane	ND	5.0	0.54	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Chloroethane	ND	20	1.6	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Chloroform	3.3	20	1.4	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Chloromethane	ND	20	3.2	µg/L	10	R-05	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
2-Chlorotoluene	ND	10	0.70	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
4-Chlorotoluene	ND	10	0.74	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	3.4	µg/L	10	V-05	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2-Dibromoethane (EDB)	ND	5.0	0.89	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Dibromomethane	ND	10	0.70	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2-Dichlorobenzene	ND	10	0.76	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,3-Dichlorobenzene	ND	10	0.79	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,4-Dichlorobenzene	ND	10	0.46	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
trans-1,4-Dichloro-2-butene	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1-Dichloroethane	71	10	1.6	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2-Dichloroethane	ND	50	1.9	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1-Dichloroethylene	9.5	10	2.1	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
cis-1,2-Dichloroethylene	1100	10	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
trans-1,2-Dichloroethylene	ND	10	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2-Dichloropropane	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,3-Dichloropropane	ND	5.0	0.99	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
2,2-Dichloropropane	ND	10	0.72	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1-Dichloropropene	ND	20	1.3	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
cis-1,3-Dichloropropene	ND	5.0	0.62	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
trans-1,3-Dichloropropene	ND	5.0	0.56	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Diethyl Ether	ND	20	2.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates NY | Sample Description: | Work Order: 14D0694

Date Received: 4/18/2014

Field Sample #: Duplicate

Sample ID: 14D0694-06 | Start Date/Time: 3/27/2014 12:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/17/2014 12:00:00AM

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	4/21/14	4/21/14 16:48	EEH
1,4-Dioxane	ND	500	260	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Ethylbenzene	2.2	10	0.92	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Hexachlorobutadiene	ND	5.0	1.7	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
2-Hexanone (MBK)	ND	100	15	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Isopropylbenzene (Cumene)	ND	10	1.1	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	0.90	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Methylene Chloride	ND	50	32	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	15	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Naphthalene	ND	20	1.2	µg/L	10	V-05, R-05	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
n-Propylbenzene	ND	10	0.94	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Styrene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1,1,2-Tetrachloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1,2,2-Tetrachloroethane	ND	5.0	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Tetrachloroethylene	70	10	0.80	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Tetrahydrofuran	ND	100	11	µg/L	10	V-16	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Toluene	57	10	0.90	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2,3-Trichlorobenzene	ND	50	1.4	µg/L	10	R-05, V-05	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2,4-Trichlorobenzene	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,3,5-Trichlorobenzene	ND	10	1.4	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1,1-Trichloroethane	200	10	0.94	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1,2-Trichloroethane	ND	10	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Trichloroethylene	95	10	0.77	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Trichlorofluoromethane (Freon 11)	ND	20	1.5	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2,3-Trichloropropane	ND	20	1.2	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	0.92	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,2,4-Trimethylbenzene	ND	10	1.8	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
1,3,5-Trimethylbenzene	ND	10	1.0	µg/L	10		SW-846 8260C	4/21/14	4/21/14 16:48	EEH
Vinyl Chloride	16	20	1.3	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
m+p Xylene	7.6	20	1.8	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 16:48	EEH
o-Xylene	2.7	10	1.1	µg/L	10	J	SW-846 8260C	4/21/14	4/21/14 16:48	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	87.2	70-130		4/21/14	16:48
Toluene-d8	99.4	70-130		4/21/14	16:48
4-Bromofluorobenzene	97.6	70-130		4/21/14	16:48

con-test® ANALYTICAL LABORATORY
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Sample Extraction Data

3810/RSK175

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094299	1.00	1.00	04/22/14
14D0694-02 [MW-10s]	B094299	1.00	1.00	04/22/14
14D0694-05 [MW-03]	B094299	1.00	1.00	04/22/14

ASTM D516-90, 02

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094289	10.0	100	04/22/14
14D0694-02 [MW-10s]	B094289	20.0	100	04/22/14
14D0694-05 [MW-03]	B094289	20.0	100	04/22/14

SM 5310C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094237	50.0	50.0	04/22/14
14D0694-02 [MW-10s]	B094237	50.0	50.0	04/22/14
14D0694-05 [MW-03]	B094237	50.0	50.0	04/22/14

SM18-20 2320B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094261	100	100	04/22/14
14D0694-02 [MW-10s]	B094261	100	100	04/22/14
14D0694-05 [MW-03]	B094261	100	100	04/22/14

SM18-20 4500 CL B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094436	100	100	04/24/14
14D0694-02 [MW-10s]	B094436	100	100	04/24/14
14D0694-05 [MW-03]	B094436	100	100	04/24/14

SM18-20 4500S-F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094397	100	100	04/24/14
14D0694-02 [MW-10s]	B094397	100	100	04/24/14
14D0694-05 [MW-03]	B094397	100	100	04/24/14

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094222	50.0	50.0	04/21/14
14D0694-02 [MW-10s]	B094222	50.0	50.0	04/21/14
14D0694-05 [MW-03]	B094222	50.0	50.0	04/21/14

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Sample Extraction Data

Prep Method: SW-846 7470A Prep-SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094300	6.00	6.00	04/22/14
14D0694-02 [MW-10s]	B094300	6.00	6.00	04/22/14
14D0694-05 [MW-03]	B094300	6.00	6.00	04/22/14

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-01 [MW-10i]	B094168	0.01	5.00	04/21/14
14D0694-02 [MW-10s]	B094168	0.005	5.00	04/21/14
14D0694-03 [MW-17s]	B094168	0.025	5.00	04/21/14
14D0694-04 [MW-17i]	B094168	0.5	5.00	04/21/14
14D0694-05 [MW-03]	B094168	2.5	5.00	04/21/14
14D0694-06 [Duplicate]	B094168	0.5	5.00	04/21/14

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0694-05RE1 [MW-03]	B094229	0.25	5.00	04/22/14

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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 B094168 - SW-846 5030B										
Blank (B094168-BLK1)				Prepared & Analyzed: 04/21/14						
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							R-05
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	5.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

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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 B094168 - SW-846 5030B												
Blank (B094168-BLK1)				Prepared & Analyzed: 04/21/14								
Methylene Chloride	ND	5.0	µg/L									
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L									
Naphthalene	ND	2.0	µg/L								R-05, V-05	
n-Propylbenzene	ND	1.0	µg/L									
Styrene	ND	1.0	µg/L									
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L									
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L									
Tetrachloroethylene	ND	1.0	µg/L									
Tetrahydrofuran	ND	10	µg/L								V-16	
Toluene	ND	1.0	µg/L									
1,2,3-Trichlorobenzene	ND	5.0	µg/L								R-05, V-05	
1,2,4-Trichlorobenzene	ND	1.0	µg/L									
1,3,5-Trichlorobenzene	ND	1.0	µg/L									
1,1,1-Trichloroethane	ND	1.0	µg/L									
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	*21.8*		µg/L	25.0		87.1		70-130				
Surrogate: Toluene-d8	*25.9*		µg/L	25.0		103		70-130				
Surrogate: 4-Bromofluorobenzene	*25.0*		µg/L	25.0		100		70-130				
LCS (B094168-BS1)				Prepared & Analyzed: 04/21/14								
Acetone	81.6	50	µg/L	100		81.6		70-160				†
Acrylonitrile	10.1	5.0	µg/L	10.0		101		70-130				
tert-Amyl Methyl Ether (TAME)	10.3	0.50	µg/L	10.0		103		70-130				
Benzene	11.8	1.0	µg/L	10.0		118		70-130				
Bromobenzene	10.8	1.0	µg/L	10.0		108		70-130				
Bromochloromethane	11.9	1.0	µg/L	10.0		119		70-130				
Bromodichloromethane	10.3	0.50	µg/L	10.0		103		70-130				
Bromoform	13.7	1.0	µg/L	10.0		**137**	*	70-130			L-07, V-20	
Bromomethane	7.19	2.0	µg/L	10.0		71.9		40-160				†
2-Butanone (MEK)	109	20	µg/L	100		109		40-160				†
tert-Butyl Alcohol (TBA)	100	20	µg/L	100		100		40-160			V-16	†
n-Butylbenzene	11.6	1.0	µg/L	10.0		116		70-130				
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109		70-130				
tert-Butylbenzene	10.8	1.0	µg/L	10.0		108		70-130				
tert-Butyl Ethyl Ether (TBEE)	11.4	0.50	µg/L	10.0		114		70-130				
Carbon Disulfide	12.7	4.0	µg/L	10.0		127		70-130				
Carbon Tetrachloride	11.0	5.0	µg/L	10.0		110		70-130				
Chlorobenzene	10.4	1.0	µg/L	10.0		104		70-130				
Chlorodibromomethane	10.0	0.50	µg/L	10.0		100		70-130				
Chloroethane	10.9	2.0	µg/L	10.0		109		70-130				
Chloroform	10.6	2.0	µg/L	10.0		106		70-130				
Chloromethane	9.64	2.0	µg/L	10.0		96.4		40-160			R-05, V-20	†
2-Chlorotoluene	9.68	1.0	µg/L	10.0		96.8		70-130				

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B094168 - SW-846 5030B												
LCS (B094168-BS1)				Prepared & Analyzed: 04/21/14								
4-Chlorotoluene	10.7	1.0	µg/L	10.0		107		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	11.1	5.0	µg/L	10.0		111		70-130			V-05	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110		70-130				
Dibromomethane	10.6	1.0	µg/L	10.0		106		70-130				
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106		70-130				
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105		70-130				
1,4-Dichlorobenzene	10.8	1.0	µg/L	10.0		108		70-130				
trans-1,4-Dichloro-2-butene	10.5	2.0	µg/L	10.0		105		70-130				
Dichlorodifluoromethane (Freon 12)	9.94	2.0	µg/L	10.0		99.4		40-160				†
1,1-Dichloroethane	12.0	1.0	µg/L	10.0		120		70-130				
1,2-Dichloroethane	9.47	5.0	µg/L	10.0		94.7		70-130				
1,1-Dichloroethylene	9.25	1.0	µg/L	10.0		92.5		70-130				
cis-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0		108		70-130				
trans-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0		114		70-130				
1,2-Dichloropropane	11.8	1.0	µg/L	10.0		118		70-130				
1,3-Dichloropropane	11.2	0.50	µg/L	10.0		112		70-130				
2,2-Dichloropropane	11.3	1.0	µg/L	10.0		113		40-130				†
1,1-Dichloropropene	11.6	2.0	µg/L	10.0		116		70-130				
cis-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109		70-130				
trans-1,3-Dichloropropene	11.4	0.50	µg/L	10.0		114		70-130				
Diethyl Ether	10.7	2.0	µg/L	10.0		107		70-130				
Diisopropyl Ether (DIPE)	11.1	0.50	µg/L	10.0		111		70-130				
1,4-Dioxane	147	50	µg/L	100		**147**	*	40-130			L-07, V-16	†
Ethylbenzene	11.2	1.0	µg/L	10.0		112		70-130				
Hexachlorobutadiene	11.8	0.50	µg/L	10.0		118		70-130				
2-Hexanone (MBK)	110	10	µg/L	100		110		70-160				†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0		103		70-130				
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114		70-130				
Methyl tert-Butyl Ether (MTBE)	11.4	1.0	µg/L	10.0		114		70-130				
Methylene Chloride	11.0	5.0	µg/L	10.0		110		70-130				
4-Methyl-2-pentanone (MIBK)	110	10	µg/L	100		110		70-160				†
Naphthalene	11.7	2.0	µg/L	10.0		117		40-130			R-05, V-05	†
n-Propylbenzene	11.0	1.0	µg/L	10.0		110		70-130				
Styrene	11.2	1.0	µg/L	10.0		112		70-130				
1,1,1,2-Tetrachloroethane	11.0	1.0	µg/L	10.0		110		70-130				
1,1,2,2-Tetrachloroethane	11.9	0.50	µg/L	10.0		119		70-130				
Tetrachloroethylene	11.0	1.0	µg/L	10.0		110		70-130				
Tetrahydrofuran	12.5	10	µg/L	10.0		125		70-130			V-16	
Toluene	10.6	1.0	µg/L	10.0		106		70-130				
1,2,3-Trichlorobenzene	11.1	5.0	µg/L	10.0		111		70-130			V-05, R-05	
1,2,4-Trichlorobenzene	11.3	1.0	µg/L	10.0		113		70-130				
1,3,5-Trichlorobenzene	11.1	1.0	µg/L	10.0		111		70-130				
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108		70-130				
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0		110		70-130				
Trichloroethylene	10.9	1.0	µg/L	10.0		109		70-130				
Trichlorofluoromethane (Freon 11)	8.37	2.0	µg/L	10.0		83.7		70-130				
1,2,3-Trichloropropane	11.4	2.0	µg/L	10.0		114		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2	1.0	µg/L	10.0		112		70-130				
1,2,4-Trimethylbenzene	11.2	1.0	µg/L	10.0		112		70-130				
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.0		107		70-130				
Vinyl Chloride	6.90	2.0	µg/L	10.0		69.0		40-160				†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B094168 - SW-846 5030B											
LCS (B094168-BS1)				Prepared & Analyzed: 04/21/14							
m+p Xylene	21.1	2.0	µg/L	20.0		105	70-130				
o-Xylene	10.5	1.0	µg/L	10.0		105	70-130				
Surrogate: 1,2-Dichloroethane-d4	*22.3*		µg/L	25.0		89.1	70-130				
Surrogate: Toluene-d8	*24.4*		µg/L	25.0		97.5	70-130				
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/L	25.0		96.8	70-130				
LCS Dup (B094168-BSD1)				Prepared & Analyzed: 04/21/14							
Acetone	77.9	50	µg/L	100		77.9	70-160	4.68	25		†
Acrylonitrile	9.46	5.0	µg/L	10.0		94.6	70-130	6.15	25		
tert-Amyl Methyl Ether (TAME)	9.85	0.50	µg/L	10.0		98.5	70-130	4.76	25		
Benzene	11.7	1.0	µg/L	10.0		117	70-130	1.45	25		
Bromobenzene	11.0	1.0	µg/L	10.0		110	70-130	2.01	25		
Bromochloromethane	12.8	1.0	µg/L	10.0		128	70-130	7.38	25		
Bromodichloromethane	10.7	0.50	µg/L	10.0		107	70-130	3.52	25		
Bromoform	12.9	1.0	µg/L	10.0		129	70-130	5.86	25	V-20	
Bromomethane	7.90	2.0	µg/L	10.0		79.0	40-160	9.41	25		†
2-Butanone (MEK)	88.7	20	µg/L	100		88.7	40-160	20.4	25		†
tert-Butyl Alcohol (TBA)	91.2	20	µg/L	100		91.2	40-160	9.61	25	V-16	†
n-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130	1.04	25		
sec-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	0.183	25		
tert-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	1.48	25		
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130	6.50	25		
Carbon Disulfide	12.7	4.0	µg/L	10.0		127	70-130	0.0785	25		
Carbon Tetrachloride	11.1	5.0	µg/L	10.0		111	70-130	0.724	25		
Chlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.36	25		
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130	2.85	25		
Chloroethane	11.3	2.0	µg/L	10.0		113	70-130	3.07	25		
Chloroform	11.0	2.0	µg/L	10.0		110	70-130	3.41	25		
Chloromethane	12.4	2.0	µg/L	10.0		124	40-160	**25.2**	* 25	R-05, V-20	†
2-Chlorotoluene	9.71	1.0	µg/L	10.0		97.1	70-130	0.309	25		
4-Chlorotoluene	10.7	1.0	µg/L	10.0		107	70-130	0.468	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.64	5.0	µg/L	10.0		86.4	70-130	24.7	25	V-05	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110	70-130	0.182	25		
Dibromomethane	11.1	1.0	µg/L	10.0		111	70-130	4.41	25		
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	1.72	25		
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.190	25		
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	1.30	25		
trans-1,4-Dichloro-2-butene	9.62	2.0	µg/L	10.0		96.2	70-130	9.13	25		
Dichlorodifluoromethane (Freon 12)	10.7	2.0	µg/L	10.0		107	40-160	6.99	25		†
1,1-Dichloroethane	12.6	1.0	µg/L	10.0		126	70-130	4.62	25		
1,2-Dichloroethane	9.90	5.0	µg/L	10.0		99.0	70-130	4.44	25		
1,1-Dichloroethylene	9.92	1.0	µg/L	10.0		99.2	70-130	6.99	25		
cis-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0		115	70-130	5.75	25		
trans-1,2-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130	4.62	25		
1,2-Dichloropropane	11.8	1.0	µg/L	10.0		118	70-130	0.677	25		
1,3-Dichloropropane	11.0	0.50	µg/L	10.0		110	70-130	2.34	25		
2,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	40-130	1.06	25		†
1,1-Dichloropropene	11.4	2.0	µg/L	10.0		114	70-130	1.13	25		
cis-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130	0.275	25		
trans-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116	70-130	1.30	25		
Diethyl Ether	9.94	2.0	µg/L	10.0		99.4	70-130	7.46	25		
Diisopropyl Ether (DIPE)	10.8	0.50	µg/L	10.0		108	70-130	2.84	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 B094168 - SW-846 5030B												
LCS Dup (B094168-BSD1)				Prepared & Analyzed: 04/21/14								
1,4-Dioxane	127	50	µg/L	100		127	40-130	14.5		50	V-16	† ‡
Ethylbenzene	11.2	1.0	µg/L	10.0		112	70-130	0.0896		25		
Hexachlorobutadiene	11.5	0.50	µg/L	10.0		115	70-130	2.82		25		
2-Hexanone (MBK)	97.2	10	µg/L	100		97.2	70-160	12.2		25		†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0		104	70-130	1.16		25		
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130	0.527		25		
Methyl tert-Butyl Ether (MTBE)	10.4	1.0	µg/L	10.0		104	70-130	8.98		25		
Methylene Chloride	12.6	5.0	µg/L	10.0		126	70-130	13.6		25		
4-Methyl-2-pentanone (MIBK)	96.0	10	µg/L	100		96.0	70-160	13.2		25		†
Naphthalene	8.71	2.0	µg/L	10.0		87.1	40-130	**29.3**	*	25	R-05, V-05	†
n-Propylbenzene	11.0	1.0	µg/L	10.0		110	70-130	0.182		25		
Styrene	11.1	1.0	µg/L	10.0		111	70-130	0.810		25		
1,1,1,2-Tetrachloroethane	10.5	1.0	µg/L	10.0		105	70-130	4.37		25		
1,1,2,2-Tetrachloroethane	10.5	0.50	µg/L	10.0		105	70-130	12.7		25		
Tetrachloroethylene	11.4	1.0	µg/L	10.0		114	70-130	3.49		25		
Tetrahydrofuran	11.6	10	µg/L	10.0		116	70-130	7.79		25	V-16	
Toluene	11.3	1.0	µg/L	10.0		113	70-130	6.58		25		
1,2,3-Trichlorobenzene	8.50	5.0	µg/L	10.0		85.0	70-130	**26.5**	*	25	R-05, V-05	
1,2,4-Trichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130	16.0		25		
1,3,5-Trichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	4.69		25		
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130	0.649		25		
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0		107	70-130	3.32		25		
Trichloroethylene	11.0	1.0	µg/L	10.0		110	70-130	0.183		25		
Trichlorofluoromethane (Freon 11)	9.03	2.0	µg/L	10.0		90.3	70-130	7.59		25		
1,2,3-Trichloropropane	10.4	2.0	µg/L	10.0		104	70-130	9.17		25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.4	1.0	µg/L	10.0		114	70-130	2.65		25		
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130	1.72		25		
1,3,5-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	1.89		25		
Vinyl Chloride	8.01	2.0	µg/L	10.0		80.1	40-160	14.9		25		†
m+p Xylene	20.7	2.0	µg/L	20.0		103	70-130	1.87		25		
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130	0.575		25		
Surrogate: 1,2-Dichloroethane-d4	*22.2*		µg/L	25.0		88.9	70-130					
Surrogate: Toluene-d8	*25.6*		µg/L	25.0		102	70-130					
Surrogate: 4-Bromofluorobenzene	*24.5*		µg/L	25.0		98.2	70-130					
Batch B094229 - SW-846 5030B												
Blank (B094229-BLK1)				Prepared & Analyzed: 04/22/14								
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								R-05, V-16	
n-Butylbenzene	ND	1.0	µg/L									
sec-Butylbenzene	ND	1.0	µg/L									
tert-Butylbenzene	ND	1.0	µg/L									

