



**2015 Periodic Review Report
Groundwater Monitoring and Sampling Report**

**Envirotek II/Roblin Steel Site
Tonawanda, New York**

Niagara River World

January 2016

**2015 PERIODIC REVIEW REPORT
GROUNDWATER MONITORING AND SAMPLING REPORT**

ENVIROTEK II/ROBLIN STEEL SITE

TONAWANDA, NEW YORK

Prepared for

NIAGARA RIVER WORLD

Prepared by

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SECTION 1 - SITE BACKGROUND

1.1 SITE LOCATION

The site consists of a 2.5-acre parcel of land located within the 50-acre Roblin Steel complex (NYSDEC Site #915056) at 4000 River Road in the Town of Tonawanda, Erie County, New York. A site location map is presented on Figure 1. Figure 2 presents a site plan of the Roblin Steel complex that includes the Envirotek II site. The Roblin Steel complex, which is presently owned by Niagara River World, Inc. (NRW), is bounded on the west by the Niagara River, on the east by River Road, on the south by Marathon Oil, and on the north by a facility that was investigated and remediated by the New York State Department of Environmental Conservation (NYSDEC) (i.e., the River Road Site, NYSDEC Site #915031).

1.2 SITE HISTORY

The history of the site is interrelated with the history of the Roblin Steel complex, as the site was formerly leased by Envirotek Ltd. Company (Envirotek) from Roblin Steel for industrial use. Between August 1981 and June 1989, Envirotek operated a solvent recovery operation at the site located within the Roblin Steel property.

A review of the property history indicates that the Roblin Steel site was the location of industrial steel production operations beginning in the early 1900s. The property was developed in the early 1900s for the production of steel by the Wickwire Spencer Steel Company (Wickwire). In 1945, the property was sold to the Colorado Fuel and Iron Corporation (Colorado F&I), which subsequently merged with Wickwire, and was operated by Colorado F&I until it went bankrupt in 1963. In the mid to late 1960s, Roblin Steel purchased the property and used it primarily for storage. Roblin Steel also subleased portions of the property to a number of other companies, including, but not limited to, Ascension Chemical, Rupp Rental, Freightways Transportation, Envirotek, and Booth Oil.

In 1984, the NYSDEC issued a Resource Conservation and Recovery Act (RCRA) Part B Permit to Envirotek to operate the site as a hazardous waste treatment, storage, and disposal facility. After violations of this permit in 1985, including improper waste characterization, RCRA drum handling violations, and lack of insurance and financial assurance, Envirotek entered into an Administrative Order of Consent (AOC) with the NYSDEC that required a reduction of Envirotek's hazardous waste inventory.

In 1988, Envirotek submitted a Facility Closure Plan (Envirotek, 1988) to the NYSDEC to remove and dispose of all materials remaining onsite and to take measures to decontaminate the property. The

NYSDEC denied approval of the Facility Closure Plan after its review and determined this plan was unacceptable. NYSDEC believed that it contained inaccurate closure costs and proposed the use of unqualified personnel to implement the site closure.

On February 2, 1989, Envirotek filed a petition under Chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court of the Western District of New York. The current owner of the property, NRW, evicted Envirotek in June 1989, at which time Envirotek abandoned the facility. On November 16, 1989, the NYSDEC formally revoked Envirotek's RCRA Part B Permit to operate on the basis of Envirotek's inability to develop an acceptable Facility Closure Plan.

Following abandonment of the site, the United States Environmental Protection Agency (USEPA) inspected the site and confirmed the presence of abandoned and unsecured drums and containers, pits containing hazardous substances, and contaminated process vessels and tanks. As a result, the USEPA notified former Envirotek customers of their potential liability at the site and requested a removal action. In May of 1990, the USEPA entered into an AOC with site respondents to perform a removal action at the site (Removal Action AOC).

In November 1990, implementation of a Remedial Action Sampling Plan (RASP) was completed at the site to identify areas onsite, other than the Still Discharge Area (SDA), at which spills or releases of chemical compounds may have occurred. The results of this investigation indicated the following:

- The soil gas survey indicated elevated levels of Volatile Organic Compounds (VOCs) in the area of the SDA and in an area to the west of Building 153.
- The analytical results for the groundwater sampling indicated the presence of VOC-impacted groundwater associated with the site.
- The analytical results for the soil sampling indicated that there were elevated levels of chlorinated and aromatic VOCs and that the soils containing the highest level of VOCs were located in the vicinity of the SDA.

In May 1993, implementation of a removal action that consisted of the removal of approximately 175 tons of impacted soil from the SDA was completed.

The NYSDEC and the Envirotek II/Roblin Steel Site Potentially Responsible Party (PRP) Group entered into a Consent Order on September 2, 1997 and on August 20, 1998. The Consent Order, and its

amendment, obligated the responsible parties to implement a remedial investigation/feasibility study (RI/FS) remedial program.

The Envirotek II/Roblin Steel Site PRP Group conducted an RI at the site to assess the on-site surface and subsurface soil quality, subsurface soil quality, site groundwater quality, and site geologic and hydrogeologic characteristics. The results of the RI for the site were presented in the RI Report. Based on the results of the RI report, the Envirotek II/Roblin Steel Site PRP Group submitted the following three recommendations to the NYSDEC.

- Defined as OU-1, the implementation of an Interim Remedial Measure (IRM) to remove the Boiler House ink waste for offsite disposal; removing soils containing elevated levels of VOCs from Waste Pit No. 6, decontaminating the pit, and backfilling the pit with clean backfill; and disposing of all solid, liquid, and personal protection equipment generated during this IRM to an approved offsite disposal facility.
- Defined as OU-2, the reduction of the potential for migration of VOC constituents of concern (COCs) from source-area soils to the shallow overburden groundwater.
- Defined as OU-3, the reduction of the concentration of VOC (COCs) in shallow overburden groundwater associated with elevated VOC concentrations in source area soils.

The implementation of the OU-2 IRM had an expected significant beneficial effect on OU-3 due to the removal of 7,100 tons of impacted soil as a potential future groundwater source of VOC COCs. The IRM Final Report for OU-3 presented an evaluation of groundwater gauging and sampling data and the historical occurrence and future viability of natural attenuation and supported the selection of a Monitored Natural Attenuation (MNA) remedy.

The NYSDEC approved the IRM Final Report for OU-3 in March 2005. On March 11, 2005, the Envirotek II/Roblin Steel Site PRP Group submitted the Focused Feasibility Study Report (FFS) that identified MNA as the best remedial option for OU-3, which was approved by the NYSDEC. The NYSDEC then issued the Record of Decision (ROD) for the site on March 31, 2005, which select MNA as the proposed remedy to complete the final remedial action of OU-3.

The Monitoring Plan for OU-3 proposed to implement a MNA groundwater sampling program utilizing the existing monitoring well network. The objective of the monitoring plan for OU-3 was to obtain additional groundwater monitoring data, to supplement the existing data, and to evaluate whether MNA continues to

be an effective remedy for OU-3. The groundwater sampling program as stated in the Site Management Plan consists of annual groundwater sampling for a period of three (3) years, commencing in 2008, with subsequent sampling events to take place every five (5) years until the year 2025. A total of six (6) groundwater sampling events is required.

SECTION 2 - GROUNDWATER MONITORING ACTIVITIES

The 2015 monitoring program at the Envirotek II/Roblin Steel site consisted of one sampling event completed on October 21, 2015. Groundwater samples and water level elevations were collected from the seven (7) monitoring wells that define the OU-3 monitoring well network (ENV-1, ENV-3R, ENV-4, ENV-7, ENV-8, ENV-9, and GW-3), along with four (4) additional monitoring wells (NRG-3, NRG-4, NRG-5 and NRG-6). Monitoring wells NRG-5 and NRG-6, previously sampled in 2007, were added to the monitoring program by the NYSDEC in 2009. Monitoring well ENV-11 was planned to be sampled, however could not be located. Further investigation found the flush mount monitoring well ENV-11 was destroyed several months prior to the 2015 sampling event when heavy equipment was clearing brush within close proximity of ENV-11. A summary of the monitoring wells that were monitored for groundwater elevation is presented on Table 1.

Groundwater samples were collected using low-flow purging and sampling techniques. Prior to sampling, each monitoring well was purged using a submersible pump and dedicated tubing or disposable bailer until parameters of pH, conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP) stabilized, which provided an indication that water drawn from the well is representative of the groundwater in the surrounding formation. The results of these field parameters are presented on Table 2. After the field parameters stabilized, samples were collected with a submersible pump or disposable bailer into sample containers provided by the testing laboratory.

Purge water generated during the groundwater sampling activities was emptied on-site away from the sampled well. Quality control samples, including a trip blank, a field blank, a matrix spike and matrix spike duplicate, and a field duplicate were collected. Samples were delivered under a chain of custody to ESC Lab Sciences in Mount Juliet, Tennessee for analysis of VOCs by USEPA SW-846 Method 8260.

SECTION 3 - SOIL MANAGEMENT PLAN

During the last 5 years, site activities included the demolition of the power house structure in the Fall of 2013. Since then, the site has been used consistent with industrial/commercial use. No excavation has taken place during the last five years.

An approximate volume of 12,500 CY of excavated soil was delivered in the Fall of 2009 to the site from the proposed Buffalo General Hospital building expansion site located at Goodrich Street and Ellicott Street. This soil was removed from the site in 2010. This soil was characterized and sampled to determine suitability for reuse and/or disposal off-site. Analytical soil sample results are summarized in Appendix A with the NYSDEC's guidance values for the acceptance of fill under unrestricted, residential and commercial use scenarios based on Part 375 Soil Cleanup Objectives regulations. The analytical results show the delivered soils are environmentally clean with no detected compounds within the NYSDEC unrestricted use criteria for acceptance as borrow fill.

The Soil Management Plan (SMP) is required to set guidelines for the management of soil materials during any future excavation activities at the site. This SMP addresses the environmental concerns related to soil management which has been approved by the NYSDEC. The SMP is presented in Appendix B.

The ROD for the site included the implementation of a SMP. The SMP requires, in part, an Institutional Control/Engineering Control (IC/EC) certification submitted to certify that the IC/EC in place is unchanged from the previous certification and that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation to comply with any operation and maintenance of the SMP. There are no engineering controls on the site as there is no active remedial system. The IC/EC for the site is in the form of an environmental easement that includes the following:

- Require compliance with the approved SMP
- Limit the use and development of property to commercial or industrial uses only
- Restrict use of groundwater as a source of potable water unless treated
- Require the site owner to complete and submit an IC/EC certification

The site owner as required by the NYSDEC has included the signed IC - EC Certification as presented in Appendix C.

SECTION 4 - GROUNDWATER MONITORING RESULTS

This section includes the results of the 2015 groundwater sampling event. Included are descriptions of site-specific hydrogeology, the identification and distribution of constituents present in groundwater, and a comparison of historical data. Constituents were compared to the applicable NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Groundwater Standards and Guidance Values.

4.1 SITE HYDROGEOLOGY

The groundwater elevation contours are consistent with historical interpretations. The groundwater flow has a unidirectional flow throughout the site due to the proximity of the Niagara River. Monitoring wells NRG-3 and NRG-4 are located west of the boiler house in an area referred to as the "Ore Pit". The Ore Pit has concrete walls to the south, north and west (and possibly east) of the well locations which provide a barrier to groundwater movement, thus creating an elevated groundwater level in the area. As presented on Table 3, the groundwater gradient calculated between monitoring wells ENV-1 and GW-3 and between ENV-1 and ENV-7 decreased from 2010 reported groundwater gradient. Variation in groundwater levels and gradients are seasonally dependent upon the amount of precipitation received.

Table 3
Groundwater Gradient Comparison

SAMPLING DATE	GROUNDWATER GRADIENT (PER FOOT)	
	ENV-1 TO GW-3	ENV-1 TO ENV-7
10/05/06	0.0033	0.0046
10/09/08	0.0046	0.0068
10/27/09	0.0028	0.0040
10/21/10	0.0030	0.0049
10/21/15	0.0028	0.0041

Groundwater elevation data collected during the groundwater sampling events is presented on Figure 3 that illustrates the groundwater elevation contours within the upper fill material based on groundwater levels measured on October 21, 2015.

4.2 GROUNDWATER ANALYTICAL TEST RESULTS

A summary of VOCs detected in groundwater during the 2015 Groundwater Sampling Event is presented on Table 4. Figure 4 illustrates the distribution of total VOC concentrations detected in groundwater from each of the monitoring wells during the 2015 sampling event. Laboratory analytical data reports are provided in Appendix D. Historical groundwater analytical data is presented in Table 4. Historical groundwater total VOC concentration figures displaying the lateral extent of the total VOC concentration plume from the sampling events of October 2015, October 2010, October 2009, October 2008, October 2006, October 2005, September 2004, May 2004, September 1999 are presented in Appendix F.

The concentrations of cis-1,2-dichloroethene (ENV-7, ENV-8, NRG-5 and NRG-6) and vinyl chloride (ENV-7 and ENV-8) were equal to or exceeded the NYSDEC TOGS. The concentrations of 1,1-dichloroethane (ENV-3R and NRG-3), carbon disulfide (NRG-3), cis-1,2-dichloroethene (ENV-3R and ENV-4), trans-1,2-dichloroethene (NRG-5), trichloroethene (ENV-3R) and vinyl chloride (ENV-3R) were detected, but did not exceed the standard limit. As illustrated on Figure 4, there is an elevated total VOC concentration in groundwater within the shallow overburden zone in the central portion of the property at monitoring well ENV-7. Monitoring well ENV-7 contains the highest total VOC concentration on-site of 0.136 mg/L, which shows a decrease from 2010.

As presented in the historical groundwater total VOC concentration plume figures in Appendix F, the lateral extent of the total VOC plume has decreased over time. The figure from September 1999 shows a total VOC plume that laterally extends over the majority of the site, with a total VOC concentration detected at nearly 50 mg/L at well ENV-2. The total VOC plumes from subsequent sampling events through 2015 indicate a significantly reduced area representing total VOC concentration. Total VOC concentrations detected in groundwater at all monitoring wells in 2015 were less than 1 mg/L.

Sampling events in 2005, 2006, 2008, 2009, 2010 and 2015 continue to decrease the total VOC concentrations and plume limits, with no VOCs detected in groundwater sampled from monitoring wells ENV-1, ENV-9, GW-3, NRG-3, and NRG-4. The total VOC concentration plume in 2009 and 2010 was expanded due to the sampling of additional monitoring wells NRG-5 and NRG-6, as requested by NYSDEC. The total VOC concentrations detected in 2007 and 2015 have decreased in NRG-5 from 114.4 µg/L to 24.4 µg/L. The total VOC concentrations detected in 2007 and 2015 have decreased in NRG-6 from 27.5 µg/L to 10.3 µg/L. The VOC concentrations plume that has decrease its lateral extent over the years shows a slight increase in VOC concentrations detected at NRG-5. As presented on Figure 4 and Appendix F, the OU-3 MNA remedy has been shown to be sufficiently effective by decreasing the VOC concentration plume over time and improving the site groundwater quality.

MG/LA descriptive analysis of groundwater analytical test data collected from the OU-3 monitoring well network and monitoring wells NRG-3 and NRG-4, NRG-5 and NRG-6 is presented on Table 5. Long term trends on the following table have been evaluated to include the most recent sampling event of October 21, 2015. VOC concentration trend plots for selected compounds are presented on Figures 5 through 16.

4.3 QUALITY ASSURANCE/QUALITY CONTROL ANALYTICAL RESULTS

Groundwater samples were analyzed for VOCs by USEPA SW-846 Method 8260 volatiles at ESC Lab Sciences in Mount Juliet, Tennessee. The Data Usability Summary Report (DUSR) as presented in Appendix E was prepared by evaluating the analytical data package, SDG#L795740, ESC Lab Sciences, as submitted to Vali-Data of WNY, LLC. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocol and USEPA National Functional Guidelines. The laboratory performed the analyses using USEPA methods, 8260B (Volatile Organics).

The associated laboratory analytical reports of the field duplicate, equipment blank, and other quality assurance/quality control (QA/QC) samples collected during the October 21, 2015 sampling event are presented in Appendix D. The QA/QC measurements examined for the data were within method-specified or laboratory-derived limits. No data were rejected as a result of the data validation. The following items were reviewed and technically in compliance with the method and Standard Operating Procedure (SOP) criteria.

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

**Table 5
Descriptive Analysis Groundwater Analytical Test Data**

MONITORING WELL	LONG TERM TRENDING ANALYSIS	ADDITIONAL COMMENTS
ENV-1	No VOCs have been detected since 1990, with the exceptions of benzene and methylene chloride, which were detected at a low concentration in 2004.	No VOCs were detected during the 2010 or 2015 groundwater sampling events.
ENV-3R	Variable, but generally low and decreasing VOC concentrations.	TTCE, VC, 1,1-DCA and cis-1,2-DCE decreased below the NYSDEC TOGS.
ENV-4	Steady, low VOC concentrations	Cis-1,2-DCE decreased below the NYSDEC TOGS.
ENV-7	Variable, but generally decreasing VOC concentrations.	Cis-1,2-DCE and VC decreased, and were detected at concentrations exceeding the NYSDEC TOGS.
ENV-8	Variable, but generally low and decreasing VOC concentrations.	TCE decreased below the NYSDEC TOGS. Cis-1,2-DCE and VC were detected at concentrations exceeding NYSDEC TOGS.
ENV-9	No VOCs detected	No VOCs were detected during the 2010 or 2015 groundwater sampling events.
ENV-11	Generally decreasing VOC concentrations.	Well was not sampled since it was destroyed during brush clearing operation.
GW-3	No VOCs detected	No VOCs were detected during the 2010 or 2015 groundwater sampling events.
NRG-3	VOCs detected in 2007 at low concentrations. No VOCs detected in 2008, 2009 and 2010.	1,1-DCE and carbon disulfide detected in 2015 at low concentrations.
NRG-4	VOCs detected in 2007 at low concentrations. No VOCs detected last four sampling events (since 2007).	No VOCs were detected during the 2010 or 2015 groundwater sampling events.
NRG-5	VOCs detected in 2007 with decreasing VOC concentrations.	Cis-1, 2-DCE, was detected at concentrations equal to or exceeding NYSDEC TOGS. Trans-1, 2-DCE decreased to below the NYSDEC TOGS.
NRG-6	VOCs detected in 2007 with decreasing VOC concentrations.	Cis-1, 2-DCE was detected at concentrations equal to or exceeding NYSDEC TOGS.

Notes:

Cis-1,2-DCE - cis-1,2-dichloroethene

1,1-DCA - 1,1-dichloroethane

1,2-DCA - 1,2-dichloroethane

TTCE - Tetrachloroethene

TCE - Trichloroethane

Trans-1,2-DCE - trans-1,2-dichloroethene

VC - vinyl chloride

NYSDEC TOGS - NYSDEC Technical and Operational Guidance Series

SECTION 5 - CONCLUSIONS

Analytical testing from the 2015 sampling event detected cis-1,2-dichloroethene (ENV-7, ENV-8, NRG-5 and NRG-6); and vinyl chloride (ENV-7, and ENV-8); at concentrations that were equal to or exceed the groundwater standards.

Trend analysis of VOCs from the comparison of historical data and Figures 5 through 16 indicates that all VOC concentrations are decreasing or remaining the same in groundwater at all monitoring wells with exceptions for cis-1,2-dichloroethene (ENV-7 and NRG-5), and vinyl chloride (ENV-8).

Concentrations of cis-1,2-dichloroethene and vinyl chloride at ENV-7 have fluctuated historically. The test results from the most recent 2015 sampling event detected the concentration of cis-1,2-dichloroethene at 83.6 µg/L (ppb), which represents a 30 percent decrease from the 2010 sampling event. The concentration of cis-1,2-dichloroethene increased by 29 percent at ENV-7 from 2009 to 2010. The 2009 sampling event detected the concentration of vinyl chloride at 98 µg/L (ppb), which represented a 100 percent increase from the previous sampling event. However, in 2010 detected concentration of vinyl chloride was 68 µg/L (ppb), representing a 30 percent decrease; and, in 2015 the detected concentration of vinyl chloride decreased an additional 24 percent to 51.9 µg/L (ppb). The concentration of vinyl chloride has generally showed a decreasing trend from 2001 through 2015. The highest concentrations of cis-1,2-dichloroethene and vinyl chloride were 430 µg/L and 250 µg/L (ppb) in 2001 and 2007 respectively. The long term trend for cis-1,2-dichloroethene and vinyl chloride indicates a decrease in both compound concentrations at the ENV-7 location.

Concentrations of cis-1,2-dichloroethene at ENV-8 continue to trend downward from the highest concentration of 150 µg/L in April 2001 to a concentration of 15.70 µg/L in October 2015.

Concentrations of cis-1,2-dichloroethene at NRG-5 have been trending downward from 93 µg/L in 2007, 59 µg/L in 2009 and 17 µg/L in 2010. However, the 2015 detected concentration of cis-1,2-dichloroethene was 22.5 µg/L, which represents a 32 percent increase from 2010. The long term trend for cis-1,2-dichloroethene indicates a decrease in concentration at the NRG-5 location.

Concentration of trichloroethene at ENV-8 has fluctuated historically. The 2015 test results from the most recent sampling event detected an estimated concentration of 1.16 µg/L (ppb), which is below the groundwater standards. The concentration of trichloroethene was not detected during the 2008 sampling event. The highest concentration of trichloroethene was 14 µg/L in 2004. The long term trend for trichloroethene indicates a decrease in concentration at the ENV-8 location.

The total VOC concentration plume for the 2009 and 2010 sampling events are shown to be larger in area from the 2008 Monitoring Report due to the addition of monitoring wells NRG-5 and NRG-6 at the request of the NYSDEC. Since previously sampled in 2007, the total VOC concentrations at NRG-5 and NRG-6 have decreased by 76 and 59 percent respectively. The total VOC concentrations at all sampled wells, with the exception of NRG-5, have decreased or remained at non-detectable levels for the 2015 sampling event.

Therefore, the OU-3 MNA remedy has been shown to be sufficiently effective by decreasing the VOC concentration plume over time and improving the site groundwater quality.

FIGURES





SOUTH GRAND ISLAND BRIDGE

APPROXIMATE AREA OF ROBLIN STEEL COMPLEX

GRAND ISLAND

MOTOR ISLAND

I-290

TOWN OF TONAWANDA

I-190

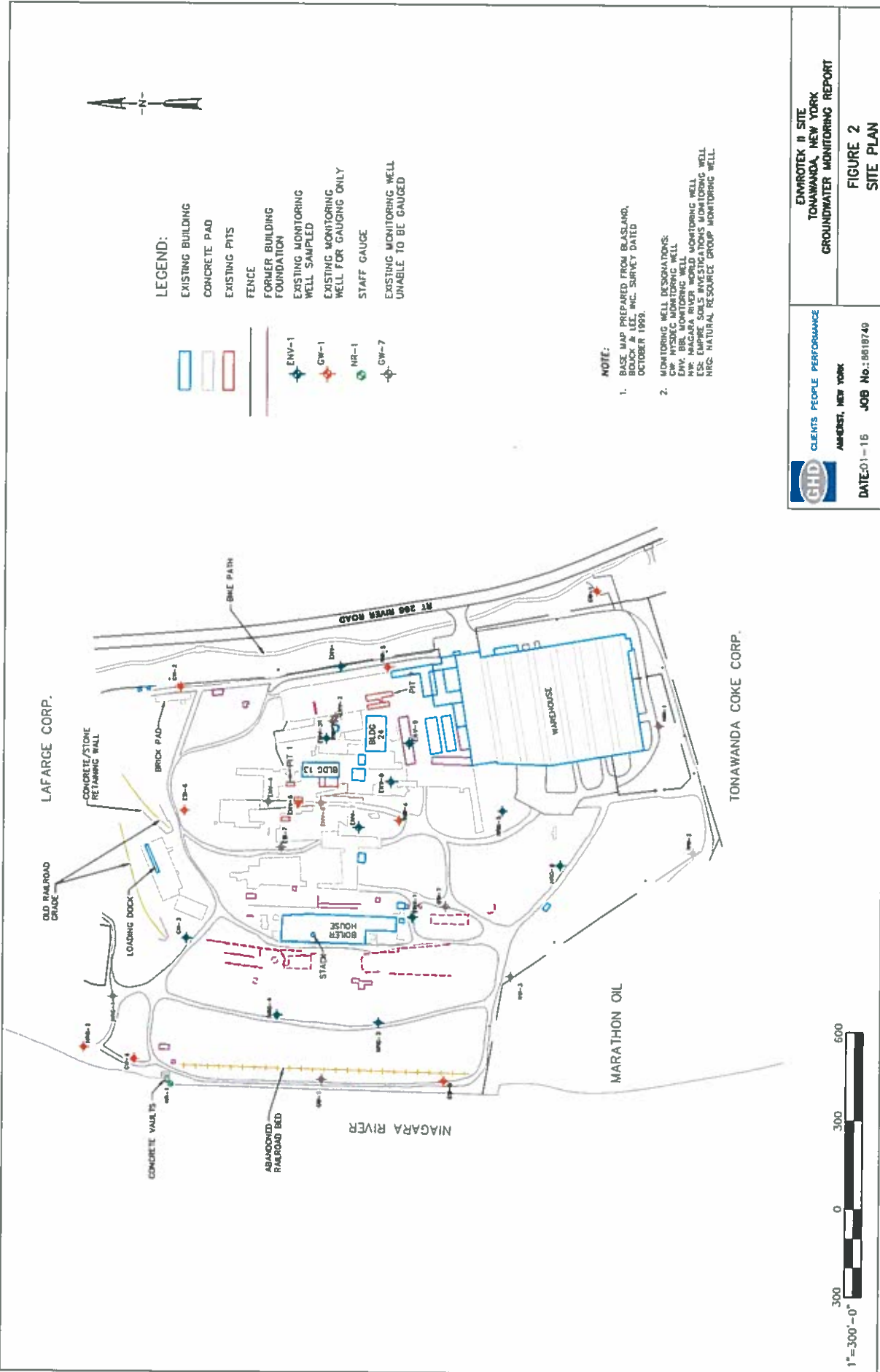


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ENVIROTEK II SITE
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GROUNDWATER MONITORING REPORT

FIGURE 1
SITE LOCATION MAP

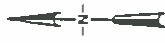
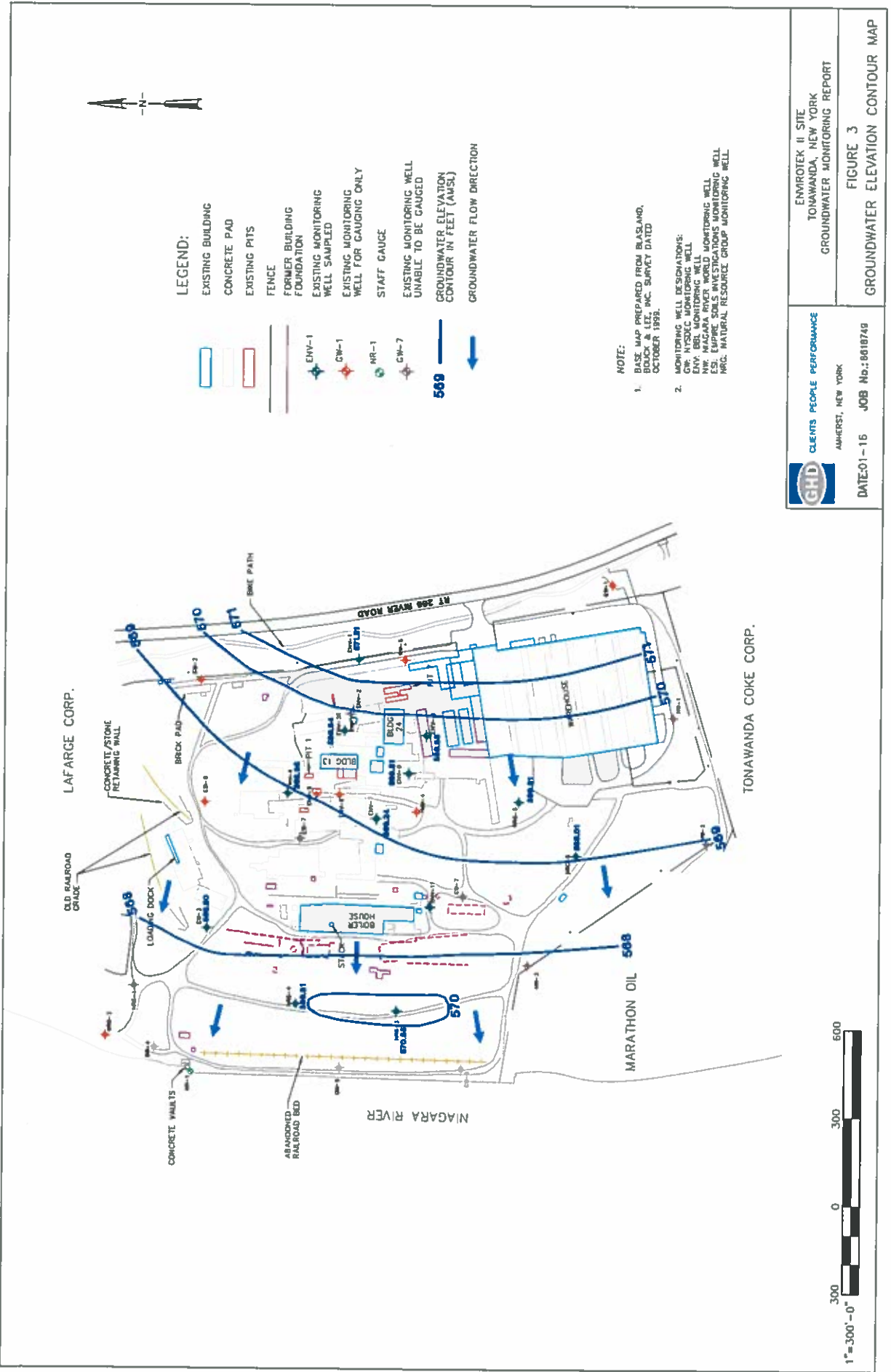


**ENVIROTEK II SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT**

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**FIGURE 2
 SITE PLAN**



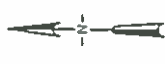
- LEGEND:**
- EXISTING BUILDING
 - CONCRETE PAD
 - EXISTING PITS
 - FENCE
 - FORMER BUILDING FOUNDATION
 - ◆ EXISTING MONITORING WELL SAMPLED
 - ◆ EXISTING MONITORING WELL FOR GAUGING ONLY
 - STAFF GAUGE
 - ◆ EXISTING MONITORING WELL UNABLE TO BE GAUGED
 - GROUNDWATER ELEVATION CONTOUR IN FEET (AMSL)
 - GROUNDWATER FLOW DIRECTION

NOTE:

1. BASE MAP PREPARED FROM BLASLAND, BOOK & LEZ, INC. SURVEY DATED OCTOBER 1999.
2. MONITORING WELL DESIGNATIONS:
 CW- HYDRO MONITORING WELL
 EMV: EEL MONITORING WELL
 MR: NIAGARA RIVER WORLD MONITORING WELL
 FSG: SURFACE SOILS INVESTIGATIONS MONITORING WELL
 MR: NATURAL RESOURCE GROUP MONITORING WELL



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<p>DATE: 01-15-16 JOB No.: 8618748</p>		<p>FIGURE 3 GROUNDWATER ELEVATION CONTOUR MAP</p>