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094229 - SW-846 5030B										
Blank (B094229-BLK1)				Prepared & Analyzed: 04/22/14						
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	5.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
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							V-16
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							V-05
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B094229 - SW-846 5030B											
Blank (B094229-BLK1)				Prepared & Analyzed: 04/22/14							
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	*22.3*		µg/L	25.0		89.4	70-130				
Surrogate: Toluene-d8	*24.7*		µg/L	25.0		98.7	70-130				
Surrogate: 4-Bromofluorobenzene	*24.7*		µg/L	25.0		98.7	70-130				
LCS (B094229-BS1)				Prepared & Analyzed: 04/22/14							
Acetone	75.6	50	µg/L	100		75.6	70-160				†
Acrylonitrile	9.58	5.0	µg/L	10.0		95.8	70-130				
tert-Amyl Methyl Ether (TAME)	9.92	0.50	µg/L	10.0		99.2	70-130				
Benzene	11.4	1.0	µg/L	10.0		114	70-130				
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130				
Bromochloromethane	12.4	1.0	µg/L	10.0		124	70-130				
Bromodichloromethane	10.6	0.50	µg/L	10.0		106	70-130				
Bromoform	11.7	1.0	µg/L	10.0		117	70-130			V-20	
Bromomethane	6.13	2.0	µg/L	10.0		61.3	40-160			V-20	†
2-Butanone (MEK)	91.6	20	µg/L	100		91.6	40-160				†
tert-Butyl Alcohol (TBA)	72.5	20	µg/L	100		72.5	40-160			R-05, V-16	†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130				
sec-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130				
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130				
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130				
Carbon Disulfide	12.2	4.0	µg/L	10.0		122	70-130				
Carbon Tetrachloride	10.7	5.0	µg/L	10.0		107	70-130				
Chlorobenzene	9.89	1.0	µg/L	10.0		98.9	70-130				
Chlorodibromomethane	9.95	0.50	µg/L	10.0		99.5	70-130				
Chloroethane	10.6	2.0	µg/L	10.0		106	70-130				
Chloroform	10.8	2.0	µg/L	10.0		108	70-130				
Chloromethane	9.75	2.0	µg/L	10.0		97.5	40-160			V-20	†
2-Chlorotoluene	9.69	1.0	µg/L	10.0		96.9	70-130				
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.56	5.0	µg/L	10.0		85.6	70-130				
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0		103	70-130				
Dibromomethane	10.4	1.0	µg/L	10.0		104	70-130				
1,2-Dichlorobenzene	9.61	1.0	µg/L	10.0		96.1	70-130				
1,3-Dichlorobenzene	9.81	1.0	µg/L	10.0		98.1	70-130				
1,4-Dichlorobenzene	9.96	1.0	µg/L	10.0		99.6	70-130				
trans-1,4-Dichloro-2-butene	9.45	2.0	µg/L	10.0		94.5	70-130				
Dichlorodifluoromethane (Freon 12)	8.70	2.0	µg/L	10.0		87.0	40-160				†
1,1-Dichloroethane	12.3	1.0	µg/L	10.0		123	70-130				
1,2-Dichloroethane	9.61	5.0	µg/L	10.0		96.1	70-130				
1,1-Dichloroethylene	9.74	1.0	µg/L	10.0		97.4	70-130				
cis-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130				
trans-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0		116	70-130				

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B094229 - SW-846 5030B											
LCS (B094229-BS1)				Prepared & Analyzed: 04/22/14							
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130				
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130				
2,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	40-130				†
1,1-Dichloropropene	10.8	2.0	µg/L	10.0		108	70-130				
cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130				
trans-1,3-Dichloropropene	11.1	0.50	µg/L	10.0		111	70-130				
Diethyl Ether	9.83	2.0	µg/L	10.0		98.3	70-130				
Diisopropyl Ether (DIPE)	10.7	0.50	µg/L	10.0		107	70-130				
1,4-Dioxane	125	50	µg/L	100		125	40-130			V-16	†
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130				
Hexachlorobutadiene	10.3	0.50	µg/L	10.0		103	70-130				
2-Hexanone (MBK)	99.5	10	µg/L	100		99.5	70-160				†
Isopropylbenzene (Cumene)	9.84	1.0	µg/L	10.0		98.4	70-130				
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130				
Methyl tert-Butyl Ether (MTBE)	10.4	1.0	µg/L	10.0		104	70-130				
Methylene Chloride	12.9	5.0	µg/L	10.0		129	70-130				
4-Methyl-2-pentanone (MIBK)	97.1	10	µg/L	100		97.1	70-160				†
Naphthalene	8.53	2.0	µg/L	10.0		85.3	40-130				†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130				
Styrene	10.8	1.0	µg/L	10.0		108	70-130				
1,1,1,2-Tetrachloroethane	9.65	1.0	µg/L	10.0		96.5	70-130				
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130				
Tetrachloroethylene	11.1	1.0	µg/L	10.0		111	70-130				
Tetrahydrofuran	10.8	10	µg/L	10.0		108	70-130			V-16	
Toluene	11.1	1.0	µg/L	10.0		111	70-130				
1,2,3-Trichlorobenzene	8.09	5.0	µg/L	10.0		80.9	70-130			V-05	
1,2,4-Trichlorobenzene	8.98	1.0	µg/L	10.0		89.8	70-130				
1,3,5-Trichlorobenzene	9.69	1.0	µg/L	10.0		96.9	70-130				
1,1,1-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130				
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130				
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130				
Trichlorofluoromethane (Freon 11)	8.81	2.0	µg/L	10.0		88.1	70-130				
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.0	1.0	µg/L	10.0		110	70-130				
1,2,4-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130				
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130				
Vinyl Chloride	7.53	2.0	µg/L	10.0		75.3	40-160				†
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130				
o-Xylene	10.2	1.0	µg/L	10.0		102	70-130				
Surrogate: 1,2-Dichloroethane-d4	*23.2*		µg/L	25.0		92.7	70-130				
Surrogate: Toluene-d8	*25.3*		µg/L	25.0		101	70-130				
Surrogate: 4-Bromofluorobenzene	*24.3*		µg/L	25.0		97.3	70-130				