- LEGEND:**
- EXISTING BUILDING
 - CONCRETE PAD
 - EXISTING PITS
 - FENCE
 - FORMER BUILDING FOUNDATION
 - EXISTING MONITORING WELL SAMPLED
 - EXISTING MONITORING WELL FOR GAUGING ONLY
 - STAFF GAUGE
 - EXISTING MONITORING WELL UNABLE TO BE GAUGED
 - GROUNDWATER FLOW DIRECTION
 - TOTAL VOC CONCENTRATION (ug/L)
 - 1,000 - 100 ug/L
 - 100 - 10 ug/L
 - 10 - 1 ug/L

- NOTE:**
- BASE MAP PREPARED FROM BLASLAND, BOUCK & LEE, INC. SURVEY DATED OCTOBER 1999.
 - MONITORING WELL DESIGNATIONS:
 ENV: ENVIRONMENTAL MONITORING WELL
 GW: GROUNDWATER MONITORING WELL
 MR: MARATHON RIVER MONITORING WELL
 ES: EMPIRE SOILS INVESTIGATIONS MONITORING WELL
 NRC: NATURAL RESOURCE GROUP MONITORING WELL

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 GROUNDWATER MONITORING REPORT

FIGURE 4 - TOTAL GROUNDWATER VOC CONCENTRATION MAP - OCTOBER 21, 2015



FIGURE 6
Groundwater VOC Concentrations in ENV-3 vs. Time
Envirotek II Site - Tonawanda, New York
2015 Groundwater Monitoring Report

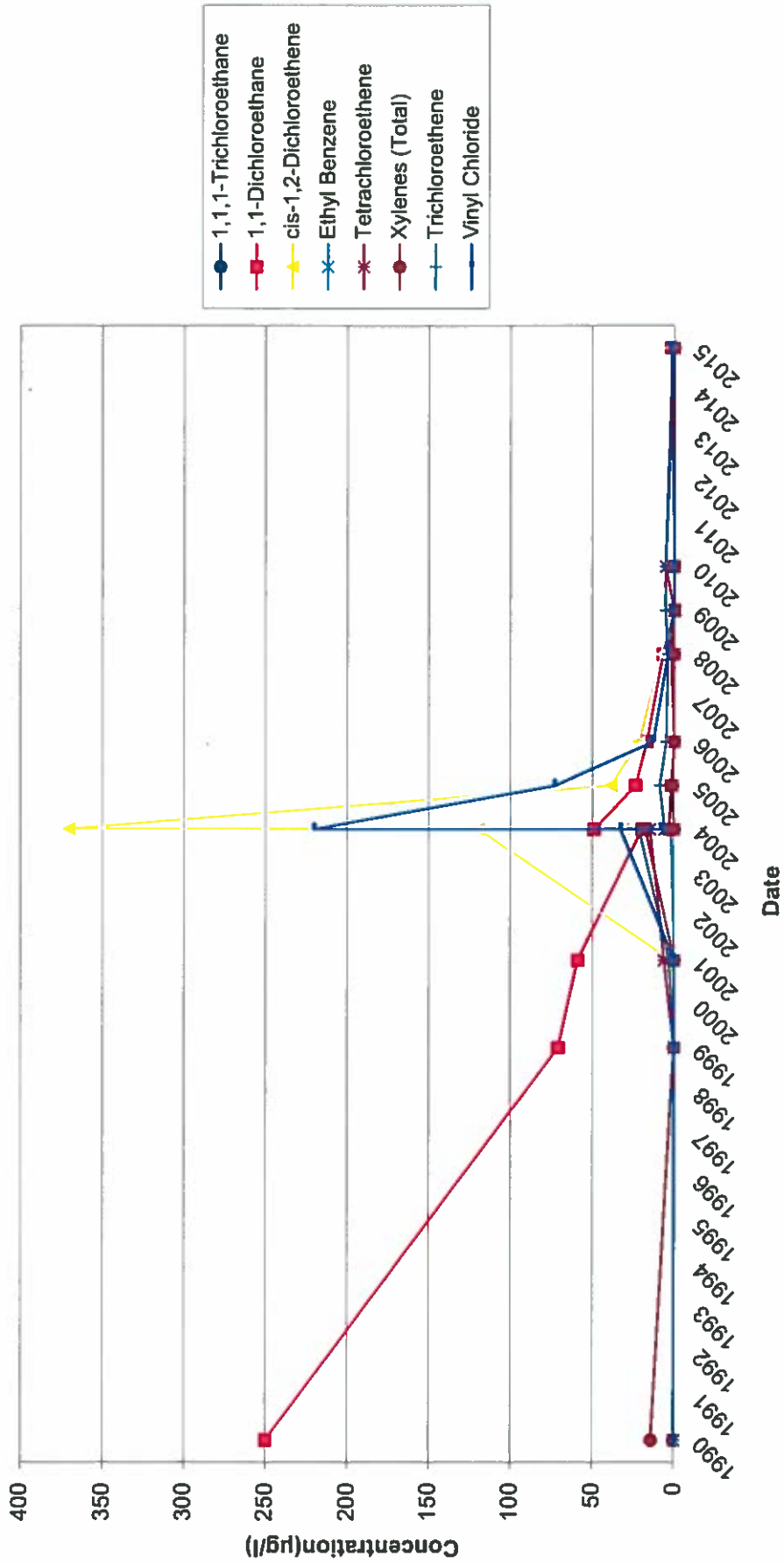


FIGURE 7
Groundwater VOC Concentrations in ENV-4 vs. Time
Envirotek II Site - Tonawanda, New York
2015 Groundwater Monitoring Report

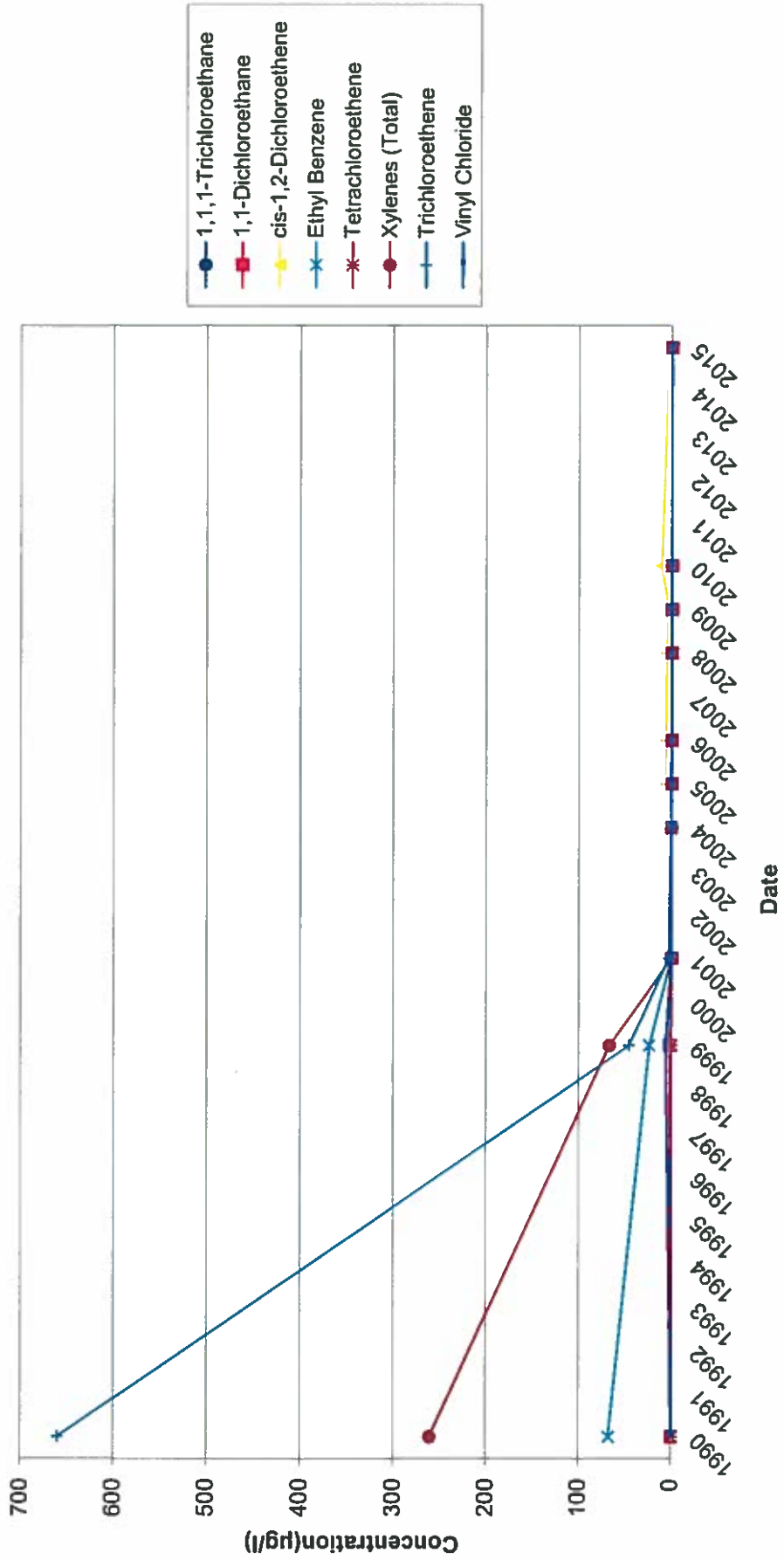


FIGURE 8
Groundwater VOC Concentrations in ENV-7 vs. Time

Envirotek II Site - Tonawanda, New York
 2015 Groundwater Monitoring Report

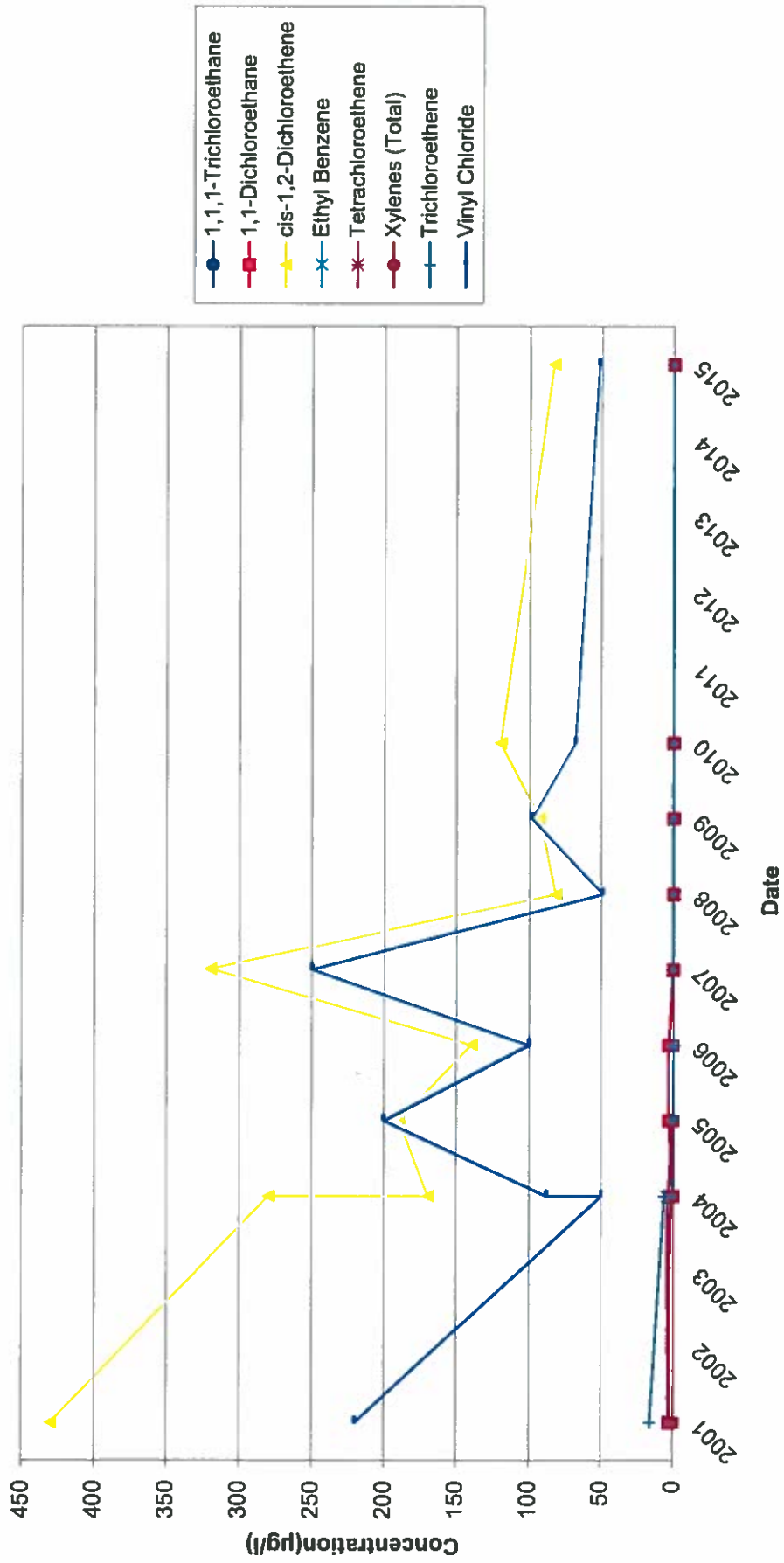


FIGURE 9
Groundwater VOC Concentrations in ENV-8 vs. Time

Envirotek II Site - Tonawanda, New York
 2015 Groundwater Monitoring Report

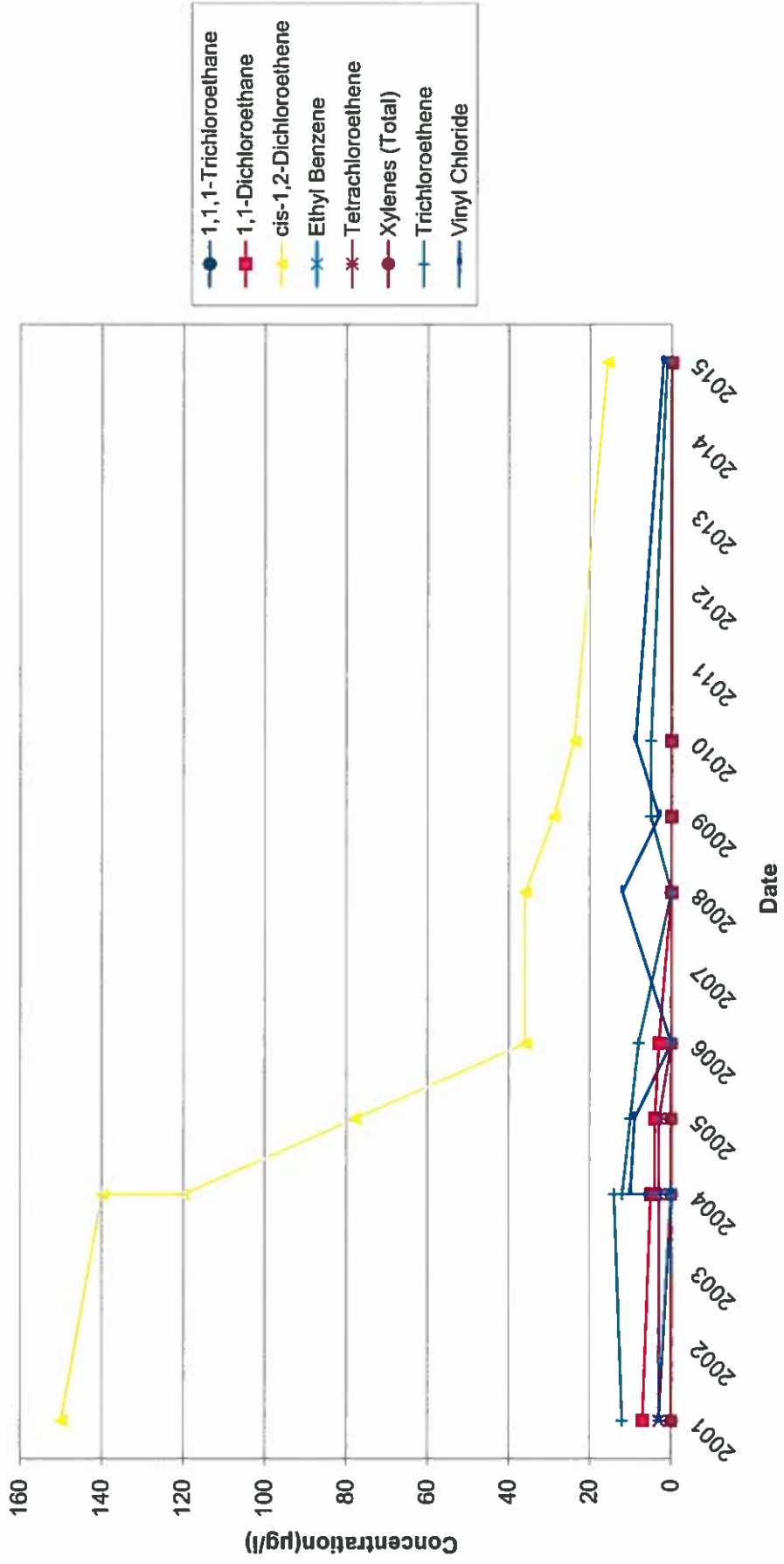


FIGURE 10
Groundwater VOC Concentrations in ENV-9 vs. Time
Envirotek II Site - Tonawanda, New York
2015 Groundwater Monitoring Report