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes	
Batch B094229 - SW-846 5030B												
LCS Dup (B094229-BSD1)				Prepared & Analyzed: 04/22/14								
Acetone	89.0	50	µg/L	100		89.0	70-160	16.3		25		†
Acrylonitrile	10.4	5.0	µg/L	10.0		104	70-130	8.40		25		
tert-Amyl Methyl Ether (TAME)	9.67	0.50	µg/L	10.0		96.7	70-130	2.55		25		
Benzene	11.0	1.0	µg/L	10.0		110	70-130	4.11		25		
Bromobenzene	9.95	1.0	µg/L	10.0		99.5	70-130	4.42		25		
Bromochloromethane	11.6	1.0	µg/L	10.0		116	70-130	6.77		25		
Bromodichloromethane	9.45	0.50	µg/L	10.0		94.5	70-130	11.3		25		
Bromoform	11.9	1.0	µg/L	10.0		119	70-130	2.12		25	V-20	
Bromomethane	6.25	2.0	µg/L	10.0		62.5	40-160	1.94		25	V-20	†
2-Butanone (MEK)	112	20	µg/L	100		112	40-160	20.3		25		†
tert-Butyl Alcohol (TBA)	101	20	µg/L	100		101	40-160	**32.5**	*	25	R-05, V-16	†
n-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	4.87		25		
sec-Butylbenzene	9.66	1.0	µg/L	10.0		96.6	70-130	5.63		25		
tert-Butylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130	2.97		25		
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	µg/L	10.0		109	70-130	1.20		25		
Carbon Disulfide	11.0	4.0	µg/L	10.0		110	70-130	10.3		25		
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102	70-130	4.67		25		
Chlorobenzene	9.52	1.0	µg/L	10.0		95.2	70-130	3.81		25		
Chlorodibromomethane	9.73	0.50	µg/L	10.0		97.3	70-130	2.24		25		
Chloroethane	9.93	2.0	µg/L	10.0		99.3	70-130	6.62		25		
Chloroform	10.1	2.0	µg/L	10.0		101	70-130	6.79		25		
Chloromethane	9.13	2.0	µg/L	10.0		91.3	40-160	6.57		25	V-20	†
2-Chlorotoluene	9.04	1.0	µg/L	10.0		90.4	70-130	6.94		25		
4-Chlorotoluene	9.70	1.0	µg/L	10.0		97.0	70-130	4.04		25		
1,2-Dibromo-3-chloropropane (DBCP)	10.5	5.0	µg/L	10.0		105	70-130	20.0		25		
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0		104	70-130	0.962		25		
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130	3.21		25		
1,2-Dichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130	0.104		25		
1,3-Dichlorobenzene	9.26	1.0	µg/L	10.0		92.6	70-130	5.77		25		
1,4-Dichlorobenzene	9.66	1.0	µg/L	10.0		96.6	70-130	3.06		25		
trans-1,4-Dichloro-2-butene	10.5	2.0	µg/L	10.0		105	70-130	10.3		25		
Dichlorodifluoromethane (Freon 12)	7.81	2.0	µg/L	10.0		78.1	40-160	10.8		25		†
1,1-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130	4.90		25		
1,2-Dichloroethane	9.22	5.0	µg/L	10.0		92.2	70-130	4.14		25		
1,1-Dichloroethylene	9.04	1.0	µg/L	10.0		90.4	70-130	7.45		25		
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130	6.31		25		
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	5.78		25		
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130	1.42		25		
1,3-Dichloropropane	10.7	0.50	µg/L	10.0		107	70-130	0.841		25		
2,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	40-130	7.71		25		†
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130	1.02		25		
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	3.38		25		
trans-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130	1.27		25		
Diethyl Ether	10.4	2.0	µg/L	10.0		104	70-130	5.73		25		
Diisopropyl Ether (DIPE)	10.6	0.50	µg/L	10.0		106	70-130	0.470		25		
1,4-Dioxane	140	50	µg/L	100		**140**	40-130	11.1		50	L-07, V-16	† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	3.96		25		
Hexachlorobutadiene	10.0	0.50	µg/L	10.0		100	70-130	2.84		25		
2-Hexanone (MBK)	113	10	µg/L	100		113	70-160	12.5		25		†
Isopropylbenzene (Cumene)	9.62	1.0	µg/L	10.0		96.2	70-130	2.26		25		
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.0		101	70-130	6.13		25		
Methyl tert-Butyl Ether (MTBE)	11.1	1.0	µg/L	10.0		111	70-130	6.52		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 B094229 - SW-846 5030B											
LCS Dup (B094229-BSD1)				Prepared & Analyzed: 04/22/14							
Methylene Chloride	12.9	5.0	µg/L	10.0		129	70-130	0.0774	25		
4-Methyl-2-pentanone (MIBK)	107	10	µg/L	100		107	70-160	9.98	25		†
Naphthalene	10.9	2.0	µg/L	10.0		109	40-130	24.8	25		†
n-Propylbenzene	10.1	1.0	µg/L	10.0		101	70-130	1.87	25		
Styrene	9.97	1.0	µg/L	10.0		99.7	70-130	7.71	25		
1,1,1,2-Tetrachloroethane	10.0	1.0	µg/L	10.0		100	70-130	3.56	25		
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110	70-130	5.82	25		
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	8.44	25		
Tetrahydrofuran	12.2	10	µg/L	10.0		122	70-130	12.5	25	V-16	
Toluene	10.1	1.0	µg/L	10.0		101	70-130	9.65	25		
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103	70-130	24.1	25	V-05	
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	13.2	25		
1,3,5-Trichlorobenzene	9.70	1.0	µg/L	10.0		97.0	70-130	0.103	25		
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	3.38	25		
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0		106	70-130	0.570	25		
Trichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	2.40	25		
Trichlorofluoromethane (Freon 11)	7.94	2.0	µg/L	10.0		79.4	70-130	10.4	25		
1,2,3-Trichloropropane	11.1	2.0	µg/L	10.0		111	70-130	8.48	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4	1.0	µg/L	10.0		104	70-130	5.99	25		
1,2,4-Trimethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	2.31	25		
1,3,5-Trimethylbenzene	9.70	1.0	µg/L	10.0		97.0	70-130	0.617	25		
Vinyl Chloride	6.68	2.0	µg/L	10.0		66.8	40-160	12.0	25		†
m+p Xylene	19.3	2.0	µg/L	20.0		96.6	70-130	4.85	25		
o-Xylene	9.52	1.0	µg/L	10.0		95.2	70-130	6.41	25		
Surrogate: 1,2-Dichloroethane-d4	*23.2*		µg/L	25.0		92.6	70-130				
Surrogate: Toluene-d8	*24.8*		µg/L	25.0		99.1	70-130				
Surrogate: 4-Bromofluorobenzene	*24.9*		µg/L	25.0		99.4	70-130				

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QUALITY CONTROL

Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094299 - 3810/RSK175										
Blank (B094299-BLK1)				Prepared & Analyzed: 04/22/14						
Ethane	ND	0.0028	mg/L							
Ethene	ND	0.0038	mg/L							
Methane	ND	0.0026	mg/L							
LCS (B094299-BS1)				Prepared & Analyzed: 04/22/14						
Ethane	2200		mg/L	2000		110	60-122			
Ethene	2200		mg/L	2000		111	67-113			
Methane	2100		mg/L	2000		107	56-121			

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094222 - SW-846 3005A Dissolved										
Blank (B094222-BLK1)				Prepared: 04/21/14 Analyzed: 04/22/14						
Aluminum	ND	0.050	mg/L							
Antimony	ND	0.050	mg/L							
Arsenic	ND	0.010	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.15	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.050	mg/L							
Copper	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Lead	ND	0.010	mg/L							
Magnesium	ND	0.15	mg/L							
Manganese	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.0050	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	ND	0.020	mg/L							
LCS (B094222-BS1)				Prepared: 04/21/14 Analyzed: 04/22/14						
Silver	0.495	0.0050	mg/L	0.500		99.0	80-120			
LCS (B094222-BS2)				Prepared: 04/21/14 Analyzed: 04/22/14						
Aluminum	2.08	0.050	mg/L	2.00		104	80-120			
Antimony	2.18	0.050	mg/L	2.00		109	80-120			
Arsenic	2.05	0.010	mg/L	2.00		102	80-120			
Barium	2.03	0.050	mg/L	2.00		102	80-120			
Beryllium	2.09	0.0040	mg/L	2.00		104	80-120			
Cadmium	2.07	0.0040	mg/L	2.00		103	80-120			
Calcium	2.10	0.15	mg/L	2.00		105	80-120			
Chromium	2.06	0.010	mg/L	2.00		103	80-120			
Cobalt	2.03	0.050	mg/L	2.00		102	80-120			
Copper	2.06	0.010	mg/L	2.00		103	80-120			
Iron	2.06	0.050	mg/L	2.00		103	80-120			
Lead	2.05	0.010	mg/L	2.00		102	80-120			
Magnesium	2.15	0.15	mg/L	2.00		108	80-120			
Manganese	2.06	0.010	mg/L	2.00		103	80-120			
Nickel	2.04	0.010	mg/L	2.00		102	80-120			
Potassium	20.5	2.0	mg/L	20.0		102	80-120			
Selenium	2.05	0.050	mg/L	2.00		102	80-120			
Sodium	2.10	2.0	mg/L	2.00		105	80-120			
Thallium	1.94	0.050	mg/L	2.00		97.1	80-120			
Vanadium	1.85	0.010	mg/L	2.00		92.7	80-120			
Zinc	2.07	0.020	mg/L	2.00		103	80-120			

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094222 - SW-846 3005A Dissolved										
LCS Dup (B094222-BSD1)				Prepared: 04/21/14 Analyzed: 04/22/14						
Silver	0.491	0.0050	mg/L	0.500		98.1	80-120	0.914	20	
LCS Dup (B094222-BSD2)				Prepared: 04/21/14 Analyzed: 04/22/14						
Aluminum	2.10	0.050	mg/L	2.00		105	80-120	0.750	20	
Antimony	2.19	0.050	mg/L	2.00		110	80-120	0.368	20	
Arsenic	2.06	0.010	mg/L	2.00		103	80-120	0.534	20	
Barium	2.04	0.050	mg/L	2.00		102	80-120	0.311	20	
Beryllium	2.07	0.0040	mg/L	2.00		103	80-120	0.764	20	
Cadmium	2.07	0.0040	mg/L	2.00		104	80-120	0.347	20	
Calcium	2.09	0.15	mg/L	2.00		104	80-120	0.634	20	
Chromium	2.06	0.010	mg/L	2.00		103	80-120	0.0606	20	
Cobalt	2.04	0.050	mg/L	2.00		102	80-120	0.280	20	
Copper	2.05	0.010	mg/L	2.00		102	80-120	0.475	20	
Iron	2.04	0.050	mg/L	2.00		102	80-120	0.734	20	
Lead	2.06	0.010	mg/L	2.00		103	80-120	0.393	20	
Magnesium	2.16	0.15	mg/L	2.00		108	80-120	0.331	20	
Manganese	2.05	0.010	mg/L	2.00		103	80-120	0.210	20	
Nickel	2.04	0.010	mg/L	2.00		102	80-120	0.238	20	
Potassium	20.7	2.0	mg/L	20.0		103	80-120	0.948	20	
Selenium	2.07	0.050	mg/L	2.00		103	80-120	0.870	20	
Sodium	2.25	2.0	mg/L	2.00		113	80-120	7.13	20	
Thallium	1.96	0.050	mg/L	2.00		97.8	80-120	0.644	20	
Vanadium	1.86	0.010	mg/L	2.00		92.9	80-120	0.202	20	
Zinc	2.08	0.020	mg/L	2.00		104	80-120	0.420	20	
Batch B094300 - SW-846 7470A Prep										
Blank (B094300-BLK1)				Prepared: 04/22/14 Analyzed: 04/23/14						
Mercury	ND	0.00010	mg/L							
LCS (B094300-BS1)				Prepared: 04/22/14 Analyzed: 04/23/14						
Mercury	0.00221	0.00010	mg/L	0.00200		110	80-120			
LCS Dup (B094300-BSD1)				Prepared: 04/22/14 Analyzed: 04/23/14						
Mercury	0.00218	0.00010	mg/L	0.00200		109	80-120	1.02	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094237 - SM 5310C										
Blank (B094237-BLK1)				Prepared & Analyzed: 04/22/14						
Total Organic Carbon	ND	0.50	mg/L							
LCS (B094237-BS1)				Prepared & Analyzed: 04/22/14						
Total Organic Carbon	10.5	0.50	mg/L	10.0		105	85-115			
LCS Dup (B094237-BSD1)				Prepared & Analyzed: 04/22/14						
Total Organic Carbon	10.5	0.50	mg/L	10.0		105	85-115	0.218	20	
Matrix Spike (B094237-MS2)		**Source: 14D0694-01**		Prepared & Analyzed: 04/22/14						
Total Organic Carbon	8.16	0.50	mg/L	5.00	3.61	91.1	85-115			
Batch B094261 - SM18-20 2320B										
Blank (B094261-BLK1)				Prepared & Analyzed: 04/22/14						
Alkalinity	ND	1.0	mg/L							
LCS (B094261-BS1)				Prepared & Analyzed: 04/22/14						
Alkalinity	36		mg/L	37.2		97.0	85.9-108			
LCS Dup (B094261-BSD1)				Prepared & Analyzed: 04/22/14						
Alkalinity	36		mg/L	37.2		97.0	85.9-108	0.00	3.52	
Batch B094289 - ASTM D516-90, 02										
Blank (B094289-BLK1)				Prepared & Analyzed: 04/22/14						
Sulfate	ND	2.0	mg/L							
LCS (B094289-BS1)				Prepared & Analyzed: 04/22/14						
Sulfate	22	2.0	mg/L	20.0		112	80.5-116			
LCS Dup (B094289-BSD1)				Prepared & Analyzed: 04/22/14						
Sulfate	22	2.0	mg/L	20.0		109	80.5-116	2.22	11	
Batch B094397 - SM18-20 4500S-F										
Blank (B094397-BLK1)				Prepared & Analyzed: 04/24/14						
Sulfide	ND	2.0	mg/L							
LCS (B094397-BS1)				Prepared & Analyzed: 04/24/14						
Sulfide	14	2.0	mg/L	14.4		94.4	85-115			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094436 - SM18-20 4500 CL B										
Blank (B094436-BLK1)				Prepared & Analyzed: 04/24/14						
Chloride	ND	1.0	mg/L							
LCS (B094436-BS1)				Prepared & Analyzed: 04/24/14						
Chloride	29		mg/L	29.4		98.9	84.4-115			
LCS Dup (B094436-BSD1)				Prepared & Analyzed: 04/24/14						
Chloride	29		mg/L	29.4		98.9	84.4-115	0.00	8.29	

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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.
E	Reported result is estimated. Value reported over verified calibration range.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-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.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
3810/RSK175 in Water	
Ethane	VA,NY,NJ,ME
Ethene	VA,NY,NJ,ME
Methane	VA,NY,NJ,ME
ASTM D516-90, 02 in Water	
Sulfate	NY,NH,MA,CT,RI,VA,NJ,NC
SM 5310C in Water	
Total Organic Carbon	NY,NC,CT,RI,ME,MA,VA,NJ
SM18-20 2320B in Water	
Alkalinity	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM18-20 4500 CL B in Water	
Chloride	NH,CT,MA,NY,RI,NC,ME,VA,NJ
SM18-20 4500S-F in Water	
Sulfide	CT,NH,NY,RI,NC,ME,VA
SW-846 6010C in Water	
Aluminum	CT,NY,NH,ME,VA,NJ,NC
Antimony	CT,NH,NY,ME,VA,NC,NJ
Arsenic	CT,NH,NY,ME,NC,VA,NJ
Barium	MA,NY,CT,NH,NC,ME,VA,NJ
Beryllium	CT,NH,NY,NC,ME,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Calcium	CT,NH,NY,NC,ME,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
Cobalt	CT,NH,NY,NC,ME,VA,NJ
Copper	CT,NH,NY,ME,NC,VA,NJ
Iron	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,NC,ME,VA,NJ
Magnesium	CT,NH,NY,NC,ME,VA,NJ
Manganese	CT,NH,NY,ME,NC,VA,NJ
Nickel	CT,NH,NY,ME,NC,VA,NJ
Potassium	CT,NH,NY,ME,NC,VA,NJ
Selenium	CT,NH,NY,ME,NC,VA,NJ
Silver	CT,NH,NY,ME,NC,VA,NJ
Sodium	CT,NH,NY,NC,ME,VA,NJ
Thallium	CT,NH,NY,RI,NC,VA,NJ
Vanadium	CT,NH,NY,ME,NC,VA,NJ
Zinc	CT,NH,NY,ME,NC,VA,NJ
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA,NJ
SW-846 8260C in Water	
Acetone	CT,NY,ME,NH,VA,NJ
Acrylonitrile	CT,NY,ME,NH,VA,NJ
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA,NJ
Benzene	CT,NY,ME,NH,VA,NJ
Bromochloromethane	NY,ME,NH,VA,NJ

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
Bromodichloromethane	CT,NY,ME,NH,VA,NJ
Bromoform	CT,NY,ME,NH,VA,NJ
Bromomethane	CT,NY,ME,NH,VA,NJ
2-Butanone (MEK)	CT,NY,ME,NH,VA,NJ
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA,NJ
n-Butylbenzene	NY,ME,VA,NJ
sec-Butylbenzene	NY,ME,VA,NJ
tert-Butylbenzene	NY,ME,VA,NJ
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA,NJ
Carbon Disulfide	CT,NY,ME,NH,VA,NJ
Carbon Tetrachloride	CT,NY,ME,NH,VA,NJ
Chlorobenzene	CT,NY,ME,NH,VA,NJ
Chlorodibromomethane	CT,NY,ME,NH,VA,NJ
Chloroethane	CT,NY,ME,NH,VA,NJ
Chloroform	CT,NY,ME,NH,VA,NJ
Chloromethane	CT,NY,ME,NH,VA,NJ
2-Chlorotoluene	NY,ME,NH,VA,NJ
4-Chlorotoluene	NY,ME,NH,VA,NJ
Dibromomethane	NY,ME,NH,VA,NJ
1,2-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,4-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA,NJ
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA,NJ
1,1-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,2-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,1-Dichloroethylene	CT,NY,ME,NH,VA,NJ
cis-1,2-Dichloroethylene	NY,ME,NJ
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA,NJ
1,2-Dichloropropane	CT,NY,ME,NH,VA,NJ
1,3-Dichloropropane	NY,ME,VA,NJ
2,2-Dichloropropane	NY,ME,NH,VA,NJ
1,1-Dichloropropene	NY,ME,NH,VA,NJ
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
Diisopropyl Ether (DIPE)	NY,ME,NH,VA,NJ
Ethylbenzene	CT,NY,ME,NH,VA,NJ
Hexachlorobutadiene	CT,NY,ME,NH,VA,NJ
2-Hexanone (MBK)	CT,NY,ME,NH,VA,NJ
Isopropylbenzene (Cumene)	NY,ME,VA,NJ
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA,NJ
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA,NJ
Methylene Chloride	CT,NY,ME,NH,VA,NJ
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA,NJ
Naphthalene	NY,ME,NH,VA,NJ
n-Propylbenzene	CT,NY,ME,NH,VA,NJ
Styrene	CT,NY,ME,NH,VA,NJ

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
Tetrachloroethylene	CT,NY,ME,NH,VA,NJ
Toluene	CT,NY,ME,NH,VA,NJ
1,2,3-Trichlorobenzene	NY,ME,NH,VA,NJ
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA,NJ
1,1,2-Trichloroethane	CT,NY,ME,NH,VA,NJ
Trichloroethylene	CT,NY,ME,NH,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA,NJ
1,2,3-Trichloropropane	NY,ME,NH,VA,NJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA,NJ
1,2,4-Trimethylbenzene	NY,ME,VA,NJ
1,3,5-Trimethylbenzene	NY,ME,VA,NJ
Vinyl Chloride	CT,NY,ME,NH,VA,NJ
m+p Xylene	CT,NY,ME,NH,VA
o-Xylene	CT,NY,ME,NH,VA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2014
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2014
FL	Florida Department of Health	E871027 NELAP	06/30/2014
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2014
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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www.contestlabs.com
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East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

1140694
Rev. 04.05.12

Page 1 of 1

Company Name: Arcadis-US
Address: 855 Rt 146
Telephone: 518-250-7300
Project #: 04124094
Client PO#:
Attention: Mark Fischer
Project Location: GATES NY
Sampled By: D. Symonds

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

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #:
Email:
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	8260	6010c	Sulfate/Chloride	Sulfide	RSK 175	TOC	Alk				
								18	3	3	3	9	3	3				
-01	MW-10i	3/27 1120	4/17 1200	~~1340~~		GW		✓	✓	✓	✓	✓	✓	✓				
-02	MW-10s	3/27 1150	4/17 1230	~~1445~~		GW		✓	✓	✓	✓	✓	✓	✓				
-03	MW-17s	3/27 1140	4/17 1400			GW		✓										
-04	MW-17i	3/27 1215	4/17 1500			GW		✓										
-05	MW-03	3/27 1020	4/17 1600			GW		✓	✓	✓	✓	✓	✓	✓				
-06	Duplicate	3/27 —	4/17 —			GW		✓										

ANALYSIS REQUESTED

# of Containers
** Preservation
***Container Code

Dissolved Metals
● Field Filtered
○ Lab to Filter

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

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

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

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

Comments: Metals field filtered

Relinquished by: (signature)	Date/Time:
D Symonds	4/17 1830
Received by: (signature)	Date/Time:
0911	4/18/14
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Turnaround ††
☐ 7-Day
☑ STANDARD
☐ 10-Day
☐ Other
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

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

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

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

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

FedEx

805051898782

Ship (P/U) date :
Thur 4/17/2014 6:25 pm
CLI US

Delivered
Signed for by: C COLLINS

Actual delivery :
Fri 4/18/2014 9:11 am
MA US

Let us tell you when your shipment arrives. Sign up for delivery notifications

Travel History

Date/Time	Activity	Location
- 4/18/2014 - Friday		
9:11 am	Delivered	MA
8:11 am	On FedEx vehicle for delivery	WINDSOR LOCKS, CT
7:24 am	At local FedEx facility	WINDSOR LOCKS, CT
6:16 am	At destination sort facility	EAST GRANBY, CT
3:19 am	Departed FedEx location	MEMPHIS, TN
- 4/17/2014 - Thursday		
11:16 pm	Arrived at FedEx location	MEMPHIS, TN
8:27 pm	Left FedEx origin facility	ROCHESTER, NY
6:25 pm	Picked up Tendered at FedEx Office	VICTOR, NY

Local Scan Time

Shipment Facts

Tracking number	805051898782	**Service**	FedEx Priority Overnight
Dimensions	24x14x14 in.	**Delivered To**	Receptionist/Front Desk
Total pieces	1	**Packaging**	Your Packaging
Special handling section	Deliver Weekday, Additional Handling Surcharge		

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East Longmeadow, MA. 01028
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F: 413-525-6405
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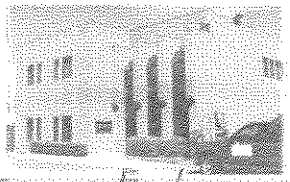
Sample Receipt Checklist



CLIENT NAME: Arcadis RECEIVED BY: CEC DATE: 4/18/14

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 3.0° 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: 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)	3	2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic	3	SOC Kit	
250 mL plastic	9	Non-ConTest Container	
40 mL Vial - type listed below	27	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

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

Time and Date Frozen:

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) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	T	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	NA	
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
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: CEC Date/Time: 4/18/14 0911

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April 28, 2014

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

Project Location: Gates, NY
Client Job Number:
Project Number: 04124094
Laboratory Work Order Number: 14D0758

Enclosed are results of analyses for samples received by the laboratory on April 19, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager

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: 4/28/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 04124094

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14D0758

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

PROJECT LOCATION: Gates, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-09	14D0758-01	Ground Water		3810/RSK175	
				ASTM D516-90, 02	
				SM 5310C	
				SM18-20 2320B	
				SM18-20 4500 CL B	
				SM18-20 4500S-F	
				SW-846 6010C	
				SW-846 8260C	
MW-16i	14D0758-02	Ground Water		3810/RSK175	
				ASTM D516-90, 02	
				SM 5310C	
				SM18-20 2320B	
				SM18-20 4500 CL B	
				SM18-20 4500S-F	
				SW-846 6010C	
				SW-846 8260C	
MW-16s	14D0758-03	Ground Water		SW-846 8260C	
MW-11	14D0758-04	Ground Water		SW-846 8260C	
MW-13	14D0758-05	Ground Water		SW-846 8260C	
MW-15	14D0758-06	Ground Water		SW-846 8260C	
MW-14	14D0758-07	Ground Water		SW-846 8260C	
Trip Blank	14D0758-08	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:

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

Analyte & Samples(s) Qualified:

1,4-Dioxane

B094229-BSD1

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

Analyte & Samples(s) Qualified:

tert-Butyl Alcohol (TBA)

14D0758-01[MW-09], 14D0758-02[MW-16i], 14D0758-03[MW-16s], 14D0758-04[MW-11], 14D0758-05[MW-13], 14D0758-06[MW-15], 14D0758-07[MW-14], 14D0758-08[Trip Blank], B094229-BLK1, B094229-BS1, B094229-BSD1, S005833-CCV1

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

14D0758-01[MW-09], 14D0758-02[MW-16i], 14D0758-03[MW-16s], 14D0758-04[MW-11], 14D0758-05[MW-13]

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

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene

14D0758-01[MW-09], 14D0758-02[MW-16i], 14D0758-03[MW-16s], 14D0758-04[MW-11], 14D0758-05[MW-13], 14D0758-06[MW-15], 14D0758-07[MW-14], 14D0758-08[Trip Blank], B094229-BLK1, B094229-BS1, B094229-BSD1, S005833-CCV1

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

Analyte & Samples(s) Qualified:

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

14D0758-01[MW-09], 14D0758-02[MW-16i], 14D0758-03[MW-16s], 14D0758-04[MW-11], 14D0758-05[MW-13], 14D0758-06[MW-15], 14D0758-07[MW-14], 14D0758-08[Trip Blank], B094229-BLK1, B094229-BS1, B094229-BSD1, S005833-CCV1

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:

Bromoform, Bromomethane, Chloromethane

B094229-BS1, B094229-BSD1, S005833-CCV1

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Michael A. Erickson
Laboratory Director

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-09

Sample ID: 14D0758-01 | Start Date/Time: 3/27/2014 10:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 8:45:00AM

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		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Acrylonitrile	ND	200	23	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
tert-Amyl Methyl Ether (TAME)	ND	20	3.6	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Benzene	ND	40	3.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Bromobenzene	ND	40	1.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Bromochloromethane	ND	40	8.9	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Bromodichloromethane	ND	20	3.5	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Bromoform	ND	40	8.4	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Bromomethane	ND	80	38	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
2-Butanone (MEK)	ND	800	95	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
tert-Butyl Alcohol (TBA)	ND	800	87	µg/L	40	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 13:20	EEH
n-Butylbenzene	ND	40	2.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
sec-Butylbenzene	ND	40	3.4	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
tert-Butylbenzene	ND	40	3.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	20	3.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Carbon Disulfide	ND	160	41	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Carbon Tetrachloride	ND	200	4.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Chlorobenzene	ND	40	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Chlorodibromomethane	ND	20	2.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Chloroethane	86	80	6.4	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Chloroform	ND	80	5.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Chloromethane	ND	80	13	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
2-Chlorotoluene	ND	40	2.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
4-Chlorotoluene	ND	40	3.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	200	14	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2-Dibromoethane (EDB)	ND	20	3.6	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Dibromomethane	ND	40	2.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2-Dichlorobenzene	ND	40	3.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,3-Dichlorobenzene	ND	40	3.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,4-Dichlorobenzene	ND	40	1.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
trans-1,4-Dichloro-2-butene	ND	80	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Dichlorodifluoromethane (Freon 12)	ND	80	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1-Dichloroethane	660	40	6.3	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2-Dichloroethane	ND	200	7.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1-Dichloroethylene	ND	40	8.4	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
cis-1,2-Dichloroethylene	1000	40	5.9	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
trans-1,2-Dichloroethylene	ND	40	6.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2-Dichloropropane	ND	40	4.5	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,3-Dichloropropane	ND	20	4.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
2,2-Dichloropropane	ND	40	2.9	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1-Dichloropropene	ND	80	5.1	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
cis-1,3-Dichloropropene	ND	20	2.5	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
trans-1,3-Dichloropropene	ND	20	2.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Diethyl Ether	ND	80	8.9	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-09

Sample ID: 14D0758-01 | Start Date/Time: 3/27/2014 10:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 8:45:00AM

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	4/22/14	4/22/14 13:20	EEH
1,4-Dioxane	ND	2000	1100	µg/L	40	V-16	SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Ethylbenzene	ND	40	3.7	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Hexachlorobutadiene	ND	20	6.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
2-Hexanone (MBK)	ND	400	61	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Isopropylbenzene (Cumene)	ND	40	4.5	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
p-Isopropyltoluene (p-Cymene)	ND	40	5.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Methyl tert-Butyl Ether (MTBE)	ND	40	3.6	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Methylene Chloride	ND	200	130	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
4-Methyl-2-pentanone (MIBK)	ND	400	59	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Naphthalene	ND	80	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
n-Propylbenzene	ND	40	3.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Styrene	ND	40	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1,1,2-Tetrachloroethane	ND	40	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1,2,2-Tetrachloroethane	ND	20	5.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Tetrachloroethylene	ND	40	3.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Tetrahydrofuran	ND	400	43	µg/L	40	V-16	SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Toluene	92	40	3.6	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2,3-Trichlorobenzene	ND	200	5.6	µg/L	40	V-05	SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2,4-Trichlorobenzene	ND	40	4.7	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,3,5-Trichlorobenzene	ND	40	5.5	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1,1-Trichloroethane	23	40	3.8	µg/L	40	J	SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1,2-Trichloroethane	ND	40	4.6	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Trichloroethylene	ND	40	3.1	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Trichlorofluoromethane (Freon 11)	ND	80	5.9	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2,3-Trichloropropane	ND	80	4.8	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	40	3.7	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,2,4-Trimethylbenzene	ND	40	7.2	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
1,3,5-Trimethylbenzene	ND	40	4.0	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
Vinyl Chloride	510	80	5.3	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH
m+p Xylene	10	80	7.2	µg/L	40	J	SW-846 8260C	4/22/14	4/22/14 13:20	EEH
o-Xylene	ND	40	4.4	µg/L	40		SW-846 8260C	4/22/14	4/22/14 13:20	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.6	70-130		4/22/14 13:20
Toluene-d8	101	70-130		4/22/14 13:20
4-Bromofluorobenzene	96.3	70-130		4/22/14 13:20

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

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-09

Sample ID: 14D0758-01 | Start Date/Time: 3/27/2014 10:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 8:45:00AM

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.020	0.0028	0.00088	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:57	WSD
Ethene	0.72	0.0038	0.00099	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:57	WSD
Methane	1.1	0.0026	0.0011	mg/L	1		3810/RSK175	4/22/14	4/22/14 13:57	WSD

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Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-09

Sample ID: 14D0758-01 | Start Date/Time: 3/27/2014 10:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 8:45:00AM

Metals Analyses (Dissolved)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	0.23	0.050	0.026	mg/L	1		SW-846 6010C	4/22/14	4/23/14 14:44	OP
Manganese	0.065	0.010	0.0020	mg/L	1		SW-846 6010C	4/22/14	4/23/14 14:44	OP

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

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-09

Sample ID: 14D0758-01 | Start Date/Time: 3/27/2014 10:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 8:45:00AM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	330	1.0	0.79	mg/L	1		SM18-20 2320B	4/25/14	4/25/14 15:30	VAK
Chloride	220	5.0	3.5	mg/L	5		SM18-20 4500 CL B	4/24/14	4/24/14 14:15	VAK
Sulfate	35	10	8.0	mg/L	5		ASTM D516-90, 02	4/22/14	4/22/14 12:00	ABH
Sulfide	ND	2.0	1.9	mg/L	1		SM18-20 4500S-F	4/24/14	4/24/14 9:30	LL
Total Organic Carbon	3.4	0.50	0.20	mg/L	1		SM 5310C	4/22/14	4/22/14 9:59	LL

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

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16i

Sample ID: 14D0758-02 | Start Date/Time: 3/27/2014 9:30:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:35:00AM