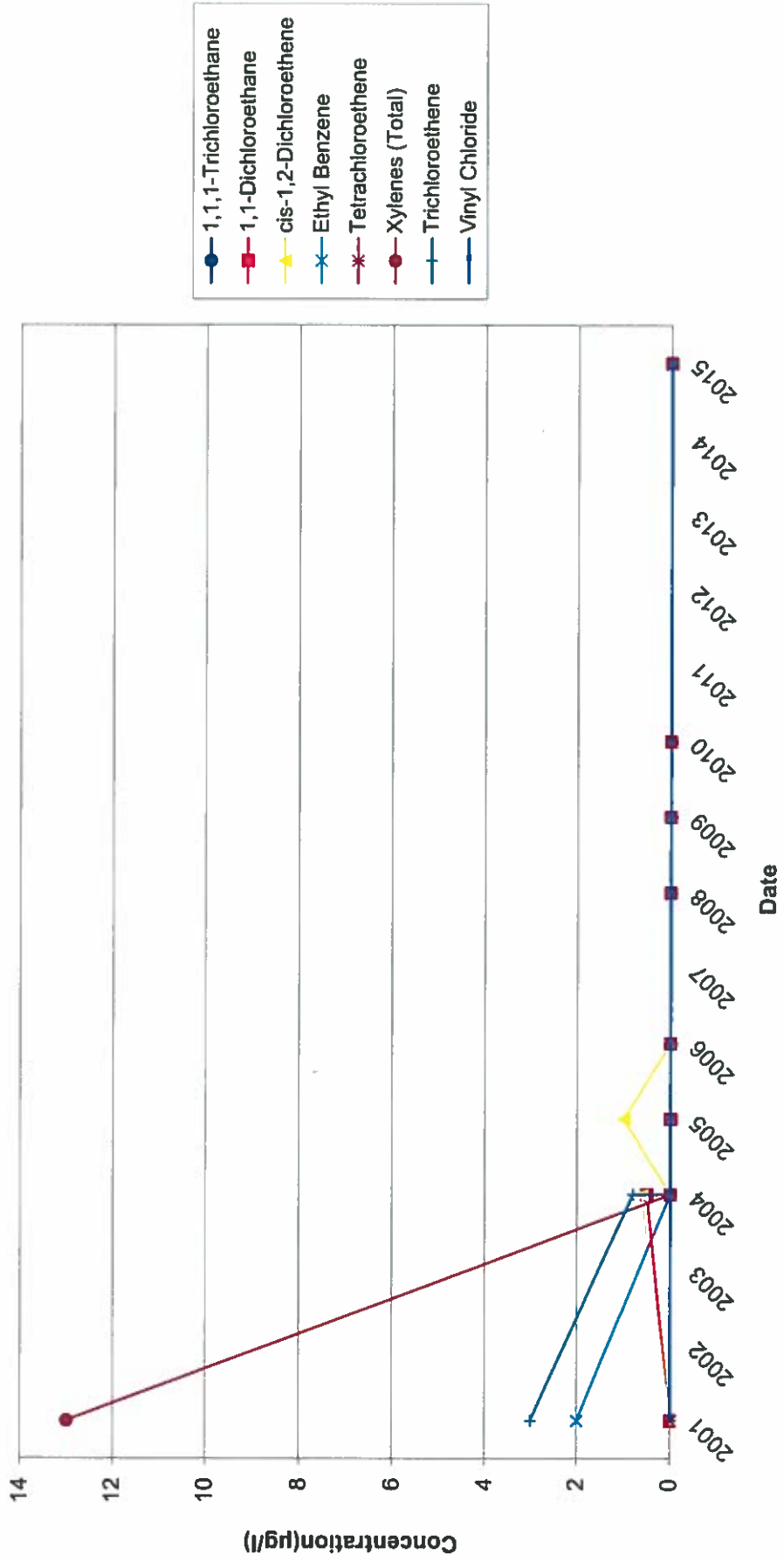


FIGURE 11
Groundwater VOC Concentrations in ENV-11 vs. Time
Envirotek II Site - Tonawanda, New York
2015 Groundwater Monitoring Report

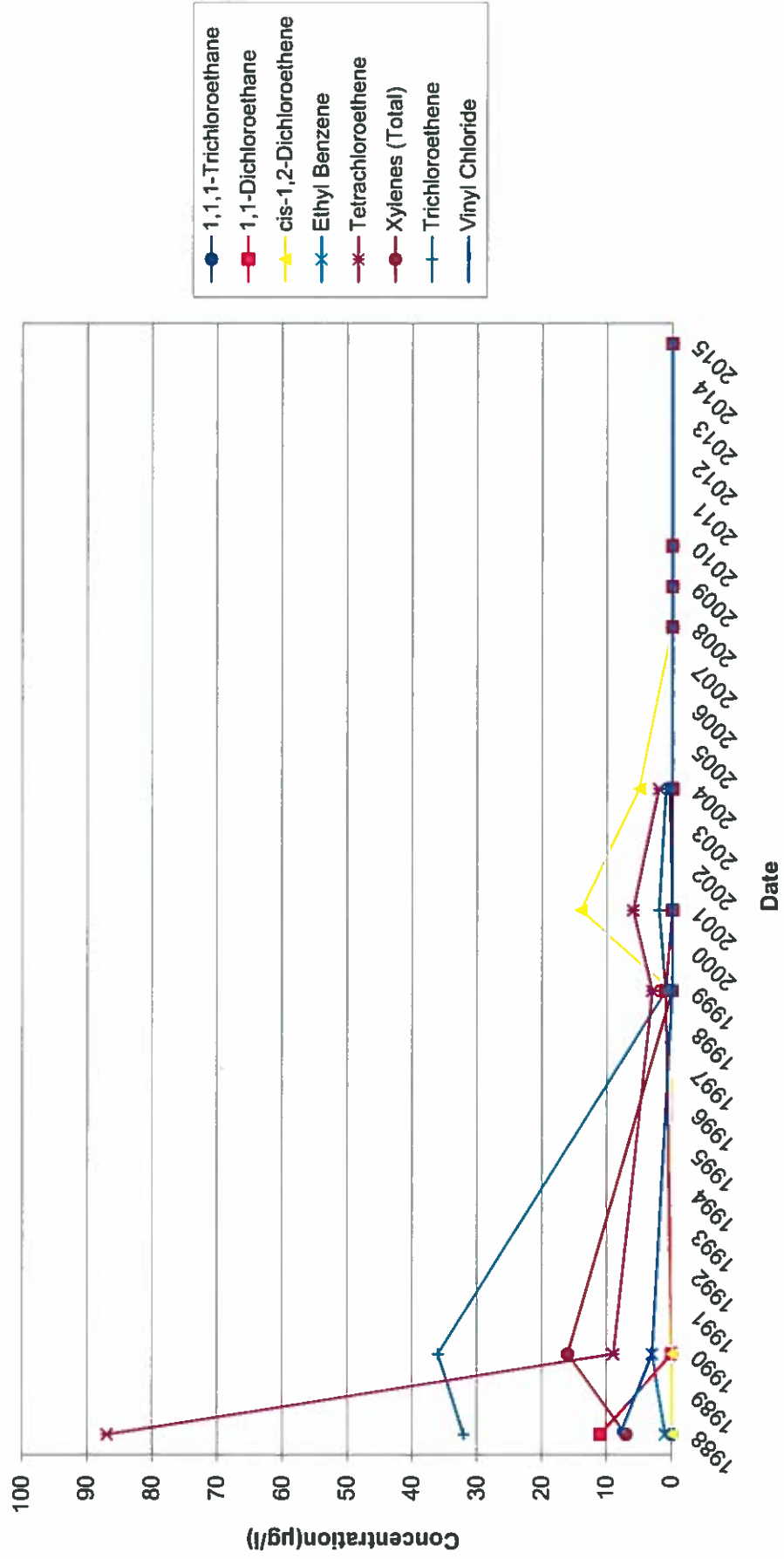
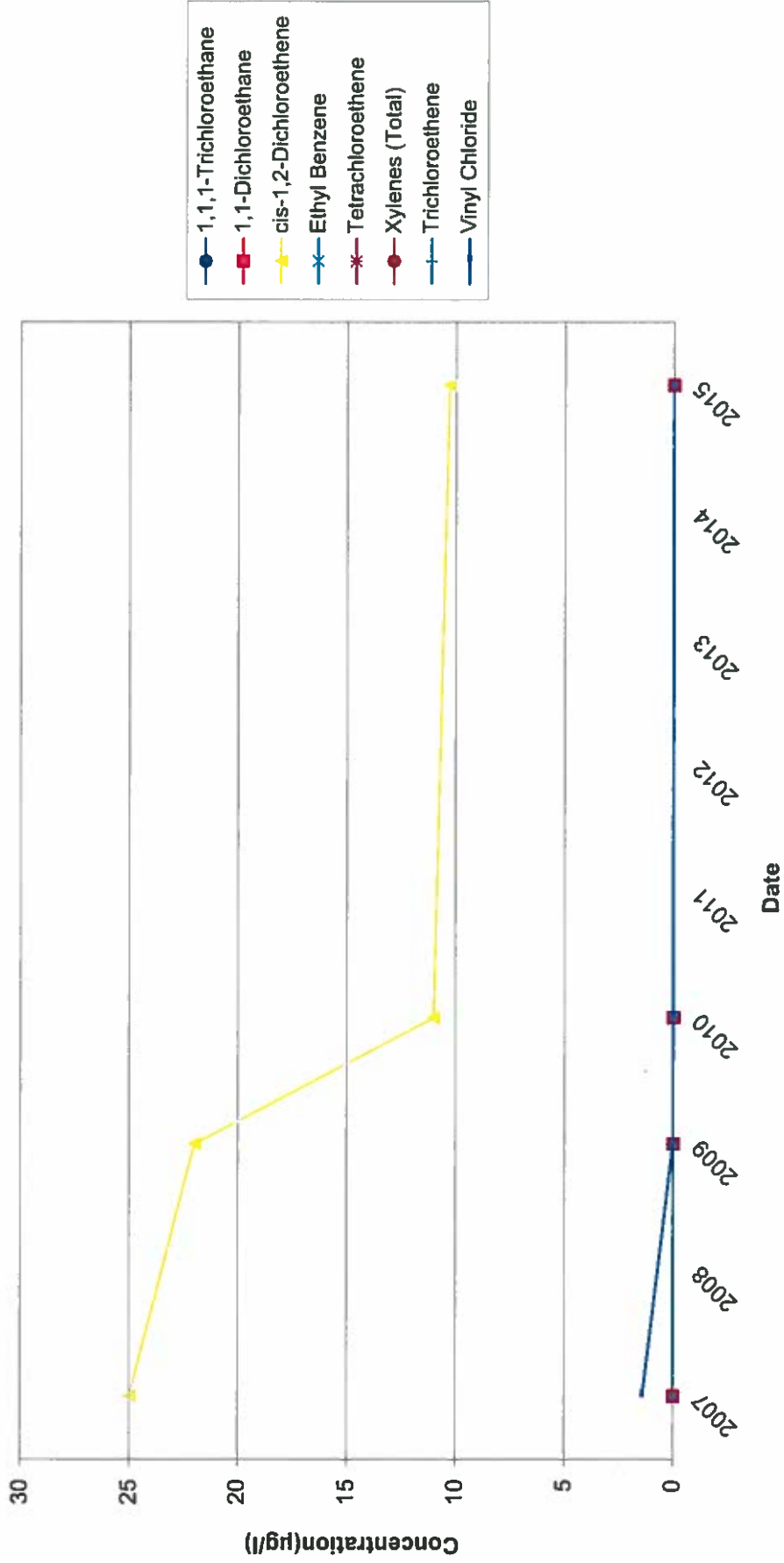


FIGURE 16
Groundwater VOC Concentrations in NRG-6 vs. Time
Envirotek II Site - Tonawanda, New York
2015 Groundwater Monitoring Report



TABLES



TABLE 1
Inventory of Shallow Groundwater Monitoring Wells

Monitoring Well #	2015 Status	Well Sampled	Groundwater Elevation (ft.)	Comments
ENV-1	Existing	YES	571.51	Flush mount
ENV-3R	Existing	YES	569.64	Flush mount
ENV-4	Existing	YES	568.95	Protective casing bent
ENV-5	Existing	NO	NA	
ENV-6	Existing	NO	NA	
ENV-7	Existing	YES	569.24	
ENV-8	Existing	YES	569.61	
ENV-9	Existing	YES	569.65	
ENV-11	Destroyed	NO	NA	Flush mount, destroyed during recent brush clearing
ESI-7	Existing	NO	NA	No ground surface elevation data available.
ESI-8	Existing	NO	NA	
GW-1	Existing	NO	NA	Flush mount
GW-2	Existing	NO	NA	Not painted
GW-3	Existing	YES	568.60	
GW-4	Existing	NO	NA	
GW-5	Existing	NO	NA	Not accessible to gauge; Field labeled as GW-6, incorrect
GW-6	Existing	NO	NA	Field labeled as GW-5, incorrect
GW-7	Existing	NO	NA	Well plugged; replaced by ENV-11
NR-1	Existing	NO	NA	Staff Gauge - painted notch on sheet pile wall
NRG-1	Destroyed	NO	NA	Protective case bent to ground
NRG-2	Existing	NO	NA	
NRG-3	Existing	YES	570.55	
NRG-4	Existing	YES	569.61	
NRG-5	Existing	YES	569.51	
NRG-6	Existing	YES	569.01	
NW-1	Existing	NO	NA	Located in fenced area
NW-2	Existing	NO	NA	Obstruction in well at 8.3'
NW-3	Existing	NO	NA	Obstruction in well at 12.2'
NW-4	Existing	NO	NA	
NW-5	Existing	NO	NA	

Notes:

NA - Data Not Available

TABLE 2
FIELD MEASURED PARAMETERS

Parameter Date Collected	Temperature (°C)						pH (standard units)						Conductivity (mS/cm)					
	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
ENV-1	14.55	14.70	14.70	14.50	12.84	13.21	6.32	6.96	6.91	6.84	7.06	7.17	0.702	0.866	1.120	0.837	1.110	0.942
ENV-3R	16.04	15.60	15.10	17.20	16.00	15.73	7.95	8.39	7.64	7.15	8.05	7.69	0.834	0.984	1.140	0.878	0.632	0.773
ENV-4	14.16	13.90	13.40	14.50	13.70	13.25	7.96	9.09	8.75	8.83	8.27	8.95	0.971	0.983	0.749	0.884	1.320	0.596
ENV-7	13.89	13.10	13.80	14.20	12.50	13.53	7.74	8.50	7.65	7.56	8.14	8.03	0.567	0.911	0.945	0.771	0.654	0.674
ENV-8	16.09	15.40	14.30	16.50	14.41	14.86	7.49	8.27	7.97	7.36	8.40	7.91	0.989	1.290	1.250	1.140	1.240	0.828
ENV-9	14.76	13.90	13.90	16.40	14.05	14.70	7.90	8.17	6.50	7.27	7.93	7.47	1.708	2.170	2.440	2.380	2.590	2.340
ENV-11	-	-	-	13.00	12.70	-	-	-	-	11.50	11.99	-	-	-	-	2.210	2.680	-
GW-3	13.44	13.10	14.20	14.40	13.22	13.68	10.11	11.71	11.39	10.40	11.78	11.04	1.116	1.360	1.830	1.940	2.270	1.150
NRG-3	-	-	15.50	16.10	14.64	16.28	-	-	8.42	8.38	8.00	8.11	-	-	0.661	0.355	0.439	0.516
NRG-4	-	-	15.00	16.10	14.55	14.99	-	-	10.02	9.87	10.53	8.28	-	-	0.472	0.466	0.328	0.519
NRG-5	-	-	-	15.20	14.56	14.78	-	-	-	9.13	9.27	9.09	-	-	1.880	1.730	1.830	-
NRG-6	-	-	-	15.40	15.03	16.10	-	-	-	10.55	11.39	10.85	-	-	1.800	1.960	1.670	-

Parameter Date Collected	Dissolved Oxygen (mg/L)						Turbidity (NTUs)						ORP (mV)					
	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
ENV-1	0.30	9.28	2.78	4.24	4.27	3.28	5.2	2.0	101	11	51	41	-121.7	-169	-150	-121	-111	-95
ENV-3R	0.36	9.49	1.85	4.16	0.71	5.19	0.9	1.2	316	7	N/A	492	-159.9	-248	-19	20	-135	-25
ENV-4	0.00	9.60	1.96	3.47	1.60	1.85	9.7	2.0	136	349	67	36	-206.9	-330	-223	-107	-282	-248
ENV-7	0.54	4.72	2.80	6.02	4.79	3.75	0.0	0.0	71	183	345	455	58.7	-141	-49	121	-63	-22
ENV-8	0.37	0.49	1.26	3.62	3.58	4.45	1.5	5.0	N/A	72	N/A	N/A	233.8	-162	22	13	-144	-37
ENV-9	0.57	9.21	1.30	5.89	3.86	4.40	7.7	6.3	N/A	96	N/A	320	-208.1	-253	-45	-47	-99	-24
ENV-11	-	-	-	4.27	1.86	-	-	-	-	24	223	-	-	-	-	-136	-253	-
GW-3	0.17	0.00	1.83	3.92	3.33	2.07	3.7	0.4	44	78	N/A	253	-110.7	-296	-258	-110	-201	-214
NRG-3	-	-	2.02	2.52	3.65	3.53	-	-	250	230	156	305	-	-	-183	-4	-163	-68
NRG-4	-	-	2.74	3.68	4.9	3.00	-	-	78	28	137	31	-	-	-217	-15	-225	-140
NRG-5	-	-	-	2.94	3.17	2.90	-	-	-	NA	N/A	346	-	-	-	57	-85	-128
NRG-6	-	-	-	3.56	4.71	2.53	-	-	-	NA	N/A	179	-	-	-125	-207	-239	-

Notes:

- *C - degrees Celsius
- mS/cm - millisemens/centimeter
- mV - millivolts
- mg/L - milligrams per liter
- NTU - nephelometric turbidity units
- N/A - Field equipment unable to record a turbidity reading due to very murky water.
- ENV-11 - well not sampled due to being destroyed during brush cleaning prior to sampling event

**TABLE 4
MONITORING WELL ENV-1
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	09/29/99	04/18/01	05/05/04	09/28/04	10/17/05	10/06/06	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
1,1,2-Tetrachloroethane	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
1,1-Dichloroethene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	-	100 U	100 U	100 U	ND
2-Hexanone	50	µg/L	10 U	10 U	5 U	25 U	10 U	5 U	10 U	10 U	5 U	-
Acetone	50	µg/L	10 U	10 U	5 U	25 U	10 U	5 U	10 U	10 U	10 U	ND
Benzene	1	µg/L	10 U	10 U	1	5 U	10 U	1 U	5 U	5 U	5 U	ND
Bromoform	50	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Bromomethane	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Chlorobenzene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
Chloroethane	5	µg/L	10 U	10 U	1 U	5 U	10 U	R	5 U	5 U	5 U	ND
Chloroform	7	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
Chloromethane	NE	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	-	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Cyclohexane	NE	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	-
Dibromochloromethane	50	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	-
Ethylbenzene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Methyl acetate	NE	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	10 U	10 U	1 U	25 U	10 U	5 U	10 U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	10 U	10 U	5 U	25 U	10 U	5 U	10 U	10 U	5 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Methylene chloride	5	µg/L	10 U	10 U	2 U	3 U	10 U	1 U	5 U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	-
o-Xylene	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	-
Styrene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	-
Tetrachloroethene	5	µg/L	10 U	10 U	1 U	25 U	10 U	1 U	5 U	5 U	5 U	ND
Toluene	5	µg/L	10 U	10 U	1 U	25 U	10 U	1 U	5 U	5 U	5 U	ND
Total Xylenes	5	µg/L	10 U	10 U	3 U	15 U	10 U	3 U	5 U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5	µg/L	NA	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Trichloroethene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
Trichlorofluoromethane	5	µg/L	-	-	-	-	10 U	1 U	5 U	5 U	5 U	ND
Vinyl chloride	2	µg/L	10 U	10 U	1 U	5 U	10 U	1 U	5 U	5 U	5 U	ND
Total VOCs		µg/L	ND	ND	1	3	ND	ND	ND	ND	ND	ND
Total VOCs		mg/L	ND	ND	ND	0.003	ND	ND	ND	ND	ND	ND

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1.

Ambient Water Quality Standards and Guidance Values (µg/L)

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified, however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL ENV-3R
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	11/19/90	10/01/99	04/18/01	05/05/04	07/15/04	09/28/04	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	-	10 U	10 U	2.00	4 J	10 U	2 J	5 U	5 U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,1,2-Trichlorofluoroethane	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	-	10 U	10 U	1 U	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	250	71	59	20	18	49	24	17	7	4 J	4 J	2.04
1,1-Dichloroethene	5	µg/L	-	10 U	10 U	1	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	-	10 U	10 U	1	-	3 J	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	-	-	-	100 U	100 U	100 U	-
2-Hexanone	50	µg/L	-	10 U	10 U	5 U	-	50 U	10 U	25 U	10 U	10 U	10 U	ND
Acetone	50	µg/L	-	10 U	10 U	5 U	-	50 U	10 U	25 U	10 U	10 U	10 U	ND
Benzene	1	µg/L	-	1 J	10 U	1	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
Bromoform	50	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Bromomethane	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	-	10 U	10 U	1 U	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Chlorobenzene	5	µg/L	-	10 U	10 U	1 U	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
Chloroethane	5	µg/L	79	51	25	1 U	-	10 U	10 U	R	5 U	5 U	5 U	ND
Chloroform	7	µg/L	-	10 U	10 U	1 U	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
Chloromethane	NE	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	NA	NA	2 J	120 D	32	370 D	39	22	8	5.3	4 J	1.78
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	-
Dibromochloromethane	50	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Ethylbenzene	5	µg/L	-	10 U	10 U	2	-	10 U	1 J	5 U	5 U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	-	10 U	10 U	1 U	-	50 U	10 U	25 U	10 U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	82	10 U	2 J	14	-	50 U	10 U	25 U	10 U	10 U	10 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Methylene chloride	5	µg/L	-	2 J	10 U	0.8 J	6 J	9 DJ	10 U	5 U	5 U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
o-Xylene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
Styrene	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	-	5 U	5 U	5 U	-
Tetrachloroethene	5	µg/L	-	10 U	6 J	15	6	3 J	2 J	3 J	2 J	4 J	5.3	ND
Toluene	5	µg/L	11	10 U	10 U	3	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
Total Xylenes	5	µg/L	14	10 U	10 U	18	3 J	30 U	1 J	15 U	5 U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5	µg/L	NA	NA	10 U	0.7 J	-	10 U	10 U	5 U	5 U	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Trichloroethene	5	µg/L	-	10 U	3 J	22	7	6 J	9 J	5	4 J	5.4	5.5	1.12
Trichlorofluoromethane	5	µg/L	-	-	-	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Vinyl chloride	2	µg/L	-	10 U	10 U	33 D	8	220 J	73	13	4 J	2 J	3 J	1.72
Total VOCs		µg/L	436	126	97	253.5	84	660	151	60	25	21	22	6.7
Total VOCs		mg/L	0.436	0.126	0.097	0.254	0.084	0.660	0.151	0.060	0.025	0.021	0.022	0.007

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1:

Ambient Water Quality Standards and Guidance Values (µg/L)

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL ENV-4
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	11/19/90	09/30/99	04/18/01	05/05/04	09/28/04	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,1,2-Trichloroethane	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,1,2-Trichloroethane	1	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
1,1-Dichloroethane	5	µg/L	-	2 J	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
1,1-Dichloroethane	5	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,2-Dichloroethane	0.6	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	-	-	100 U	100 U	200 U	-
2-Hexanone	50	µg/L	-	10 U	10 U	5 U	50 U	10 U	25 U	10 U	10 U	20 U	ND
Acetone	50	µg/L	-	10 U	10 U	5 U	50 U	10 U	25 U	10 U	10 U	20 U	ND
Benzene	1	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Bromoform	50	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Bromomethane	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Chlorobenzene	5	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Chloroethane	5	µg/L	-	10 U	10 U	1 U	10 U	10 U	R	5 U	5 U	10 U	ND
Chloroform	7	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Chloromethane	NE	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
cis-1,2-Dichloroethene	5	µg/L	-	-	3 J	1 U	10 U	6 J	6	5.5	3 J	11.0	2.67
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	-
Dibromochloromethane	50	µg/L	-	-	-	-	50	10 U	5 U	5 U	5 U	10 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Ethylbenzene	5	µg/L	58	24	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Isopropylbenzene	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
2-Butanone (MEK)	50	µg/L	-	10 U	10 U	1 U	10 U	10 U	25 U	10 U	10 U	20 U	ND
4-Methyl 2-Pentanone	NE	µg/L	110	10 U	10 U	5 U	50 U	10 U	25 U	10 U	10 U	20 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Methylene chloride	5	µg/L	-	10 U	10 U	2 U	8 J	10 U	5 U	5 U	5 U	10 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
o-Xylene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
Styrene	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	10 U	-
Tetrachloroethene	5	µg/L	-	10 U	10 U	0.3 J	10 U	10 U	5 U	5 U	5 U	10 U	ND
Toluene	5	µg/L	760	9 J	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Total Xylenes	5	µg/L	260	67	10 U	3 U	30 U	10 U	15 U	5 U	5 U	10 U	ND
trans-1,2-Dichloroethene	5	µg/L	-	-	10 U	1 U	10 U	2 J	5 U	5 U	5 U	10 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Trichloroethene	5	µg/L	560	46	3 J	1	10 U	1 J	5 U	5 U	5 U	10 U	ND
Trichlorofluoromethane	5	µg/L	-	-	-	-	-	10 U	5 U	5 U	5 U	10 U	ND
Vinyl chloride	2	µg/L	-	5 J	10 U	1 U	10 U	10 U	5 U	5 U	5 U	10 U	ND
Total VOCs		µg/L	1748	154	6	1.3	8	9	6	6	3	11	2.67
Total VOCs		mg/L	1.748	0.154	0.006	0.001	0.008	0.009	0.006	0.006	0.003	0.011	0.003

Notes:

- 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L)
- Bolded concentrations indicated the analyte was detected.
- Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.
- NE = NYSDEC TOGS 1.1.1 water quality standard not established.
- U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- ND = The analyte was analyzed for but not detected.
- J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R = The sample results are rejected.
- D = Compound identified in analysis at a secondary dilution factor
- = The analyte was not sampled for
- Synonyms: Chlorodibromomethane = Dichlorobromoethane
- Synonyms: 2-Butanone = Methyl Ethyl Ketone
- Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL ENV-7
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	04/19/01	05/05/04	09/28/04	10/17/05	10/05/06	03/08/07	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	3 J	2.00	5 U	3 J	3 J	U	5 U	5 U	5 U	ND
1,1-Dichloroethene	5	µg/L	25 U	1.00	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	U	100 U	100 U	100 U	-
2-Hexanone	50	µg/L	25 U	5 U	25 U	10 U	25 U	U	10 U	10 U	10 U	ND
Acetone	50	µg/L	16 U	5 U	25 U	10 U	25 U	U	10 U	10 U	10 U	ND
Benzene	1	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
Bromoform	50	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Bromomethane	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Chlorobenzene	5	µg/L	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	ND
Chloroethane	5	µg/L	µg/L	25 U	1 U	5 U	10 U	R	U	5 U	5 U	ND
Chloroform	7	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
Chloromethane	NE	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	430	280 D	170	190	140	320	82	93	120	83.4
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Cyclohexane	NE	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	-
Dibromochloromethane	50	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Ethylbenzene	5	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Methyl acetate	NE	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	25 U	1 U	5 U	10 U	25 U	U	10 U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	25 U	5 U	25 U	10 U	25 U	U	10 U	10 U	10 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Methylene chloride	5	µg/L	25 U	2 U	3 J	10 U	5 U	U	5 U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
o-Xylene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
Styrene	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	U	5 U	5 U	5 U	-
Tetrachloroethene	5	µg/L	3 J	4	3 J	1 J	5 U	U	5 U	5 U	5 U	ND
Toluene	5	µg/L	25 U	1 U	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
Total Xylenes	5	µg/L	28 U	3 U	15 U	10 U	15 U	U	5 U	5 U	5 U	ND
trans-1,2-Dichloroethene	5	µg/L	4 J	3	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Trichloroethene	5	µg/L	16 J	6	5 U	10 U	5 U	U	5 U	5 U	5 U	ND
Trichlorofluoromethane	5	µg/L	-	-	-	10 U	5 U	U	5 U	5 U	5 U	ND
Vinyl chloride	2	µg/L	220	50 D	88	200	100	240	49	98	60	51.9
Total VOCs		µg/L	720	346	264	394	243	570	131	191	188	135.50
Total VOCs		mg/L	0.720	0.346	0.264	0.394	0.243	0.570	0.131	0.191	0.188	0.136

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1:

Ambient Water Quality Standards and Guidance Values (µg/L)

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified, however, the associated numerical value is an estimated concentration only