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	25000	2300	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Acrylonitrile	ND	2500	290	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
tert-Amyl Methyl Ether (TAME)	ND	250	46	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Benzene	ND	500	40	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Bromobenzene	ND	500	22	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Bromochloromethane	ND	500	110	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Bromodichloromethane	ND	250	44	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Bromoform	ND	500	100	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Bromomethane	ND	1000	470	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
2-Butanone (MEK)	ND	10000	1200	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
tert-Butyl Alcohol (TBA)	ND	10000	1100	µg/L	500	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 13:46	EEH
n-Butylbenzene	ND	500	27	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
sec-Butylbenzene	ND	500	42	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
tert-Butylbenzene	ND	500	48	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	250	38	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Carbon Disulfide	ND	2000	510	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Carbon Tetrachloride	ND	2500	50	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Chlorobenzene	ND	500	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Chlorodibromomethane	ND	250	27	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Chloroethane	ND	1000	80	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Chloroform	ND	1000	72	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Chloromethane	ND	1000	160	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
2-Chlorotoluene	ND	500	35	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
4-Chlorotoluene	ND	500	37	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	170	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2-Dibromoethane (EDB)	ND	250	44	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Dibromomethane	ND	500	35	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2-Dichlorobenzene	ND	500	38	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,3-Dichlorobenzene	ND	500	40	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,4-Dichlorobenzene	ND	500	23	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
trans-1,4-Dichloro-2-butene	ND	1000	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Dichlorodifluoromethane (Freon 12)	ND	1000	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1-Dichloroethane	2300	500	79	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2-Dichloroethane	ND	2500	97	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1-Dichloroethylene	520	500	100	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
cis-1,2-Dichloroethylene	48000	500	74	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
trans-1,2-Dichloroethylene	ND	500	75	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2-Dichloropropane	ND	500	56	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,3-Dichloropropane	ND	250	50	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
2,2-Dichloropropane	ND	500	36	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1-Dichloropropene	ND	1000	64	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
cis-1,3-Dichloropropene	ND	250	31	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
trans-1,3-Dichloropropene	ND	250	28	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Diethyl Ether	ND	1000	110	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH

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

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16i

Sample ID: 14D0758-02 | Start Date/Time: 3/27/2014 9:30:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:35:00AM

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	250	90	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,4-Dioxane	ND	25000	13000	µg/L	500	V-16	SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Ethylbenzene	110	500	46	µg/L	500	J	SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Hexachlorobutadiene	ND	250	85	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
2-Hexanone (MBK)	ND	5000	760	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Isopropylbenzene (Cumene)	ND	500	56	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
p-Isopropyltoluene (p-Cymene)	ND	500	62	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Methyl tert-Butyl Ether (MTBE)	ND	500	45	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Methylene Chloride	ND	2500	1600	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
4-Methyl-2-pentanone (MIBK)	ND	5000	730	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Naphthalene	ND	1000	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
n-Propylbenzene	ND	500	47	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Styrene	ND	500	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1,1,2-Tetrachloroethane	ND	500	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1,2,2-Tetrachloroethane	ND	250	62	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Tetrachloroethylene	6300	500	40	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Tetrahydrofuran	ND	5000	540	µg/L	500	V-16	SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Toluene	3200	500	45	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2,3-Trichlorobenzene	ND	2500	70	µg/L	500	V-05	SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2,4-Trichlorobenzene	ND	500	59	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,3,5-Trichlorobenzene	ND	500	69	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1,1-Trichloroethane	33000	500	47	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1,2-Trichloroethane	ND	500	58	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Trichloroethylene	31000	500	38	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Trichlorofluoromethane (Freon 11)	ND	1000	74	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2,3-Trichloropropane	ND	1000	60	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	46	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,2,4-Trimethylbenzene	ND	500	90	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
1,3,5-Trimethylbenzene	ND	500	50	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
Vinyl Chloride	1400	1000	66	µg/L	500		SW-846 8260C	4/22/14	4/22/14 13:46	EEH
m+p Xylene	340	1000	90	µg/L	500	J	SW-846 8260C	4/22/14	4/22/14 13:46	EEH
o-Xylene	120	500	55	µg/L	500	J	SW-846 8260C	4/22/14	4/22/14 13:46	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	91.8	70-130		4/22/14	13:46
Toluene-d8	99.2	70-130		4/22/14	13:46
4-Bromofluorobenzene	97.8	70-130		4/22/14	13:46

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

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16i

Sample ID: 14D0758-02 | Start Date/Time: 3/27/2014 9:30:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:35:00AM

Miscellaneous Organic Analyses

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Ethane	0.065	0.0028	0.00088	mg/L	1		3810/RSK175	4/22/14	4/22/14 14:10	WSD
Ethene	0.059	0.0038	0.00099	mg/L	1		3810/RSK175	4/22/14	4/22/14 14:10	WSD
Methane	0.30	0.0026	0.0011	mg/L	1		3810/RSK175	4/22/14	4/22/14 14:10	WSD

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Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16i

Sample ID: 14D0758-02 | Start Date/Time: 3/27/2014 9:30:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:35:00AM

Metals Analyses (Dissolved)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Iron	36	0.050	0.026	mg/L	1		SW-846 6010C	4/22/14	4/23/14 14:50	OP
Manganese	0.25	0.010	0.0020	mg/L	1		SW-846 6010C	4/22/14	4/23/14 14:50	OP

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Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16i

Sample ID: 14D0758-02 | Start Date/Time: 3/27/2014 9:30:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:35:00AM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alkalinity	220	1.0	0.79	mg/L	1		SM18-20 2320B	4/25/14	4/25/14 15:30	VAK
Chloride	97	5.0	3.5	mg/L	5		SM18-20 4500 CL B	4/24/14	4/24/14 14:15	VAK
Sulfate	63	20	16	mg/L	10		ASTM D516-90, 02	4/22/14	4/22/14 12:00	ABH
Sulfide	ND	2.0	1.9	mg/L	1		SM18-20 4500S-F	4/24/14	4/24/14 9:30	LL
Total Organic Carbon	6.4	0.50	0.20	mg/L	1		SM 5310C	4/22/14	4/22/14 9:59	LL

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Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16s

Sample ID: 14D0758-03 | Start Date/Time: 3/27/2014 9:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:45:00AM

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	23	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Acrylonitrile	ND	25	2.9	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
tert-Amyl Methyl Ether (TAME)	ND	2.5	0.46	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Benzene	ND	5.0	0.40	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Bromobenzene	ND	5.0	0.22	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Bromochloromethane	ND	5.0	1.1	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Bromodichloromethane	ND	2.5	0.44	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Bromoform	ND	5.0	1.0	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Bromomethane	ND	10	4.7	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
2-Butanone (MEK)	ND	100	12	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
tert-Butyl Alcohol (TBA)	ND	100	11	µg/L	5	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 14:13	EEH
n-Butylbenzene	ND	5.0	0.27	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
sec-Butylbenzene	ND	5.0	0.42	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
tert-Butylbenzene	ND	5.0	0.48	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	2.5	0.38	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Carbon Disulfide	ND	20	5.1	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Carbon Tetrachloride	ND	25	0.50	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Chlorobenzene	ND	5.0	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Chlorodibromomethane	ND	2.5	0.27	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Chloroethane	ND	10	0.80	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Chloroform	ND	10	0.72	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Chloromethane	ND	10	1.6	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
2-Chlorotoluene	ND	5.0	0.35	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
4-Chlorotoluene	ND	5.0	0.37	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	1.7	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2-Dibromoethane (EDB)	ND	2.5	0.44	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Dibromomethane	ND	5.0	0.35	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2-Dichlorobenzene	ND	5.0	0.38	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,3-Dichlorobenzene	ND	5.0	0.40	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,4-Dichlorobenzene	ND	5.0	0.23	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
trans-1,4-Dichloro-2-butene	ND	10	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Dichlorodifluoromethane (Freon 12)	ND	10	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1-Dichloroethane	190	5.0	0.79	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2-Dichloroethane	ND	25	0.97	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1-Dichloroethylene	21	5.0	1.0	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
cis-1,2-Dichloroethylene	350	5.0	0.74	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
trans-1,2-Dichloroethylene	3.4	5.0	0.75	µg/L	5	J	SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2-Dichloropropane	ND	5.0	0.56	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,3-Dichloropropane	ND	2.5	0.50	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
2,2-Dichloropropane	ND	5.0	0.36	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1-Dichloropropene	ND	10	0.64	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
cis-1,3-Dichloropropene	ND	2.5	0.31	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
trans-1,3-Dichloropropene	ND	2.5	0.28	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Diethyl Ether	ND	10	1.1	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH

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Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-16s

Sample ID: 14D0758-03 | Start Date/Time: 3/27/2014 9:00:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 9:45:00AM

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	4/22/14	4/22/14 14:13	EEH
1,4-Dioxane	ND	250	130	µg/L	5	V-16	SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Ethylbenzene	ND	5.0	0.46	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Hexachlorobutadiene	ND	2.5	0.85	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
2-Hexanone (MBK)	ND	50	7.6	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Isopropylbenzene (Cumene)	ND	5.0	0.56	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
p-Isopropyltoluene (p-Cymene)	ND	5.0	0.62	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.45	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Methylene Chloride	ND	25	16	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
4-Methyl-2-pentanone (MIBK)	ND	50	7.3	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Naphthalene	ND	10	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
n-Propylbenzene	ND	5.0	0.47	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Styrene	ND	5.0	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1,1,2-Tetrachloroethane	ND	5.0	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1,2,2-Tetrachloroethane	ND	2.5	0.62	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Tetrachloroethylene	12	5.0	0.40	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Tetrahydrofuran	ND	50	5.4	µg/L	5	V-16	SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Toluene	ND	5.0	0.45	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2,3-Trichlorobenzene	ND	25	0.70	µg/L	5	V-05	SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2,4-Trichlorobenzene	ND	5.0	0.59	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,3,5-Trichlorobenzene	ND	5.0	0.69	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1,1-Trichloroethane	68	5.0	0.47	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1,2-Trichloroethane	ND	5.0	0.58	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Trichloroethylene	91	5.0	0.38	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Trichlorofluoromethane (Freon 11)	ND	10	0.74	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2,3-Trichloropropane	ND	10	0.60	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	0.46	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,2,4-Trimethylbenzene	ND	5.0	0.90	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
1,3,5-Trimethylbenzene	ND	5.0	0.50	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
Vinyl Chloride	1.4	10	0.66	µg/L	5	J	SW-846 8260C	4/22/14	4/22/14 14:13	EEH
m+p Xylene	ND	10	0.90	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH
o-Xylene	ND	5.0	0.55	µg/L	5		SW-846 8260C	4/22/14	4/22/14 14:13	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	90.1	70-130		4/22/14	14:13
Toluene-d8	101	70-130		4/22/14	14:13
4-Bromofluorobenzene	98.2	70-130		4/22/14	14:13

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Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-11

Sample ID: 14D0758-04 | Start Date/Time: 3/27/2014 10:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 10:45:00AM

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	5000	470	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Acrylonitrile	ND	500	58	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
tert-Amyl Methyl Ether (TAME)	ND	50	9.1	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Benzene	ND	100	7.9	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Bromobenzene	ND	100	4.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Bromochloromethane	ND	100	22	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Bromodichloromethane	ND	50	8.8	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Bromoform	ND	100	21	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Bromomethane	ND	200	94	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
2-Butanone (MEK)	ND	2000	240	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
tert-Butyl Alcohol (TBA)	ND	2000	220	µg/L	100	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 14:40	EEH
n-Butylbenzene	ND	100	5.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
sec-Butylbenzene	ND	100	8.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
tert-Butylbenzene	ND	100	9.6	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	50	7.5	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Carbon Disulfide	ND	400	100	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Carbon Tetrachloride	ND	500	10	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Chlorobenzene	ND	100	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Chlorodibromomethane	ND	50	5.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Chloroethane	ND	200	16	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Chloroform	ND	200	14	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Chloromethane	ND	200	32	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
2-Chlorotoluene	ND	100	7.0	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
4-Chlorotoluene	ND	100	7.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	34	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2-Dibromoethane (EDB)	ND	50	8.9	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Dibromomethane	ND	100	7.0	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2-Dichlorobenzene	ND	100	7.6	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,3-Dichlorobenzene	ND	100	7.9	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,4-Dichlorobenzene	ND	100	4.6	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
trans-1,4-Dichloro-2-butene	ND	200	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	200	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1-Dichloroethane	340	100	16	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2-Dichloroethane	ND	500	19	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1-Dichloroethylene	120	100	21	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
cis-1,2-Dichloroethylene	8100	100	15	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
trans-1,2-Dichloroethylene	34	100	15	µg/L	100	J	SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2-Dichloropropane	ND	100	11	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,3-Dichloropropane	ND	50	9.9	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
2,2-Dichloropropane	ND	100	7.2	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1-Dichloropropene	ND	200	13	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
cis-1,3-Dichloropropene	ND	50	6.2	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
trans-1,3-Dichloropropene	ND	50	5.6	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Diethyl Ether	ND	200	22	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-11

Sample ID: 14D0758-04 | Start Date/Time: 3/27/2014 10:50:00AM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 10:45:00AM

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	50	18	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,4-Dioxane	ND	5000	2600	µg/L	100	V-16	SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Ethylbenzene	ND	100	9.2	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Hexachlorobutadiene	ND	50	17	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
2-Hexanone (MBK)	ND	1000	150	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Isopropylbenzene (Cumene)	ND	100	11	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
p-Isopropyltoluene (p-Cymene)	ND	100	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	100	9.0	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Methylene Chloride	ND	500	320	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	1000	150	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Naphthalene	ND	200	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
n-Propylbenzene	ND	100	9.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Styrene	ND	100	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1,1,2-Tetrachloroethane	ND	100	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1,2,2-Tetrachloroethane	ND	50	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Tetrachloroethylene	ND	100	8.0	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Tetrahydrofuran	ND	1000	110	µg/L	100	V-16	SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Toluene	36	100	9.0	µg/L	100	J	SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2,3-Trichlorobenzene	ND	500	14	µg/L	100	V-05	SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2,4-Trichlorobenzene	ND	100	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,3,5-Trichlorobenzene	ND	100	14	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1,1-Trichloroethane	220	100	9.4	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1,2-Trichloroethane	ND	100	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Trichloroethylene	190	100	7.7	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Trichlorofluoromethane (Freon 11)	ND	200	15	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2,3-Trichloropropane	ND	200	12	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	9.2	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,2,4-Trimethylbenzene	ND	100	18	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
1,3,5-Trimethylbenzene	ND	100	10	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
Vinyl Chloride	540	200	13	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
m+p Xylene	ND	200	18	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH
o-Xylene	ND	100	11	µg/L	100		SW-846 8260C	4/22/14	4/22/14 14:40	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	86.4	70-130		4/22/14 14:40
Toluene-d8	102	70-130		4/22/14 14:40
4-Bromofluorobenzene	101	70-130		4/22/14 14:40

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-13

Sample ID: 14D0758-05 | Start Date/Time: 3/27/2014 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 11:30:00AM