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL ENV-8
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	04/19/01	05/05/04	09/28/04	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	7 J	5	4 J	4 J	5 U	3 J	5 J	2 J	ND
1,1-Dichloroethene	5	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	100 U	100 U	100 U	-
2-Hexanone	50	µg/L	10 U	25 U	50 U	10 U	25 U	10 U	10 U	10 U	ND
Acetone	50	µg/L	31	25 U	50 U	10 U	25 U	10 U	10 U	10 U	ND
Benzene	1	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
Bromoform	50	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Bromomethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Chlorobenzene	5	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
Chloroethane	5	µg/L	10 U	5 U	10 U	10 U	R	5 U	5 U	5 U	ND
Chloroform	7	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
Chloromethane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	150	140	120	78	36	36	29	24	15.70
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Cyclohexane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	-
Dibromochloromethane	50	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Ethylbenzene	5	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Methyl acetate	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	10 U	5 U	10 U	10 U	25 U	10 U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	11	25 U	50 U	10 U	25 U	10 U	10 U	10 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Methylene chloride	5	µg/L	10 U	10 U	4 J	10 U	5 U	5 U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
o-Xylene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
Styrene	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
Tetrachloroethene	5	µg/L	3 J	3 J	3 J	3 J	5 U	5 U	5 U	5 U	ND
Toluene	5	µg/L	10 U	5 U	10 U	10 U	5 U	5 U	5 U	5 U	ND
Total Xylenes	5	µg/L	-	15 U	30 U	10 U	15 U	5 U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5	µg/L	4 J	3 J	10 U	2 J	5 U	5 U	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Trichloroethene	5	µg/L	12	14 J	12	10	8	5 U	5 J	5 J	1.16
Trichlorofluoromethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Vinyl chloride	2	µg/L	3 J	5 U	10	9 J	5 U	12	3 J	8.8	2.02
Total VOCs		µg/L	233	165	153	106	44	51	37	40	18.88
Total VOCs		mg/L	0.233	0.165	0.153	0.106	0.044	0.051	0.037	0.040	0.019

Notes:

1 New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1.

Ambient Water Quality Standards and Guidance Values (µg/L)

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL ENV-9
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	04/19/01	05/05/04	09/28/04	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	10 U	0.5 J	5 U	10 U	5 U	5 U	5 U	5 U	ND
1,1-Dichloroethene	5	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	100 U	100 U	100 U	-
2-Hexanone	50	µg/L	2 J	5 U	25 U	10 U	25 U	10 U	10 U	10 U	ND
Acetone	50	µg/L	1,200 DJ	5 U	25 U	10 U	25 UJ	10 U	10 U	10 U	ND
Benzene	1	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Bromoform	50	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Bromomethane	5	µg/L	-	-	-	10 U	5 UJ	5 U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Chlorobenzene	5	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Chloroethane	5	µg/L	10 U	1 U	5 U	10 U	R	5 U	5 U	5 U	ND
Chloroform	7	µg/L	3 J	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Chloromethane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	10 U	0.6 J	5 U	1 J	5 U	5 U	5 U	5 U	ND
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Cyclohexane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	-
Dibromochloromethane	50	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Ethylbenzene	5	µg/L	2 J	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Methyl acetate	NE	µg/L	-	-	-	10 U	5 UJ	5 U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	5 J	1 U	5 U	10 U	25 U	10 U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	10	5 U	25 U	10 U	25 U	10 U	10 U	10 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Methylene chloride	5	µg/L	10 U	2 U	3 J	10 U	5 U	5 U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
o-Xylene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
Styrene	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	5 U	5 U	5 U	-
Tetrachloroethene	5	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Toluene	5	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Total Xylenes	5	µg/L	13 J	3 U	15 U	10 U	15 U	5 U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Trichloroethene	5	µg/L	3 J	0.8 J	5 U	10 U	5 U	5 U	5 U	5 U	ND
Trichlorofluoromethane	5	µg/L	-	-	-	10 U	5 U	5 U	5 U	5 U	ND
Vinyl chloride	2	µg/L	10 U	1 U	5 U	10 U	5 U	5 U	5 U	5 U	ND
Total VOCs		µg/L	1238	19	3	1	ND	ND	ND	ND	ND
Total VOCs		mg/L	1.238	0.0019	0.003	0.001	ND	ND	ND	ND	ND

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1.

Ambient Water Quality Standards and Guidance Values (µg/L.)

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified, however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL ENV-11
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1		Monitoring Dates										
	Water Quality Standards ¹	Units	09/28/88	12/05/90	09/30/99	04/19/01	05/05/04	09/28/04	10/07/08	10/27/09	10/21/10	10/21/2015 ²	
1,1,1-Trichloroethane	5	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,1,2-Trichlorotrifluoroethane	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,1,2-Trichloroethane	1	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
1,1-Dichloroethane	5	µg/L	11	-	1 J	10 U	1 U	10 U	-	5 U	5 U	-	
1,1-Dichloroethene	5	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	-	-	
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,2-Dichlorobenzene	3	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,2-Dichloroethane	0.6	µg/L	-	4 J	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
1,2-Dichloropropane	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,3-Dichlorobenzene	3	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,4-Dichlorobenzene	3	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
1,4-Dioxane	5	µg/L	-	-	-	-	-	-	-	100 U	100 U	-	
2-Hexanone	50	µg/L	-	-	10 U	10 U	5 U	50 U	-	10 U	10 U	-	
Acetone	50	µg/L	210 D	60	10 U	12	5 U	50 U	-	10 U	10 U	-	
Benzene	1	µg/L	2 J	0.9 J	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
Bromoform	50	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Bromomethane	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	-	-	
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	-	-	
Carbon disulfide	60	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
Carbon tetrachloride	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Chlorobenzene	5	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
Chloroethane	5	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
Chloroform	7	µg/L	-	-	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
Chloromethane	NE	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
cis-1,2-Dichloroethene	5	µg/L	-	-	-	14	5	5 J	-	5 U	4 J	-	
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Cyclohexane	NE	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Dibromochloromethane	50	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Chlorodibromomethane	NE	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Dichlorodifluoromethane	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Ethylbenzene	5	µg/L	1 J	3 J	10 U	10 U	1 U	10 U	-	5 U	5 U	-	
Isopropylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Methyl acetate	NE	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
2-Butanone (MEK)	50	µg/L	61	-	10 U	10 U	1 U	10 U	-	10 U	10 U	-	
4-Methyl 2-Pentanone	NE	µg/L	40	20	10 U	10 U	5 U	50 U	-	10 U	10 U	-	
Methyl Cyclohexane	NE	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Methylene chloride	5	µg/L	41 B	-	10 U	10 U	2 U	20 U	-	5 U	5 U	-	
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
m,p-Xylene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
n-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
n-Propylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
o-Xylene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
sec-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Styrene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
tert-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Tetrachloroethene	5	µg/L	87	9 J	3 J	6 J	2	10 U	-	5 U	5 U	-	
Toluene	5	µg/L	30 B	59	10 U	1 J	1	10 U	-	5 U	5 U	-	
Total Xylenes	5	µg/L	7	16	10 U	10 U	3 U	30 U	-	5 U	5 U	-	
trans-1, 2-Dichloroethene	5	µg/L	-	-	-	10 U	1 U	10 U	-	5 U	5 U	-	
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Trichloroethene	5	µg/L	32	36	1 J	2 J	1	10 U	-	5 U	5 U	-	
Trichlorofluoromethane	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	-	
Vinyl chloride	2	µg/L	8	3 J	10 U	10 U	-	-	-	5 U	5 U	-	
Total VOCs		µg/L	530	210.9	5	35	9.4	5	ND	ND	4	-	
Total VOCs		mg/L	0.530	0.2109	0.005	0.035	0.0094	0.005	ND	ND	0.004	-	

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1 - Ambient Water Quality Standards and Guidance Values (µg/L)

2. Well was not sampled since it was destroyed during a brush clearing operation.

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE J
MONITORING WELL GW-3
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	09/28/88	12/05/90	09/29/99	05/05/04	09/28/04	10/17/05	10/05/06	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
1,1-Dichloroethene	5	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	-	-	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	-	-	-	-	-	-	5 U	5 U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	-	-	-	-	-	-	-	100 U	100 U	100 U	-
2-Hexanone	50	µg/L	-	-	10 U	5 U	10 U	10 U	20 U	10 U	10 U	10 U	ND
Acetone	50	µg/L	-	20	10 U	5 U	10 U	10 U	20 U	10 U	10 U	10 U	ND
Benzene	1	µg/L	6	2 J	1 J	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Bromoform	50	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Bromomethane	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	-	-	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	-	-	-	-	-	-	ND
Carbon disulfide	60	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Chlorobenzene	5	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Chloroethane	5	µg/L	-	-	10 U	1 U	2 U	10 U	R	5 U	5 U	5 U	ND
Chloroform	7	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Chloromethane	NE	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	-	-	-	0.3 J	2 U	10 U	4 U	5 U	5 U	5 U	ND
cis-1,3-Dichloropropene	0.40	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	-
Dibromochloromethane	50	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Ethylbenzene	5	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	-	29	10 U	1 U	2 U	10 U	20 U	10 U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	-	-	10 U	5 U	10 U	10 U	20 U	10 U	10 U	10 U	ND
Methyl Cyclohexane	NE	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Methylene chloride	5	µg/L	-	-	10 U	2 U	1 J	10 U	4 U	5 U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
m,p-Xylene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
n-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
n-Propylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
o-Xylene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
Styrene	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	-	-	-	-	-	-	-	5 U	5 U	5 U	-
Tetrachloroethene	5	µg/L	-	-	10 U	0.5 J	2 U	10 U	4 U	5 U	5 U	5 U	ND
Toluene	5	µg/L	1 J	0.6 J	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Total Xylenes	5	µg/L	2 J	-	10 U	3 U	6 U	10 U	12 U	5 U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5	µg/L	-	-	-	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Trichloroethene	5	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Trichlorofluoromethane	5	µg/L	-	-	-	-	-	10 U	4 U	5 U	5 U	5 U	ND
Vinyl chloride	2	µg/L	-	-	10 U	1 U	2 U	10 U	4 U	5 U	5 U	5 U	ND
Total VOCs		µg/L	9	51.6	1	0.8	1	ND	ND	ND	ND	ND	ND
Total VOCs		mg/L	0.009	0.0516	0.001	0.0008	0.001	ND	ND	ND	ND	ND	ND

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1.

Ambient Water Quality Standards and Guidance Values (µg/L)

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDCE TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified, however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL NRG-3
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIRTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	3/14/07 ²	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	U	25 U	100 U	50 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	U	25 U	100 U	50 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	U	25 U	100 U	50 U	ND
1,1,2-Trichloroethane	1	µg/L	U	25 U	100 U	50 U	ND
1,1-Dichloroethane	5	µg/L	2.3 J	25 U	100 U	50 U	1.04
1,1-Dichloroethene	5	µg/L	U	25 U	100 U	50 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	U	25 U	100 U	50 U	ND
1,2,4-Trimethylbenzene	5	µg/L	U	25 U	100 U	50 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	U	25 U	100 U	50 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	U	25 U	100 U	50 U	ND
1,2-Dichlorobenzene	3	µg/L	U	25 U	100 U	50 U	ND
1,2-Dichloroethane	0.6	µg/L	U	25 U	100 U	50 U	ND
1,2-Dichloropropane	5	µg/L	U	25 U	100 U	50 U	ND
1,3-Dichlorobenzene	3	µg/L	U	25 U	100 U	50 U	ND
1,3,5-Trimethylbenzene	5	µg/L	U	25 U	100 U	50 U	-
1,4-Dichlorobenzene	3	µg/L	U	25 U	100 U	50 U	ND
1,4-Dioxane	5	µg/L	U	500 U	2000 U	1000 U	-
2-Hexanone	50	µg/L	U	50 U	200 U	100 U	ND
Acetone	50	µg/L	U	50 U	200 U	100 U	ND
Benzene	1	µg/L	1.7 J	25 U	100 U	50 U	ND
Bromoform	50	µg/L	U	25 U	100 U	50 U	ND
Bromomethane	5	µg/L	U	25 U	100 U	50 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	ND
Carbon disulfide	60	µg/L	U	25 U	100 U	50 U	1.03
Carbon tetrachloride	5	µg/L	U	25 U	100 U	50 U	ND
Chlorobenzene	5	µg/L	U	25 U	100 U	50 U	ND
Chloroethane	5	µg/L	U	25 U	100 U	50 U	ND
Chloroform	7	µg/L	U	25 U	100 U	50 U	ND
Chloromethane	NE	µg/L	U	25 U	100 U	50 U	ND
cis-1,2-Dichloroethene	5	µg/L	U	25 U	100 U	50 U	ND
cis-1,3-Dichloropropene	0.40	µg/L	U	25 U	100 U	50 U	ND
Cyclohexane	NE	µg/L	U	25 U	100 U	50 U	-
Dibromochloromethane	50	µg/L	U	25 U	100 U	50 U	-
Chlorodibromomethane	NE	µg/L	U	25 U	100 U	50 U	ND
Dichlorodifluoromethane	5	µg/L	U	25 U	100 U	50 U	ND
Ethylbenzene	5	µg/L	1.1 J	25 U	100 U	50 U	ND
Isopropylbenzene	5	µg/L	U	25 U	100 U	50 U	ND
Methyl acetate	NE	µg/L	U	25 U	100 U	50 U	ND
2-Butanone (MEK)	50	µg/L	U	50 U	200 U	100 U	ND
4-Methyl 2-Pentanone	NE	µg/L	U	50 U	200 U	100 U	ND
Methyl Cyclohexane	NE	µg/L	U	25 U	100 U	50 U	ND
Methylene chloride	5	µg/L	U	25 U	100 U	50 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	U	25 U	100 U	50 U	ND
m,p-Xylene	5	µg/L	U	25 U	100 U	50 U	-
n-Butylbenzene	5	µg/L	U	25 U	100 U	50 U	-
n-Propylbenzene	5	µg/L	U	25 U	100 U	50 U	-
o-Xylene	5	µg/L	U	25 U	100 U	50 U	-
sec-Butylbenzene	5	µg/L	U	25 U	100 U	50 U	-
Styrene	5	µg/L	U	25 U	100 U	50 U	ND
tert-Butylbenzene	5	µg/L	U	25 U	100 U	50 U	-
Tetrachloroethene	5	µg/L	U	25 U	100 U	50 U	ND
Toluene	5	µg/L	3.1 J	25 U	100 U	50 U	ND
Total Xylenes	5	µg/L	1.0	25 U	100 U	50 U	ND
trans-1, 2-Dichloroethene	5	µg/L	U	25 U	100 U	50 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	U	25 U	100 U	50 U	ND
Trichloroethene	5	µg/L	U	25 U	100 U	50 U	ND
Trichlorofluoromethane	5	µg/L	U	25 U	100 U	50 U	ND
Vinyl chloride	2	µg/L	U	25 U	100 U	50 U	ND
Total VOCs		µg/L	19.4	ND	ND	ND	ND
Total VOCs		mg/L	0.0194	ND	ND	ND	ND

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1:
Ambient Water Quality Standards and Guidance Values (µg/L)

2. The reporting limits were raised due to matrix interference. Sample foamed during laboratory purging procedure.
Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

**TABLE 4
MONITORING WELL NRG-4
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	3/14/07 ²	10/07/08	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	U	25 U	5 U	25 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	U	25 U	5 U	25 U	ND
1,1,2-Trichlorotrifluoroethane	5	µg/L	U	25 U	5 U	25 U	ND
1,1,2-Trichloroethane	1	µg/L	U	25 U	5 U	25 U	ND
1,1-Dichloroethane	5	µg/L	5.4	25 U	5 U	25 U	ND
1,1-Dichloroethene	5	µg/L	U	25 U	5 U	25 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	U	25 U	5 U	25 U	ND
1,2,4-Trimethylbenzene	5	µg/L	U	25 U	5 U	25 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	U	25 U	5 U	25 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	U	25 U	5 U	25 U	ND
1,2-Dichlorobenzene	3	µg/L	U	25 U	5 U	25 U	ND
1,2-Dichloroethane	0.6	µg/L	U	25 U	5 U	25 U	ND
1,2-Dichloropropane	5	µg/L	U	25 U	5 U	25 U	ND
1,3-Dichlorobenzene	3	µg/L	U	25 U	5 U	25 U	ND
1,3,5-Trimethylbenzene	5	µg/L	U	25 U	5 U	25 U	-
1,4-Dichlorobenzene	3	µg/L	U	25 U	5 U	25 U	ND
1,4-Dioxane	5	µg/L	U	500 U	100 U	500 U	-
2-Hexanone	50	µg/L	U	50 U	10 U	50 U	ND
Acetone	50	µg/L	U	50 U	10 U	50 U	ND
Benzene	1	µg/L	0.79 J	25 U	5 U	25 U	ND
Bromoform	50	µg/L	U	25 U	5 U	25 U	ND
Bromomethane	5	µg/L	U	25 U	5 U	25 U	ND
Bromochloromethane	5	µg/L	-	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	-	ND
Carbon disulfide	60	µg/L	U	25 U	5 U	25 U	ND
Carbon tetrachloride	5	µg/L	U	25 U	5 U	25 U	ND
Chlorobenzene	5	µg/L	U	25 U	5 U	25 U	ND
Chloroethane	5	µg/L	U	25 U	5 U	25 U	ND
Chloroform	7	µg/L	U	25 U	5 U	25 U	ND
Chloromethane	NE	µg/L	U	25 U	5 U	25 U	ND
cis-1,2-Dichloroethene	5	µg/L	U	25 U	5 U	25 U	ND
cis-1,3-Dichloropropene	0.40	µg/L	U	25 U	5 U	25 U	ND
Cyclohexane	NE	µg/L	U	25 U	5 U	25 U	-
Dibromochloromethane	50	µg/L	U	25 U	5 U	25 U	-
Chlorodibromomethane	NE	µg/L	U	25 U	5 U	25 U	ND
Dichlorodifluoromethane	5	µg/L	U	25 U	5 U	25 U	ND
Ethylbenzene	5	µg/L	U	25 U	5 U	25 U	ND
Isopropylbenzene	5	µg/L	U	25 U	5 U	25 U	ND
Methyl acetate	NE	µg/L	U	25 U	5 U	25 U	ND
2-Butanone (MEK)	50	µg/L	U	50 U	10 U	50 U	ND
4-Methyl 2-Pentanone	NE	µg/L	U	50 U	10 U	50 U	ND
Methyl Cyclohexane	NE	µg/L	U	25 U	5 U	25 U	ND
Methylene chloride	5	µg/L	U	25 U	5 U	25 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	U	25 U	5 U	25 U	ND
m,p-Xylene	5	µg/L	U	25 U	5 U	25 U	-
n-Butylbenzene	5	µg/L	U	25 U	5 U	25 U	-
n-Propylbenzene	5	µg/L	U	25 U	5 U	25 U	-
o-Xylene	5	µg/L	U	25 U	5 U	25 U	-
sec-Butylbenzene	5	µg/L	U	25 U	5 U	25 U	-
Styrene	5	µg/L	U	25 U	5 U	25 U	ND
tert-Butylbenzene	5	µg/L	U	25 U	5 U	25 U	-
Tetrachloroethene	5	µg/L	U	25 U	5 U	25 U	ND
Toluene	5	µg/L	1.8 J	25 U	5 U	25 U	ND
Total Xylenes	5	µg/L	1.6 J	25 U	5 U	25 U	ND
trans-1, 2-Dichloroethene	5	µg/L	U	25 U	5 U	25 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	U	25 U	5 U	25 U	ND
Trichloroethene	5	µg/L	U	25 U	5 U	25 U	ND
Trichlorofluoromethane	5	µg/L	U	25 U	5 U	25 U	ND
Vinyl chloride	2	µg/L	U	25 U	5 U	25 U	ND
Total VOCs		µg/L	12.19	ND	ND	ND	ND
Total VOCs		mg/L	0.01219	ND	ND	ND	ND

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1:

Ambient Water Quality Standards and Guidance Values (µg/L)

2. The reporting limits were raised due to matrix interference. Sample foamed during laboratory purging procedure.

Bolded concentrations indicated the analyte was detected.

Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

ND = The analyte was analyzed for but not detected.

J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

R = The sample results are rejected.

D = Compound identified in analysis at a secondary dilution factor.

- = The analyte was not sampled for.

Synonyms: Chlorodibromomethane = Dichlorobromoethane

Synonyms: 2-Butanone = Methyl Ethyl Ketone

**TABLE 4
MONITORING WELL NRG-5
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality		Units	3/13/07 ²	10/27/09	10/21/10	10/21/15
	Standards ¹						
1,1,1-Trichloroethane	5		µg/L	U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5		µg/L	U	5 U	5 U	ND
1,1,2-Trichlorotrifluoroethane	5		µg/L	U	5 U	5 U	ND
1,1,2-Trichloroethane	1		µg/L	U	5 U	5 U	ND
1,1-Dichloroethane	5		µg/L	4.2 J	3 J	5 U	ND
1,1-Dichloroethene	5		µg/L	U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5		µg/L	-	-	-	ND
1,2,4-Trichlorobenzene	5		µg/L	U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5		µg/L	U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04		µg/L	U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE		µg/L	U	5 U	5 U	ND
1,2-Dichlorobenzene	3		µg/L	U	5 U	5 U	ND
1,2-Dichloroethane	0.6		µg/L	4.4 J	2 J	5 U	ND
1,2-Dichloropropane	5		µg/L	U	5 U	5 U	ND
1,3-Dichlorobenzene	3		µg/L	U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5		µg/L	U	5 U	5 U	-
1,4-Dichlorobenzene	3		µg/L	U	5 U	5 U	ND
1,4-Dioxane	5		µg/L	U	100 U	100 U	-
2-Hexanone	50		µg/L	U	10 U	10 U	ND
Acetone	50		µg/L	U	10 U	10 U	ND
Benzene	1		µg/L	U	5 U	5 U	ND
Bromoform	50		µg/L	U	5 U	5 U	ND
Bromomethane	5		µg/L	U	5 U	5 U	ND
Bromochloromethane	5		µg/L	-	-	-	ND
Bromodichloromethane	50		µg/L	-	-	-	ND
Carbon disulfide	60		µg/L	U	5 U	5 U	ND
Carbon tetrachloride	5		µg/L	U	5 U	5 U	ND
Chlorobenzene	5		µg/L	U	5 U	5 U	ND
Chloroethane	5		µg/L	U	5 U	5 U	ND
Chloroform	7		µg/L	U	5 U	5 U	ND
Chloromethane	NE		µg/L	U	5 U	5 U	ND
cis-1,2-Dichloroethene	5		µg/L	93	59	17	22.50
cis-1,3-Dichloropropene	0.40		µg/L	U	5 U	5 U	ND
Cyclohexane	NE		µg/L	U	5 U	5 U	-
Dibromochloromethane	50		µg/L	U	5 U	5 U	-
Chlorodibromomethane	NE		µg/L	U	5 U	5 U	ND
Dichlorodifluoromethane	5		µg/L	U	5 U	5 U	ND
Ethylbenzene	5		µg/L	U	5 U	5 U	ND
Isopropylbenzene	5		µg/L	U	5 U	5 U	ND
Methyl acetate	NE		µg/L	U	5 U	5 U	ND
2-Butanone (MEK)	50		µg/L	U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE		µg/L	U	10 U	10 U	ND
Methyl Cyclohexane	NE		µg/L	U	5 U	5 U	ND
Methylene chloride	5		µg/L	U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10		µg/L	U	5 U	5 U	ND
m,p-Xylene	5		µg/L	U	5 U	5 U	-
n-Butylbenzene	5		µg/L	U	5 U	5 U	-
n-Propylbenzene	5		µg/L	U	5 U	5 U	-
o-Xylene	5		µg/L	U	5 U	5 U	-
sec-Butylbenzene	5		µg/L	U	5 U	5 U	-
Styrene	5		µg/L	U	5 U	5 U	ND
tert-Butylbenzene	5		µg/L	U	5 U	5 U	-
Tetrachloroethene	5		µg/L	U	5 U	5 U	ND
Toluene	5		µg/L	U	5 U	5 U	ND
Total Xylenes	5		µg/L	U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5		µg/L	6.7 J	5 J	2 J	1.94 J
trans-1,3-Dichloropropene	0.4		µg/L	U	5 U	5 U	ND
Trichloroethene	5		µg/L	U	5 U	5 U	ND
Trichlorofluoromethane	5		µg/L	U	5 U	5 U	ND
Vinyl chloride	2		µg/L	6.1 J	5 U	5 U	ND
Total VOCs			µg/L	114.40	69.00	19.00	24.44
Total VOCs			mg/L	0.11440	0.06900	0.01900	0.02444

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1 Ambient Water Quality Standards and Guidance Values (µg/L)
 2. The reporting limits were raised due to matrix interference. Sample foamed during laboratory purging procedure.
- Bolded concentrations indicated the analyte was detected.
 Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
 ND = The analyte was analyzed for but not detected.
 J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
 R = The sample results are rejected.
 D = Compound identified in analysis at a secondary dilution factor.
 - = The analyte was not sampled for
- Synonyms: Chlorodibromomethane = Dichlorobromoethane
 Synonyms: 2-Butanone = Methyl Ethyl Ketone
 Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

TABLE 4
MONITORING WELL NRG-6
GROUNDWATER ANALYTICAL TEST RESULTS
ENVIROTEK II SITE

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	3/13/07 ²	10/27/09	10/21/10	10/21/15
1,1,1-Trichloroethane	5	µg/L	U	5 U	5 U	ND
1,1,2,2-Tetrachloroethane	5	µg/L	U	5 U	5 U	ND
1,1,2-Trichlorofluoroethane	5	µg/L	U	5 U	5 U	ND
1,1,2-Trichloroethane	1	µg/L	U	5 U	5 U	ND
1,1-Dichloroethane	5	µg/L	U	5 U	5 U	ND
1,1-Dichloroethene	5	µg/L	U	5 U	5 U	ND
1,2,3-Trichlorobenzene	5	µg/L	-	-	-	ND
1,2,4-Trichlorobenzene	5	µg/L	U	5 U	5 U	ND
1,2,4-Trimethylbenzene	5	µg/L	U	5 U	5 U	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	U	5 U	5 U	ND
1,2-Dibromoethane (EDB)	NE	µg/L	U	5 U	5 U	ND
1,2-Dichlorobenzene	3	µg/L	U	5 U	5 U	ND
1,2-Dichloroethane	0.6	µg/L	U	5 U	5 U	ND
1,2-Dichloropropane	5	µg/L	U	5 U	5 U	ND
1,3-Dichlorobenzene	3	µg/L	U	5 U	5 U	ND
1,3,5-Trimethylbenzene	5	µg/L	U	5 U	5 U	-
1,4-Dichlorobenzene	3	µg/L	U	5 U	5 U	ND
1,4-Dioxane	5	µg/L	U	100 U	100 U	-
2-Hexanone	50	µg/L	U	10 U	10 U	ND
Acetone	50	µg/L	U	10 U	10 U	ND
Benzene	1	µg/L	U	5 U	5 U	ND
Bromoform	50	µg/L	U	5 U	5 U	ND
Bromomethane	5	µg/L	U	5 U	5 U	ND
Bromochloromethane	5	µg/L	-	-	-	ND
Bromodichloromethane	50	µg/L	-	-	-	ND
Carbon disulfide	60	µg/L	U	5 U	5 U	ND
Carbon tetrachloride	5	µg/L	U	5 U	5 U	ND
Chlorobenzene	5	µg/L	U	5 U	5 U	ND
Chloroethane	5	µg/L	U	5 U	5 U	ND
Chloroform	7	µg/L	U	5 U	5 U	ND
Chloromethane	NE	µg/L	U	5 U	5 U	ND
cis-1,2-Dichloroethene	5	µg/L	25	22	11	10.30
cis-1,3-Dichloropropene	0.40	µg/L	U	5 U	5 U	ND
Cyclohexane	NE	µg/L	U	5 U	5 U	-
Dibromochloromethane	50	µg/L	U	5 U	5 U	-
Chlorodibromomethane	NE	µg/L	U	5 U	5 U	ND
Dichlorodifluoromethane	5	µg/L	U	5 U	5 U	ND
Ethylbenzene	5	µg/L	U	5 U	5 U	ND
Isopropylbenzene	5	µg/L	U	5 U	5 U	ND
Methyl acetate	NE	µg/L	U	5 U	5 U	ND
2-Butanone (MEK)	50	µg/L	U	10 U	10 U	ND
4-Methyl 2-Pentanone	NE	µg/L	U	10 U	10 U	ND
Methyl Cyclohexane	NE	µg/L	U	5 U	5 U	ND
Methylene chloride	5	µg/L	U	5 U	5 U	ND
Methyl-t-Butyl Ether (MTBE)	10	µg/L	U	5 U	5 U	ND
m,p-Xylene	5	µg/L	U	5 U	5 U	-
n-Butylbenzene	5	µg/L	U	5 U	5 U	-
n-Propylbenzene	5	µg/L	U	5 U	5 U	-
o-Xylene	5	µg/L	U	5 U	5 U	-
sec-Butylbenzene	5	µg/L	U	5 U	5 U	-
Styrene	5	µg/L	U	5 U	5 U	ND
tert-Butylbenzene	5	µg/L	U	5 U	5 U	-
Tetrachloroethene	5	µg/L	U	5 U	5 U	ND
Toluene	5	µg/L	U	5 U	5 U	ND
Total Xylenes	5	µg/L	U	5 U	5 U	ND
trans-1, 2-Dichloroethene	5	µg/L	1.1 J	5 U	5 U	ND
trans-1,3-Dichloropropene	0.4	µg/L	1.4 J	5 U	5 U	ND
Trichloroethene	5	µg/L	U	5 U	5 U	ND
Trichlorofluoromethane	5	µg/L	U	5 U	5 U	ND
Vinyl chloride	2	µg/L	U	5 U	5 U	ND
Total VOCs		µg/L	27.50	22.00	11.00	10.30
Total VOCs		mg/L	0.02750	0.02200	0.01100	0.01030

Notes:

- New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L)
 - The reporting limits were raised due to matrix interference. Sample foamed during laboratory purging procedure. Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.
- NE = NYSDEC TOGS 1.1.1 water quality standard not established.
U = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
ND = The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
J = The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
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- = The analyte was not sampled for.
Synonyms: Chlorodibromomethane = Dichlorobromoethane
Synonyms: 2-Butanone = Methyl Ethyl Ketone
Synonyms: 4-Methyl 2-Pentanone = Methyl Isobutyl Ketone

APPENDICES



APPENDIX A

ANALYTICAL RESULTS OF ONSITE SOIL PILES IN 2009





MEMORANDUM

TO:	Jim Panepinto, Pinto Construction
FROM:	Dharma Iyer (IEG)
DATE:	September 4, 2009
RE:	BGH Excavation – soil sampling

Pinto Construction is in the process of excavating an estimated 40,000 cubic yards of soil from the site of the proposed Buffalo General Hospital building expansion north of the existing building. This area straddled by the Goodrich Street to the south, Ellicott Street to the west, East North St. to the north, and Hospital's power supply transformers to the east. IEG is retained by Pinto Construction to characterize and sample the excavation area soils to determine their suitability for reuse and/or disposal off-site.

On 8/31/09, Dharma Iyer and Rick Allen of IEG worked with Paul and Ed Sullivan of Pinto Construction in completing a total of 17 test pits. The locations of these test pits are shown on the attached Figure 1. The test pits were dug to a depth of up to 12 feet below ground surface, and composite soil samples were collected across the excavation depth. Samples from sixteen of these locations were further composited in groups of four (see Figure 1) to obtain four composites which were sent to Test America (Amherst, NY) for the following analyses: volatile organics (TCLP), semivolatiles (total and TCLP), metals (total and TCLP), PCBs (total), pH, Reactivity and ignitability. Instead of phasing the analyses between total and TCLP, all parameters were included together due to time constraints from scheduled construction activities.