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	50000	4700	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Acrylonitrile	ND	5000	580	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
tert-Amyl Methyl Ether (TAME)	ND	500	91	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Benzene	ND	1000	79	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Bromobenzene	ND	1000	44	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Bromochloromethane	ND	1000	220	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Bromodichloromethane	ND	500	88	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Bromoform	ND	1000	210	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Bromomethane	ND	2000	940	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
2-Butanone (MEK)	ND	20000	2400	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
tert-Butyl Alcohol (TBA)	ND	20000	2200	µg/L	1000	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 15:07	EEH
n-Butylbenzene	ND	1000	54	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
sec-Butylbenzene	ND	1000	84	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
tert-Butylbenzene	ND	1000	96	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	500	75	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Carbon Disulfide	ND	4000	1000	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Carbon Tetrachloride	ND	5000	100	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Chlorobenzene	ND	1000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Chlorodibromomethane	ND	500	54	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Chloroethane	ND	2000	160	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Chloroform	ND	2000	140	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Chloromethane	ND	2000	320	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
2-Chlorotoluene	ND	1000	70	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
4-Chlorotoluene	ND	1000	74	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5000	340	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2-Dibromoethane (EDB)	ND	500	89	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Dibromomethane	ND	1000	70	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2-Dichlorobenzene	ND	1000	76	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,3-Dichlorobenzene	ND	1000	79	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,4-Dichlorobenzene	ND	1000	46	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
trans-1,4-Dichloro-2-butene	ND	2000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Dichlorodifluoromethane (Freon 12)	ND	2000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1-Dichloroethane	1100	1000	160	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2-Dichloroethane	ND	5000	190	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1-Dichloroethylene	700	1000	210	µg/L	1000	J	SW-846 8260C	4/22/14	4/22/14 15:07	EEH
cis-1,2-Dichloroethylene	150000	1000	150	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
trans-1,2-Dichloroethylene	ND	1000	150	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2-Dichloropropane	ND	1000	110	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,3-Dichloropropane	ND	500	99	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
2,2-Dichloropropane	ND	1000	72	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1-Dichloropropene	ND	2000	130	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
cis-1,3-Dichloropropene	ND	500	62	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
trans-1,3-Dichloropropene	ND	500	56	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Diethyl Ether	ND	2000	220	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-13

Sample ID: 14D0758-05 | Start Date/Time: 3/27/2014 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 11:30:00AM

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	500	180	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,4-Dioxane	ND	50000	26000	µg/L	1000	V-16	SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Ethylbenzene	ND	1000	92	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Hexachlorobutadiene	ND	500	170	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
2-Hexanone (MBK)	ND	10000	1500	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Isopropylbenzene (Cumene)	ND	1000	110	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
p-Isopropyltoluene (p-Cymene)	ND	1000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1000	90	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Methylene Chloride	ND	5000	3200	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
4-Methyl-2-pentanone (MIBK)	ND	10000	1500	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Naphthalene	ND	2000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
n-Propylbenzene	ND	1000	94	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Styrene	ND	1000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1,1,2-Tetrachloroethane	ND	1000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1,2,2-Tetrachloroethane	ND	500	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Tetrachloroethylene	740	1000	80	µg/L	1000	J	SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Tetrahydrofuran	ND	10000	1100	µg/L	1000	V-16	SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Toluene	1100	1000	90	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2,3-Trichlorobenzene	ND	5000	140	µg/L	1000	V-05	SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2,4-Trichlorobenzene	ND	1000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,3,5-Trichlorobenzene	ND	1000	140	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1,1-Trichloroethane	2300	1000	94	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1,2-Trichloroethane	ND	1000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Trichloroethylene	5300	1000	77	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Trichlorofluoromethane (Freon 11)	ND	2000	150	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2,3-Trichloropropane	ND	2000	120	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1000	92	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,2,4-Trimethylbenzene	ND	1000	180	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
1,3,5-Trimethylbenzene	ND	1000	100	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
Vinyl Chloride	6000	2000	130	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
m+p Xylene	ND	2000	180	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH
o-Xylene	ND	1000	110	µg/L	1000		SW-846 8260C	4/22/14	4/22/14 15:07	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	87.3	70-130		4/22/14 15:07
Toluene-d8	100	70-130		4/22/14 15:07
4-Bromofluorobenzene	97.2	70-130		4/22/14 15:07

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-15

Sample ID: 14D0758-06 | Start Date/Time: 3/27/2014 1:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 12:00:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 12:26	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
cis-1,2-Dichloroethylene	0.21	1.0	0.15	µg/L	1	J	SW-846 8260C	4/22/14	4/22/14 12:26	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-15

Sample ID: 14D0758-06 | Start Date/Time: 3/27/2014 1:00:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 12:00:00PM

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	4/22/14	4/22/14 12:26	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	V-05	SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 12:26	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.3	70-130		4/22/14 12:26
Toluene-d8	100	70-130		4/22/14 12:26
4-Bromofluorobenzene	97.0	70-130		4/22/14 12:26

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-14

Sample ID: 14D0758-07 | Start Date/Time: 3/28/2014 1:20:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 12:30:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 11:58	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: MW-14

Sample ID: 14D0758-07 | Start Date/Time: 3/28/2014 1:20:00PM

Sample Matrix: Ground Water | Stop Date/Time: 4/18/2014 12:30:00PM

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	4/22/14	4/22/14 11:58	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	V-05	SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:58	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.8	70-130		4/22/14 11:58
Toluene-d8	101	70-130		4/22/14 11:58
4-Bromofluorobenzene	96.2	70-130		4/22/14 11:58

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: Trip Blank

Sample ID: 14D0758-08 | Start Date/Time: 3/28/2014 12:00:00AM

Sample Matrix: Trip Blank Water | Stop Date/Time: 4/18/2014 12:00:00AM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	4.7	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Acrylonitrile	ND	5.0	0.58	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.091	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Benzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Bromobenzene	ND	1.0	0.044	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Bromochloromethane	ND	1.0	0.22	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Bromodichloromethane	ND	0.50	0.088	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Bromoform	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Bromomethane	ND	2.0	0.94	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
2-Butanone (MEK)	ND	20	2.4	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
tert-Butyl Alcohol (TBA)	ND	20	2.2	µg/L	1	R-05, V-16	SW-846 8260C	4/22/14	4/22/14 11:25	EEH
n-Butylbenzene	ND	1.0	0.054	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
sec-Butylbenzene	ND	1.0	0.084	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
tert-Butylbenzene	ND	1.0	0.096	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.075	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Carbon Disulfide	ND	4.0	1.0	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Carbon Tetrachloride	ND	5.0	0.10	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Chlorodibromomethane	ND	0.50	0.054	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Chloroethane	ND	2.0	0.16	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Chloromethane	ND	2.0	0.32	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
2-Chlorotoluene	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
4-Chlorotoluene	ND	1.0	0.074	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.34	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.089	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Dibromomethane	ND	1.0	0.070	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2-Dichlorobenzene	ND	1.0	0.076	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,3-Dichlorobenzene	ND	1.0	0.079	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,4-Dichlorobenzene	ND	1.0	0.046	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1-Dichloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2-Dichloroethane	ND	5.0	0.19	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1-Dichloroethylene	ND	1.0	0.21	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2-Dichloropropane	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,3-Dichloropropane	ND	0.50	0.099	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
2,2-Dichloropropane	ND	1.0	0.072	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1-Dichloropropene	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
cis-1,3-Dichloropropene	ND	0.50	0.062	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
trans-1,3-Dichloropropene	ND	0.50	0.056	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Diethyl Ether	ND	2.0	0.22	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH

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

Project Location: Gates, NY | Sample Description: | Work Order: 14D0758

Date Received: 4/19/2014

Field Sample #: Trip Blank

Sample ID: 14D0758-08 | Start Date/Time: 3/28/2014 12:00:00AM

Sample Matrix: Trip Blank Water | Stop Date/Time: 4/18/2014 12:00:00AM

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	4/22/14	4/22/14 11:25	EEH
1,4-Dioxane	ND	50	26	µg/L	1	V-16	SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Ethylbenzene	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Hexachlorobutadiene	ND	0.50	0.17	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
2-Hexanone (MBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Methylene Chloride	ND	5.0	3.2	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.5	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Naphthalene	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
n-Propylbenzene	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Styrene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Tetrachloroethylene	ND	1.0	0.080	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Tetrahydrofuran	ND	10	1.1	µg/L	1	V-16	SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Toluene	ND	1.0	0.090	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.14	µg/L	1	V-05	SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1,1-Trichloroethane	ND	1.0	0.094	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1,2-Trichloroethane	ND	1.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Trichloroethylene	ND	1.0	0.077	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2,3-Trichloropropane	ND	2.0	0.12	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.092	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.18	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.10	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
Vinyl Chloride	ND	2.0	0.13	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
m+p Xylene	ND	2.0	0.18	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH
o-Xylene	ND	1.0	0.11	µg/L	1		SW-846 8260C	4/22/14	4/22/14 11:25	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.1	70-130		4/22/14 11:25
Toluene-d8	100	70-130		4/22/14 11:25
4-Bromofluorobenzene	98.3	70-130		4/22/14 11:25

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Sample Extraction Data

3810/RSK175

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094299	1.00	1.00	04/22/14
14D0758-02 [MW-16i]	B094299	1.00	1.00	04/22/14

ASTM D516-90, 02

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094289	20.0	100	04/22/14
14D0758-02 [MW-16i]	B094289	10.0	100	04/22/14

SM 5310C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094237	50.0	50.0	04/22/14
14D0758-02 [MW-16i]	B094237	50.0	50.0	04/22/14

SM18-20 2320B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094533	100	100	04/25/14
14D0758-02 [MW-16i]	B094533	100	100	04/25/14

SM18-20 4500 CL B

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094436	100	100	04/24/14
14D0758-02 [MW-16i]	B094436	100	100	04/24/14

SM18-20 4500S-F

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094397	100	100	04/24/14
14D0758-02 [MW-16i]	B094397	100	100	04/24/14

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094435	50.0	50.0	04/22/14
14D0758-02 [MW-16i]	B094435	50.0	50.0	04/22/14

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14D0758-01 [MW-09]	B094229	0.125	5.00	04/22/14
14D0758-02 [MW-16i]	B094229	0.01	5.00	04/22/14
14D0758-03 [MW-16s]	B094229	1	5.00	04/22/14
14D0758-04 [MW-11]	B094229	0.05	5.00	04/22/14

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
14D0758-05 [MW-13]	B094229	0.005	5.00	04/22/14
14D0758-06 [MW-15]	B094229	5	5.00	04/22/14
14D0758-07 [MW-14]	B094229	5	5.00	04/22/14
14D0758-08 [Trip Blank]	B094229	5	5.00	04/22/14

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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 B094229 - SW-846 5030B										
Blank (B094229-BLK1)				Prepared & Analyzed: 04/22/14						
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							R-05, 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	5.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							

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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 B094229 - SW-846 5030B											
Blank (B094229-BLK1)				Prepared & Analyzed: 04/22/14							
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							V-16	
Toluene	ND	1.0	µg/L								
1,2,3-Trichlorobenzene	ND	5.0	µg/L							V-05	
1,2,4-Trichlorobenzene	ND	1.0	µg/L								
1,3,5-Trichlorobenzene	ND	1.0	µg/L								
1,1,1-Trichloroethane	ND	1.0	µg/L								
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	*22.3*		µg/L	25.0		89.4	70-130				
Surrogate: Toluene-d8	*24.7*		µg/L	25.0		98.7	70-130				
Surrogate: 4-Bromofluorobenzene	*24.7*		µg/L	25.0		98.7	70-130				
LCS (B094229-BS1)				Prepared & Analyzed: 04/22/14							
Acetone	75.6	50	µg/L	100		75.6	70-160				†
Acrylonitrile	9.58	5.0	µg/L	10.0		95.8	70-130				
tert-Amyl Methyl Ether (TAME)	9.92	0.50	µg/L	10.0		99.2	70-130				
Benzene	11.4	1.0	µg/L	10.0		114	70-130				
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130				
Bromochloromethane	12.4	1.0	µg/L	10.0		124	70-130				
Bromodichloromethane	10.6	0.50	µg/L	10.0		106	70-130				
Bromoform	11.7	1.0	µg/L	10.0		117	70-130			V-20	
Bromomethane	6.13	2.0	µg/L	10.0		61.3	40-160			V-20	†
2-Butanone (MEK)	91.6	20	µg/L	100		91.6	40-160				†
tert-Butyl Alcohol (TBA)	72.5	20	µg/L	100		72.5	40-160			R-05, V-16	†
n-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130				
sec-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130				
tert-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130				
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0		107	70-130				
Carbon Disulfide	12.2	4.0	µg/L	10.0		122	70-130				
Carbon Tetrachloride	10.7	5.0	µg/L	10.0		107	70-130				
Chlorobenzene	9.89	1.0	µg/L	10.0		98.9	70-130				
Chlorodibromomethane	9.95	0.50	µg/L	10.0		99.5	70-130				
Chloroethane	10.6	2.0	µg/L	10.0		106	70-130				
Chloroform	10.8	2.0	µg/L	10.0		108	70-130				
Chloromethane	9.75	2.0	µg/L	10.0		97.5	40-160			V-20	†
2-Chlorotoluene	9.69	1.0	µg/L	10.0		96.9	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 B094229 - SW-846 5030B											
LCS (B094229-BS1)				Prepared & Analyzed: 04/22/14							
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.56	5.0	µg/L	10.0		85.6	70-130				
1,2-Dibromoethane (EDB)	10.3	0.50	µg/L	10.0		103	70-130				
Dibromomethane	10.4	1.0	µg/L	10.0		104	70-130				
1,2-Dichlorobenzene	9.61	1.0	µg/L	10.0		96.1	70-130				
1,3-Dichlorobenzene	9.81	1.0	µg/L	10.0		98.1	70-130				
1,4-Dichlorobenzene	9.96	1.0	µg/L	10.0		99.6	70-130				
trans-1,4-Dichloro-2-butene	9.45	2.0	µg/L	10.0		94.5	70-130				
Dichlorodifluoromethane (Freon 12)	8.70	2.0	µg/L	10.0		87.0	40-160				†
1,1-Dichloroethane	12.3	1.0	µg/L	10.0		123	70-130				
1,2-Dichloroethane	9.61	5.0	µg/L	10.0		96.1	70-130				
1,1-Dichloroethylene	9.74	1.0	µg/L	10.0		97.4	70-130				
cis-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0		111	70-130				
trans-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0		116	70-130				
1,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	70-130				
1,3-Dichloropropane	10.8	0.50	µg/L	10.0		108	70-130				
2,2-Dichloropropane	11.4	1.0	µg/L	10.0		114	40-130				†
1,1-Dichloropropene	10.8	2.0	µg/L	10.0		108	70-130				
cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130				
trans-1,3-Dichloropropene	11.1	0.50	µg/L	10.0		111	70-130				
Diethyl Ether	9.83	2.0	µg/L	10.0		98.3	70-130				
Diisopropyl Ether (DIPE)	10.7	0.50	µg/L	10.0		107	70-130				
1,4-Dioxane	125	50	µg/L	100		125	40-130			V-16	†
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130				
Hexachlorobutadiene	10.3	0.50	µg/L	10.0		103	70-130				
2-Hexanone (MBK)	99.5	10	µg/L	100		99.5	70-160				†
Isopropylbenzene (Cumene)	9.84	1.0	µg/L	10.0		98.4	70-130				
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130				
Methyl tert-Butyl Ether (MTBE)	10.4	1.0	µg/L	10.0		104	70-130				
Methylene Chloride	12.9	5.0	µg/L	10.0		129	70-130				
4-Methyl-2-pentanone (MIBK)	97.1	10	µg/L	100		97.1	70-160				†
Naphthalene	8.53	2.0	µg/L	10.0		85.3	40-130				†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130				
Styrene	10.8	1.0	µg/L	10.0		108	70-130				
1,1,1,2-Tetrachloroethane	9.65	1.0	µg/L	10.0		96.5	70-130				
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130				
Tetrachloroethylene	11.1	1.0	µg/L	10.0		111	70-130				
Tetrahydrofuran	10.8	10	µg/L	10.0		108	70-130			V-16	
Toluene	11.1	1.0	µg/L	10.0		111	70-130				
1,2,3-Trichlorobenzene	8.09	5.0	µg/L	10.0		80.9	70-130			V-05	
1,2,4-Trichlorobenzene	8.98	1.0	µg/L	10.0		89.8	70-130				
1,3,5-Trichlorobenzene	9.69	1.0	µg/L	10.0		96.9	70-130				
1,1,1-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130				
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130				
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130				
Trichlorofluoromethane (Freon 11)	8.81	2.0	µg/L	10.0		88.1	70-130				
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.0	1.0	µg/L	10.0		110	70-130				
1,2,4-Trimethylbenzene	10.5	1.0	µg/L	10.0		105	70-130				
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.0		97.6	70-130				
Vinyl Chloride	7.53	2.0	µg/L	10.0		75.3	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 B094229 - SW-846 5030B											
LCS (B094229-BS1)				Prepared & Analyzed: 04/22/14							
m+p Xylene	20.3	2.0	µg/L	20.0		101	70-130				
o-Xylene	10.2	1.0	µg/L	10.0		102	70-130				
Surrogate: 1,2-Dichloroethane-d4	*23.2*		µg/L	25.0		92.7	70-130				
Surrogate: Toluene-d8	*25.3*		µg/L	25.0		101	70-130				
Surrogate: 4-Bromofluorobenzene	*24.3*		µg/L	25.0		97.3	70-130				
LCS Dup (B094229-BSD1)				Prepared & Analyzed: 04/22/14							
Acetone	89.0	50	µg/L	100		89.0	70-160	16.3	25		†
Acrylonitrile	10.4	5.0	µg/L	10.0		104	70-130	8.40	25		
tert-Amyl Methyl Ether (TAME)	9.67	0.50	µg/L	10.0		96.7	70-130	2.55	25		
Benzene	11.0	1.0	µg/L	10.0		110	70-130	4.11	25		
Bromobenzene	9.95	1.0	µg/L	10.0		99.5	70-130	4.42	25		
Bromochloromethane	11.6	1.0	µg/L	10.0		116	70-130	6.77	25		
Bromodichloromethane	9.45	0.50	µg/L	10.0		94.5	70-130	11.3	25		
Bromoform	11.9	1.0	µg/L	10.0		119	70-130	2.12	25	V-20	
Bromomethane	6.25	2.0	µg/L	10.0		62.5	40-160	1.94	25	V-20	†
2-Butanone (MEK)	112	20	µg/L	100		112	40-160	20.3	25		†
tert-Butyl Alcohol (TBA)	101	20	µg/L	100		101	40-160	**32.5** *	25	R-05, V-16	†
n-Butylbenzene	10.2	1.0	µg/L	10.0		102	70-130	4.87	25		
sec-Butylbenzene	9.66	1.0	µg/L	10.0		96.6	70-130	5.63	25		
tert-Butylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130	2.97	25		
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	µg/L	10.0		109	70-130	1.20	25		
Carbon Disulfide	11.0	4.0	µg/L	10.0		110	70-130	10.3	25		
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102	70-130	4.67	25		
Chlorobenzene	9.52	1.0	µg/L	10.0		95.2	70-130	3.81	25		
Chlorodibromomethane	9.73	0.50	µg/L	10.0		97.3	70-130	2.24	25		
Chloroethane	9.93	2.0	µg/L	10.0		99.3	70-130	6.62	25		
Chloroform	10.1	2.0	µg/L	10.0		101	70-130	6.79	25		
Chloromethane	9.13	2.0	µg/L	10.0		91.3	40-160	6.57	25	V-20	†
2-Chlorotoluene	9.04	1.0	µg/L	10.0		90.4	70-130	6.94	25		
4-Chlorotoluene	9.70	1.0	µg/L	10.0		97.0	70-130	4.04	25		
1,2-Dibromo-3-chloropropane (DBCP)	10.5	5.0	µg/L	10.0		105	70-130	20.0	25		
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0		104	70-130	0.962	25		
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130	3.21	25		
1,2-Dichlorobenzene	9.62	1.0	µg/L	10.0		96.2	70-130	0.104	25		
1,3-Dichlorobenzene	9.26	1.0	µg/L	10.0		92.6	70-130	5.77	25		
1,4-Dichlorobenzene	9.66	1.0	µg/L	10.0		96.6	70-130	3.06	25		
trans-1,4-Dichloro-2-butene	10.5	2.0	µg/L	10.0		105	70-130	10.3	25		
Dichlorodifluoromethane (Freon 12)	7.81	2.0	µg/L	10.0		78.1	40-160	10.8	25		†
1,1-Dichloroethane	11.7	1.0	µg/L	10.0		117	70-130	4.90	25		
1,2-Dichloroethane	9.22	5.0	µg/L	10.0		92.2	70-130	4.14	25		
1,1-Dichloroethylene	9.04	1.0	µg/L	10.0		90.4	70-130	7.45	25		
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.0		104	70-130	6.31	25		
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	5.78	25		
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130	1.42	25		
1,3-Dichloropropane	10.7	0.50	µg/L	10.0		107	70-130	0.841	25		
2,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	40-130	7.71	25		†
1,1-Dichloropropene	10.9	2.0	µg/L	10.0		109	70-130	1.02	25		
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0		102	70-130	3.38	25		
trans-1,3-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130	1.27	25		
Diethyl Ether	10.4	2.0	µg/L	10.0		104	70-130	5.73	25		
Diisopropyl Ether (DIPE)	10.6	0.50	µg/L	10.0		106	70-130	0.470	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 B094229 - SW-846 5030B												
LCS Dup (B094229-BSD1)				Prepared & Analyzed: 04/22/14								
1,4-Dioxane	140	50	µg/L	100		**140**	*	40-130	11.1	50	L-07, V-16	† ‡
Ethylbenzene	10.2	1.0	µg/L	10.0		102		70-130	3.96	25		
Hexachlorobutadiene	10.0	0.50	µg/L	10.0		100		70-130	2.84	25		
2-Hexanone (MBK)	113	10	µg/L	100		113		70-160	12.5	25		†
Isopropylbenzene (Cumene)	9.62	1.0	µg/L	10.0		96.2		70-130	2.26	25		
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.0		101		70-130	6.13	25		
Methyl tert-Butyl Ether (MTBE)	11.1	1.0	µg/L	10.0		111		70-130	6.52	25		
Methylene Chloride	12.9	5.0	µg/L	10.0		129		70-130	0.0774	25		
4-Methyl-2-pentanone (MIBK)	107	10	µg/L	100		107		70-160	9.98	25		†
Naphthalene	10.9	2.0	µg/L	10.0		109		40-130	24.8	25		†
n-Propylbenzene	10.1	1.0	µg/L	10.0		101		70-130	1.87	25		
Styrene	9.97	1.0	µg/L	10.0		99.7		70-130	7.71	25		
1,1,1,2-Tetrachloroethane	10.0	1.0	µg/L	10.0		100		70-130	3.56	25		
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110		70-130	5.82	25		
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102		70-130	8.44	25		
Tetrahydrofuran	12.2	10	µg/L	10.0		122		70-130	12.5	25	V-16	
Toluene	10.1	1.0	µg/L	10.0		101		70-130	9.65	25		
1,2,3-Trichlorobenzene	10.3	5.0	µg/L	10.0		103		70-130	24.1	25	V-05	
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0		102		70-130	13.2	25		
1,3,5-Trichlorobenzene	9.70	1.0	µg/L	10.0		97.0		70-130	0.103	25		
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102		70-130	3.38	25		
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0		106		70-130	0.570	25		
Trichloroethylene	10.3	1.0	µg/L	10.0		103		70-130	2.40	25		
Trichlorofluoromethane (Freon 11)	7.94	2.0	µg/L	10.0		79.4		70-130	10.4	25		
1,2,3-Trichloropropane	11.1	2.0	µg/L	10.0		111		70-130	8.48	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4	1.0	µg/L	10.0		104		70-130	5.99	25		
1,2,4-Trimethylbenzene	10.2	1.0	µg/L	10.0		102		70-130	2.31	25		
1,3,5-Trimethylbenzene	9.70	1.0	µg/L	10.0		97.0		70-130	0.617	25		
Vinyl Chloride	6.68	2.0	µg/L	10.0		66.8		40-160	12.0	25		†
m+p Xylene	19.3	2.0	µg/L	20.0		96.6		70-130	4.85	25		
o-Xylene	9.52	1.0	µg/L	10.0		95.2		70-130	6.41	25		
Surrogate: 1,2-Dichloroethane-d4	*23.2*		µg/L	25.0		92.6		70-130				
Surrogate: Toluene-d8	*24.8*		µg/L	25.0		99.1		70-130				
Surrogate: 4-Bromofluorobenzene	*24.9*		µg/L	25.0		99.4		70-130				

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QUALITY CONTROL

Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094299 - 3810/RSK175										
Blank (B094299-BLK1)				Prepared & Analyzed: 04/22/14						
Ethane	ND	0.0028	mg/L							
Ethene	ND	0.0038	mg/L							
Methane	ND	0.0026	mg/L							
LCS (B094299-BS1)				Prepared & Analyzed: 04/22/14						
Ethane	2200		mg/L	2000		110	60-122			
Ethene	2200		mg/L	2000		111	67-113			
Methane	2100		mg/L	2000		107	56-121			

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QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094435 - SW-846 3005A Dissolved										
Blank (B094435-BLK1)				Prepared: 04/22/14 Analyzed: 04/23/14						
Iron	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
LCS (B094435-BS1)				Prepared: 04/22/14 Analyzed: 04/23/14						
Iron	2.14	0.050	mg/L	2.00		107	80-120			
Manganese	2.14	0.010	mg/L	2.00		107	80-120			
LCS Dup (B094435-BSD1)				Prepared: 04/22/14 Analyzed: 04/23/14						
Iron	2.02	0.050	mg/L	2.00		101	80-120	5.64	20	
Manganese	2.04	0.010	mg/L	2.00		102	80-120	5.09	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094237 - SM 5310C										
Blank (B094237-BLK1)				Prepared & Analyzed: 04/22/14						
Total Organic Carbon	ND	0.50	mg/L							
LCS (B094237-BS1)				Prepared & Analyzed: 04/22/14						
Total Organic Carbon	10.5	0.50	mg/L	10.0		105	85-115			
LCS Dup (B094237-BSD1)				Prepared & Analyzed: 04/22/14						
Total Organic Carbon	10.5	0.50	mg/L	10.0		105	85-115	0.218	20	
Duplicate (B094237-DUP2)		**Source: 14D0758-01**		Prepared & Analyzed: 04/22/14						
Total Organic Carbon	3.35	0.50	mg/L		3.41			1.86	20	
Batch B094289 - ASTM D516-90, 02										
Blank (B094289-BLK1)				Prepared & Analyzed: 04/22/14						
Sulfate	ND	2.0	mg/L							
LCS (B094289-BS1)				Prepared & Analyzed: 04/22/14						
Sulfate	22	2.0	mg/L	20.0		112	80.5-116			
LCS Dup (B094289-BSD1)				Prepared & Analyzed: 04/22/14						
Sulfate	22	2.0	mg/L	20.0		109	80.5-116	2.22	11	
Batch B094397 - SM18-20 4500S-F										
Blank (B094397-BLK1)				Prepared & Analyzed: 04/24/14						
Sulfide	ND	2.0	mg/L							
LCS (B094397-BS1)				Prepared & Analyzed: 04/24/14						
Sulfide	14	2.0	mg/L	14.4		94.4	85-115			
Batch B094436 - SM18-20 4500 CL B										
Blank (B094436-BLK1)				Prepared & Analyzed: 04/24/14						
Chloride	ND	1.0	mg/L							
LCS (B094436-BS1)				Prepared & Analyzed: 04/24/14						
Chloride	29		mg/L	29.4		98.9	84.4-115			
LCS Dup (B094436-BSD1)				Prepared & Analyzed: 04/24/14						
Chloride	29		mg/L	29.4		98.9	84.4-115	0.00	8.29	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B094533 - SM18-20 2320B										
Blank (B094533-BLK1)				Prepared & Analyzed: 04/25/14						
Alkalinity	ND	1.0	mg/L							
LCS (B094533-BS1)				Prepared & Analyzed: 04/25/14						
Alkalinity	37		mg/L	37.2		99.5	85.9-108			
LCS Dup (B094533-BSD1)				Prepared & Analyzed: 04/25/14						
Alkalinity	37		mg/L	37.2		99.5	85.9-108	0.00	3.52	

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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).
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-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.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
3810/RSK175 in Water	
Ethane	VA,NY,NJ,ME
Ethene	VA,NY,NJ,ME
Methane	VA,NY,NJ,ME
ASTM D516-90, 02 in Water	
Sulfate	NY,NH,MA,CT,RI,VA,NJ,NC
SM 5310C in Water	
Total Organic Carbon	NY,NC,CT,RI,ME,MA,VA,NJ
SM18-20 2320B in Water	
Alkalinity	CT,MA,NH,NY,RI,NC,ME,VA,NJ
SM18-20 4500 CL B in Water	
Chloride	NH,CT,MA,NY,RI,NC,ME,VA,NJ
SM18-20 4500S-F in Water	
Sulfide	CT,NH,NY,RI,NC,ME,VA
SW-846 6010C in Water	
Iron	CT,NH,NY,ME,NC,VA,NJ
Manganese	CT,NH,NY,ME,NC,VA,NJ
SW-846 8260C in Water	
Acetone	CT,NY,ME,NH,VA,NJ
Acrylonitrile	CT,NY,ME,NH,VA,NJ
tert-Amyl Methyl Ether (TAME)	NY,ME,NH,VA,NJ
Benzene	CT,NY,ME,NH,VA,NJ
Bromochloromethane	NY,ME,NH,VA,NJ
Bromodichloromethane	CT,NY,ME,NH,VA,NJ
Bromoform	CT,NY,ME,NH,VA,NJ
Bromomethane	CT,NY,ME,NH,VA,NJ
2-Butanone (MEK)	CT,NY,ME,NH,VA,NJ
tert-Butyl Alcohol (TBA)	NY,ME,NH,VA,NJ
n-Butylbenzene	NY,ME,VA,NJ
sec-Butylbenzene	NY,ME,VA,NJ
tert-Butylbenzene	NY,ME,VA,NJ
tert-Butyl Ethyl Ether (TBEE)	NY,ME,NH,VA,NJ
Carbon Disulfide	CT,NY,ME,NH,VA,NJ
Carbon Tetrachloride	CT,NY,ME,NH,VA,NJ
Chlorobenzene	CT,NY,ME,NH,VA,NJ
Chlorodibromomethane	CT,NY,ME,NH,VA,NJ
Chloroethane	CT,NY,ME,NH,VA,NJ
Chloroform	CT,NY,ME,NH,VA,NJ
Chloromethane	CT,NY,ME,NH,VA,NJ
2-Chlorotoluene	NY,ME,NH,VA,NJ
4-Chlorotoluene	NY,ME,NH,VA,NJ
Dibromomethane	NY,ME,NH,VA,NJ
1,2-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3-Dichlorobenzene	CT,NY,ME,NH,VA,NJ
1,4-Dichlorobenzene	CT,NY,ME,NH,VA,NJ

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Water	
trans-1,4-Dichloro-2-butene	NY,ME,NH,VA,NJ
Dichlorodifluoromethane (Freon 12)	NY,ME,NH,VA,NJ
1,1-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,2-Dichloroethane	CT,NY,ME,NH,VA,NJ
1,1-Dichloroethylene	CT,NY,ME,NH,VA,NJ
cis-1,2-Dichloroethylene	NY,ME,NJ
trans-1,2-Dichloroethylene	CT,NY,ME,NH,VA,NJ
1,2-Dichloropropane	CT,NY,ME,NH,VA,NJ
1,3-Dichloropropane	NY,ME,VA,NJ
2,2-Dichloropropane	NY,ME,NH,VA,NJ
1,1-Dichloropropene	NY,ME,NH,VA,NJ
cis-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
trans-1,3-Dichloropropene	CT,NY,ME,NH,VA,NJ
Diisopropyl Ether (DIPE)	NY,ME,NH,VA,NJ
Ethylbenzene	CT,NY,ME,NH,VA,NJ
Hexachlorobutadiene	CT,NY,ME,NH,VA,NJ
2-Hexanone (MBK)	CT,NY,ME,NH,VA,NJ
Isopropylbenzene (Cumene)	NY,ME,VA,NJ
p-Isopropyltoluene (p-Cymene)	CT,NY,ME,NH,VA,NJ
Methyl tert-Butyl Ether (MTBE)	CT,NY,ME,NH,VA,NJ
Methylene Chloride	CT,NY,ME,NH,VA,NJ
4-Methyl-2-pentanone (MIBK)	CT,NY,ME,NH,VA,NJ
Naphthalene	NY,ME,NH,VA,NJ
n-Propylbenzene	CT,NY,ME,NH,VA,NJ
Styrene	CT,NY,ME,NH,VA,NJ
1,1,1,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
1,1,2,2-Tetrachloroethane	CT,NY,ME,NH,VA,NJ
Tetrachloroethylene	CT,NY,ME,NH,VA,NJ
Toluene	CT,NY,ME,NH,VA,NJ
1,2,3-Trichlorobenzene	NY,ME,NH,VA,NJ
1,2,4-Trichlorobenzene	CT,NY,ME,NH,VA,NJ
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NY,ME,NH,VA,NJ
1,1,2-Trichloroethane	CT,NY,ME,NH,VA,NJ
Trichloroethylene	CT,NY,ME,NH,VA,NJ
Trichlorofluoromethane (Freon 11)	CT,NY,ME,NH,VA,NJ
1,2,3-Trichloropropane	NY,ME,NH,VA,NJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NY,VA,NJ
1,2,4-Trimethylbenzene	NY,ME,VA,NJ
1,3,5-Trimethylbenzene	NY,ME,VA,NJ
Vinyl Chloride	CT,NY,ME,NH,VA,NJ
m+p Xylene	CT,NY,ME,NH,VA
o-Xylene	CT,NY,ME,NH,VA

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

CHAIN OF CUSTODY RECORD

14D0758

Rev 04.05.12

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: Arcadis-US
Address: 855 Rt. 146
Cliftn Park NY 12065
Attention: Mark Fischer
Project Location: GATES NY
Sampled By: D. Symonds

Telephone: 518-250-7300
Project # 04124094
Client PO#

DATA DELIVERY (check all that apply)
○ FAX ☒ EMAIL ○ WEBSITE
Fax #
Email: mark.fischer@arcadis-us
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

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

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	# of Containers	** Preservation	*** Container Co	8260	Metals Mn, Fe	Sulfate, Cl	Sulfide	TOC	RSK 175	Alk
								21	2	2	2	2	2	6	2		
01	MW-09	3/27 1000	4/18 0845			GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
02	MW-16i	3/27 0930	4/18 0935			GW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
03	MW-16s	3/27 0900	4/18 0945			GW		✓									
04	MW-11	3/27 1050	4/18 1045			GW		✓									
05	MW-13	3/27 1240	4/18 1130			GW		✓									
06	MW-15	3/28 1300	4/18 1200			GW		✓									
07	MW-14	3/28 1320	4/18 1230			GW		✓									
08	Trip Blank																

ANALYSIS REQUESTED

Dissolved Meta
☑ Field Filtered
○ Lab to Filter

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

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

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

Comments:

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

Relinquished by: (signature) D Symonds — Date/Time: 4/18 1320
Received by: (signature) Rebecca Nesbitt 4.1°C — Date/Time: 4/19/14 945
Relinquished by: (signature) — Date/Time:
Received by: (signature) — Date/Time:

Turnaround ††
☐ 7-Day
☐ 10-Day
☐ Other ____
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

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

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

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

FedEx.

805051899182

Ship (P/U) date
Fri 4/18/2014 1:24 pm
CLI US

Delivered
Signed for by: P.BLAKE

Actual delivery :
Sat 4/19/2014 9:43 am
MA US

Let us tell you when your shipment arrives. Sign up for delivery notifications

Travel History

Date/Time	Activity	Location
- 4/19/2014 - Saturday		
9:43 am	Delivered	MA
8:28 am	On FedEx vehicle for delivery	WINDSOR LOCKS, CT
8:21 am	At local FedEx facility	WINDSOR LOCKS, CT
6:27 am	At destination sort facility	EAST GRANBY, CT
3:21 am	Departed FedEx location	MEMPHIS, TN
- 4/18/2014 - Friday		
11:07 pm	Arrived at FedEx location	MEMPHIS, TN
8:27 pm	Left FedEx origin facility	ROCHESTER, NY
1:24 pm	Picked up Tendered at FedEx Office	VICTOR, NY

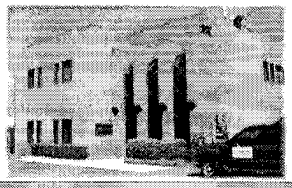
Local Scan Time

Shipment Facts

Tracking number	805051899182	**Service**	FedEx Priority Overnight
Weight	38 lbs	**Dimensions**	24x14x14 in
Delivered To	Shipping/Receiving	**Total pieces**	1
Total shipment weight	38 lbs / 17.24 kgs	**Packaging**	Your Packaging
Special handling section	For Saturday Delivery, Additional Handling Surcharge		

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

con-test® ANALYTICAL LABORATORY



Sample Receipt Checklist

CLIENT NAME: Arcadis RECEIVED BY: RLF DATE: 4/19/14

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

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

If not, explain:

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

If not, explain:

4) **How were the samples received:**

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

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

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.1°C

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

Who was notified _____ Date _____ Time _____

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

Who was notified _____ Date _____ Time _____

7) **Location where samples are stored:** 19

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

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

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

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

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)	2	2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic	2	SOC Kit	
250 mL plastic	6	Non-ConTest Container	
40 mL Vial - type listed below	30	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl 30 # Methanol _____

Bisulfate _____ # DI Water _____

Thiosulfate _____ Unpreserved

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

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

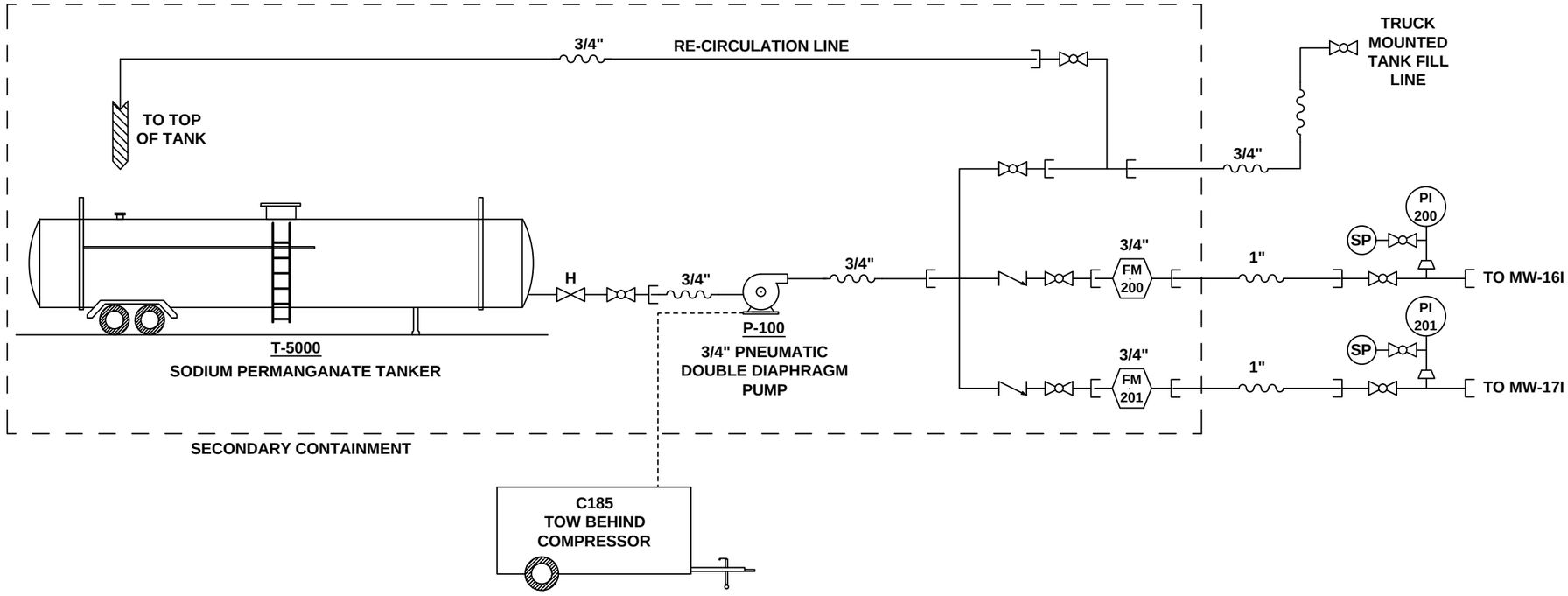
Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** **Date/Time:**

RT 4/19/14 943

Appendix F

ISCO Process & Instrumentation Diagram



P&ID LEGEND			
PROCESS PIPING		GATE VALVE	
FLEXIBLE HOSING		CHECK VALVE	
AIR SUPPLY LINE		FM 100	FLOW METER
H	HYDRAULIC VALVE		
BALL VALVE		SP	SAMPLE PORT
HOSE CONNECTION			REDUCING BUSHING

ABANDONED CHEMICAL SALES FACILITY
1600 JAY STREET
ROCHESTER, NEW YORK

ISCO PROCESS & INSTRUMENTATION DIAGRAM

ARCADIS

APPENDIX
F

Appendix G

Photographs

View of sodium permanganate tanker within 12’ x 50’ secondary containment from southern property boundary along Jay Street

View of sodium permanganate tanker, storage trailer, mobile 250-gallon tank and tow behind air compressor from the west

Storage Trailer and spill response staging area. Poly drums contain spill booms, spill pads and sodium thiosulfate neutralizing agent for addressing a potential sodium permanganate release. MW-16i is shown in the bottom left corner of the picture

Injection manifold located within secondary containment. The manifold distributed solution to MW-16i, MW-17i, EA-3 and back to the tank via a recirculation loop

Double diaphragm chemical resistant pump located in the secondary containment next to the air compressor. The blue tarp was used to keep the pump and air supply warm during sub-freezing conditions.

MW-17i (on the left) and MW-17s located on southern side of Jay Street. Hose ramps were used to protect injection solution while in transport from the tanker to injection well. The overflow valve on the wellhead manifold was retrofitted to direct solution to MW-17s.

Excavation Area 4 located on western side of site building. The curb box shown in the center of asphalt patch was the access point for manual injection of permanganate solution.

Excavation Area 3 located inside the site building. Solution was pumped from the injection manifold through a flow meter to the access point show in the picture.

Appendix H

Drum Disposal Manifest

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CESQG

Manifest Document No. 11622

2. Page 1 of 1

3. Generator's Name and Mailing Address
NYSDEC
625 Broadway, 12th Floor, Albany, NY 12233

1600 Jay Street
Rochester, NY 14611

4. Generator's Phone (585-727-3710

5. Transporter 1 Company Name
Op-Tech Environmental Svcs, Inc.

6. US EPA ID Number
N Y D 9 8 6 9 3 0 7 5 3

A. State Transporter's ID NA-1256

B. Transporter 1 Phone 800-225-6750

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Cycle Chem, Inc.
550 Industrial Drive
Lewisberry, PA 17339

10. US EPA ID Number
P A D 0 6 7 0 9 8 8 2 2

E. State Facility's ID

F. Facility's Phone 717-938-4700

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON RCRA NON DOT Regulated Solids, NOS (absorbent pads and speedi dri containing 5% sodium permanganate)	2	DF DM JS	250	P
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
a.

H. Handling Codes for Wastes Listed Above
a. B

15. Special Handling Instructions and Additional Information
In case of emergency call 1-800-225-6750
Profile approval # OPT5556-A-LD
Job# RAC00064

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Dwight Symonds on Behalf of Arcadis/NYSDEC
Signature: D Symonds
Date: Month 01 Day 08 Year 15

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name
Signature
Date: Month Day Year

GENERATOR
TRANSPORTER
FACILITY
NON-HAZARDOUS WASTE