This Memo presents preliminary results from the field sampling and laboratory analysis. A full report will be made available next week after all the analytical results are in.

The soils varied from silty clay, to clayey silt to clay. Several locations had these natural soils mixed in with bricks, pieces of concrete and similar materials in the top two to four feet from prior demolition and backfill at the site. A table with soil descriptions by depth will be included in the full report.

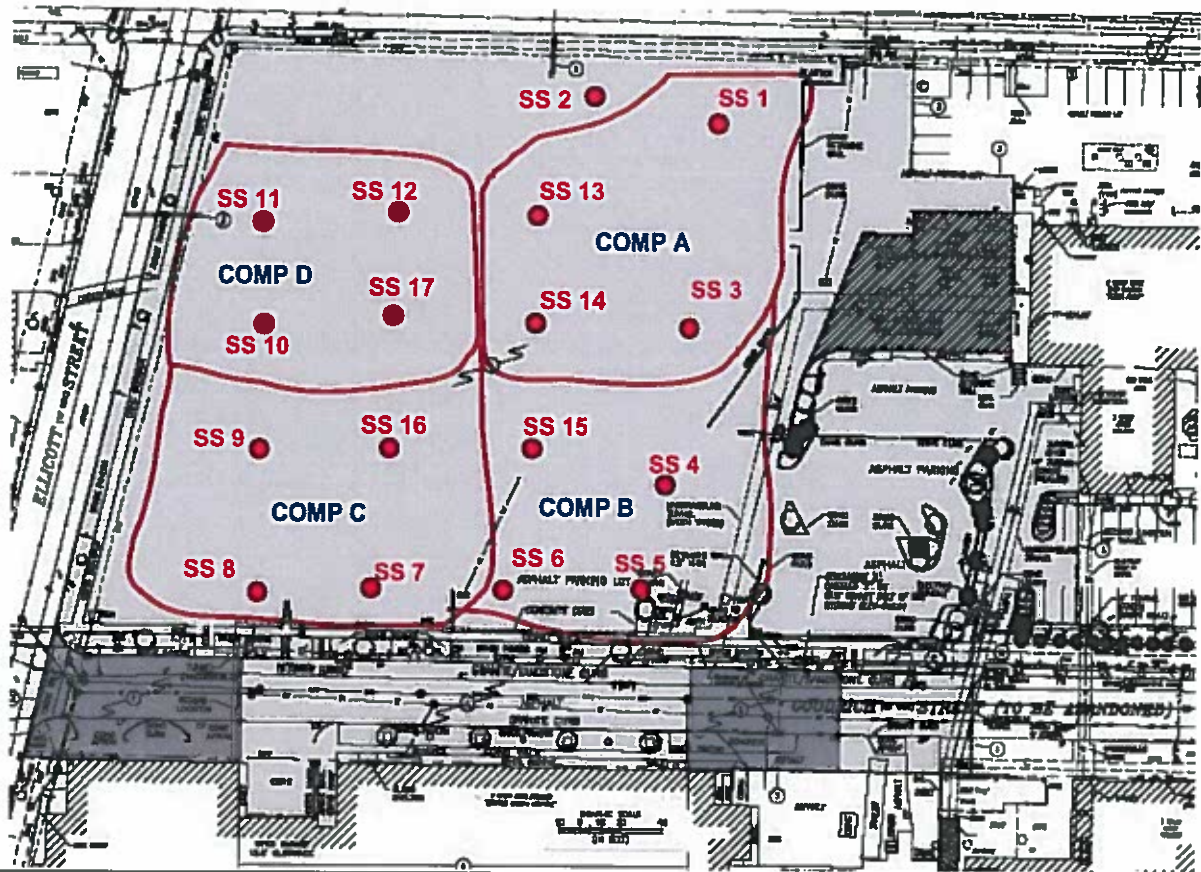
Preliminary results from the laboratory are summarized in the attached Table 1 along with the NYSDEC's guidance values for the acceptance of fill under unrestricted, residential and commercial use scenarios based on the Part 375 Brownfields regulations. The analytical results obtained so far show the soils across the excavation area environmentally clean with any detected compounds well within the NYSDEC unrestricted use criteria for acceptance as borrow fill.

Based on the soil sampling, field characterization and laboratory analyses, the soils from the area of excavation within the limits of this sampling can be considered as suitable for unrestricted reuse. However, I would recommend that the larger man-made materials (bricks, concrete, rebar, etc.) be screened and separated out for disposal. Alternately, as a matter of practical application, you could place these materials deeper while using as fill and cover them with finer grained soils.

**TABLE 1
BGH PRE-EXCAVATION SOIL SAMPLING
SAMPLES COLLECTED ON 8/31/09**

SAMPLE LOCATION/ 	PART 375 SCOs / ALLOWABLE FOR FILL			COMP A (#s 1, 3, 13, 14)	COMP B (#s 4, 5, 6, 15)	COMP C (#s 7, 8, 9, 16)	COMP D (#s 10, 11, 12, 17)	TP 1 10'-12'
	UNRESTRICTED	RESIDENTIAL	COMMERCIAL					
Percent Solids (%)								
VOLATILE ORGANICS (VOCs, ug/Kg)								
Methylene chloride	50	50	50					7.4 B
SEMIVOLATILE ORGANICS (SVOCs, ug/Kg)								
Benzo(a)anthracene	1000	1000	5600 / 1000	ND	29	ND	ND	
Chrysene	1000	1000	56000 / 1000	ND	36	ND	ND	
Fluoranthene	100000	100000	500000	ND	59	ND	ND	
Phenanthrene	100000	100000	500000	ND	53	ND	ND	
PCBs (ug/Kg)								
Aroclor 1248				13 J	27	41	47	
Aroclor 1254	100	1000	1000	16 J	ND	ND	21	
METALS (mg/Kg)								
Aluminum	--	--	--	5490	5930	4600	4250	
Arsenic	13	16	16	2.1	2.1	2.7	2.2	
Barium	350	350	400	43.2	38.9	48.7	29	
Beryllium	7.2	14	590 / 47	0.282	0.262	0.212	0.231	
Cadmium	2.5	2.5	9.3 / 7.5	0.11	0.124	0.128	0.127	
Calcium	--	--	--	51800	20400	51300	83500	
Chromium (Hex & Tri)	1 ⁽⁺⁶⁾ /30 ⁽⁺³⁾	19 ⁽⁺⁶⁾ /36 ⁽⁺³⁾	19 ⁽⁺⁶⁾ /1500 ⁽⁺³⁾	7.56	7.62	6.16	5.12	
Cobalt	--	--	--	3.93	3.62	3.33	3.07	
Copper	50	270	270	11.6	10.1	12.5	10.5	
Iron	--	--	--	8950	9480	7600	7780	
Lead	63	400	1000 / 450					
Magnesium	--	--	--	21800	10000	18400	23000	
Manganese	1600	2000	10000 / 15000	299	299	272	345	
Mercury	0.18	0.73	2.8 / 0.73	0.113	0.71	0.16	0.07	
Nickel	30	140 / 130	310 / 130	9.52	7.79	7.43	9.23	
Potassium	--	--	--	1250	696	1110	897	
Sodium	--	--	--	200	519	316	230	
Vanadium	--	--	--	12	13.4	10.1	9.27	
Zinc	109	2200	10000 / 2480	70.8	63	82.1	78.8	
pH (s.u.)	< 2 or >12.5			9.64	8.13	9.94	10.1	
Flashpoint (°F)	<140			>176	>176	>176	>176	
Reactive Sulfide (mg/Kg)	200			40.1	10	10	ND	
TCLP VOLATILES (mg/L)				ND	ND	ND	ND	
TCLP SEMIVOLATILES (mg/L)				ND	ND	ND	ND	
TCLP METALS (mg/L)								
Arsenic		5		0.0059	0.0098	ND	0.0056	
Barium		100		0.5600	0.3960	0.4860	0.5520	
Cadmium		1		0.0056	0.0035	0.0030	0.0031	
Chromium		5		0.0165	0.0046	ND	0.0023	
Lead		5		0.4140	0.0428	0.0462	0.0146	

Note: 1. ND - Not detected; shaded = not analyzed; Only detected volatiles and semivolatiles are listed
2. Only detected volatile and semivolatile compounds are listed; all metals analyzed are listed
3. SCOs based on 6 NYCRR Part 375 Regulations and DER-10 guidelines for acceptance of fill



**BUFFALO GENERAL HOSPITAL EXCAVATION
TEST PIT LOCATIONS**

FIGURE 1

IEG

APPENDIX B

SOIL MANAGEMENT PLAN



**Soils Management Plan
Roblin Steel parcel/Envirotek II Facility
Site No. 915056
Tonawanda, Erie County**

1. Overview and objectives

The Roblin Steel parcel is a 62 acre, commercial/vacant industrial property currently owned by Niagara River World, Inc. The location of the property is shown on Figure 1 of the Final Engineering Report. The Envirotek II facility was a chemical waste treatment and disposal facility that was operated during the 1980's by Envirotek, Ltd. This facility occupied a 2.5 acre parcel within the former Roblin Steel Plant and is referred to as the Envirotek II parcel. Both the Roblin Steel portion of the site and the Envirotek II portion of the site have been characterized during several previous investigations. Collectively, these two parcels are hereinafter referred to as the "Site". The user should refer to the following reports for more detail, as needed:

Envirotek II Parcel

1. "Evaluation of Interim Remedial Alternatives, Still Discharge Area", March 1991, prepared by Blasland, Bouck & Lee, Inc.
2. "Results of Sampling Plan, Envirotek II Superfund Site", June 1991, prepared by Blasland, Bouck & Lee, Inc.
3. "Supplemental Investigation Results, Still Discharge Area", November 1992, prepared by Blasland, Bouck & Lee, Inc.
4. "Remedial Investigation Report", May 2002, prepared by Blasland, Bouck & Lee, Inc.
5. "Interim Remedial Measures Final Report for Operable Unit 1", June 2003, prepared by Blasland, Bouck & Lee, Inc.
6. "Interim Remedial Measures Final Report for Operable Unit 2", January 2004, prepared by Blasland, Bouck & Lee, Inc.
7. "Interim Remedial Measures Final Report for Operable Unit 3", March 2005, prepared by Blasland, Bouck & Lee, Inc.
8. "Focused Feasibility Study", March 2005, prepared by Blasland, Bouck & Lee, Inc.

Roblin Steel Parcel

1. "Phase II Investigation", June 1990, prepared by Recra Environmental, Inc.
2. "Site Evaluation Report", December 2006, prepared by the NYSDEC.
3. "Remedial Investigation Report", June 2007, prepared by the Natural Resource Group, Inc.

The objective of this Soils Management Plan is to set guidelines for the management of soil material during any future excavation activities at the Site. This Soils Management Plan addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC).

2. Nature and extent of contamination

Roblin Steel Parcel

Based upon data obtained from previous investigations and the Remedial Investigation completed at the Roblin Steel parcel in 2007, the compounds of concern (COC) at this parcel for soil consist primarily of semivolatile organic compounds (SVOCs) and metals. The primary SVOC contaminants of concern in soil include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene and naphthalene. These contaminants belong to a class of SVOCs known as polycyclic aromatic hydrocarbons (PAHs). PAHs are a group of over 100 different chemicals that are common in the environment. Sources of PAHs include incomplete combustion of coal, oil, gasoline, garbage and wood from stoves, automobiles and incinerators. Phenolic compounds (phenol, 2-methylphenol and 4-methylphenol) were also detected in soil at elevated concentrations. The primary metals of concern in soil include arsenic, barium, cadmium, chromium, copper, lead, mercury and nickel.

Results of groundwater sampling during previous investigations and the June 2007 Remedial Investigation indicate that shallow overburden groundwater is contaminated with COC including benzene (4 wells), ethylbenzene (1 well), toluene (2 wells), xylenes (2 wells), naphthalene (1 well), phenols (2 wells), chromium (1 well) and lead (1 well) at levels above NYS ground standards. Wells adjacent to the Niagara River meet groundwater standards with the exception of lead in one well.

Envirotek II Parcel

Based upon data obtained from previous investigations and the Interim Remedial Measures (IRMs) completed at the Envirotek II parcel, a Record of Decision was issued by the NYSDEC in March 2005. The COC at the parcel for both soil and groundwater consist primarily of chlorinated VOCs, including tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride. Contaminated soil was removed from the Envirotek II parcel during an IRM in October 2003. Slightly contaminated soil, however, may still be present at the parcel.

Results of groundwater sampling indicate that shallow overburden groundwater is impacted with COC. The contaminant concentrations generally decrease downgradient (west) of the former Envirotek treatment facility. Because the COC are volatile, contaminant vapors from the groundwater plume can potentially migrate upwards and create an exposure risk during excavation activities and in new buildings that may be constructed over the footprint of the contaminated groundwater plume. The potential for vapor intrusion (VI) and VI mitigation techniques for new building construction are discussed in Section 6.

3. Contemplated use

As part of the remedy selected in the March 2005 Record of Decision for the Envirotek II parcel, an environmental easement will be required that in part limits the use and development of this site to commercial or industrial uses only. This easement has been expanded to include the entire Site. A portion of the Site is currently being utilized for warehousing operations, while the remainder of the Site is vacant.

4. Purpose and description of surface cover system

Because there is no significant residual soil contamination, no specific surface cover system was required by the Record of Decision for the Envirotek II parcel. Most of the Envirotek II parcel is covered with gravel, so maintenance of this surface is not necessary for safe use of the Site and protection of the environment. Future development of the Site may include buildings, support structures, roadways and parking lots. Under such development, a vegetative cover should be provided beyond the building foot print and paved areas.

5. Management of soils/fill

The purpose of this section is to provide environmental guidelines for the management of subsurface soils/fill during any future intrusive work that generates excavated soil and/or fill at the Site.

The Soils Management Plan includes the following condition:

- Site soil/fill that is excavated and is intended to be removed from the Site must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.
- Soil/fill excavated at the Site may be reused as backfill material on-site provided it contains no visual, olfactory or evidence of gross chemical contamination.
- Any off-site fill material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. Off-site borrow sources should be subject to collection of one

representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals plus cyanide. The soil will be acceptable for use as cover material provided that all parameters meet the NYSDEC recommended Commercial soil cleanup objectives included in Part 375-6.7 (d) for Imported Backfill.

- Prior to any excavation or construction activities, workers are to be notified of the Site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.
- The Site Owner shall complete and submit to the NYSDEC an annual report by January 15th of each year. Such annual report shall contain certification that the institutional controls put in place, pursuant to the environmental easement, are still in place, have not been altered and are still effective; and that the conditions at the Site are fully protective of public health and the environment. If excavation work has been performed during the year covered by said annual report, the owner shall include in the report a certification that all excavation work was performed in conformance with this Soils Management Plan.

In addition, an environmental easement has been placed on the Site in accordance with the requirements of Order on Consent Number B9-0407-92-05, requiring compliance with the approved Site Management Plan, restricting groundwater use, limiting the future use of the property to commercial or industrial uses, and requiring the property owner to complete and submit to the NYSDEC the Institutional Control/Engineering Control certification.

5.1. Excavated and stockpiled soil/fill disposal

Soil/fill that is excavated as part of Site development that can not be used as fill on Site will be further characterized prior to transportation off Site for disposal at a permitted facility. For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and a duplicate sample will be collected for 2000 cubic yards of stockpiled soil, and a minimum of 1 sample will be collected for volumes less than 2000 cubic yards.

The composite sample will be collected from five locations within each stockpile. A duplicate composite sample will also be collected. PID measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest PID measurement. If none of the five individual sample locations exhibit PID readings, one location will be selected at random. The composite sample will be analyzed by a NYSDOH ELAP-certified laboratory for pH (EPA Method 9045C), Target Compound List (TCL) SVOCs, pesticides, and PCBs, and TAL metals, and cyanide. The grab sample will be analyzed for TCL VOCs.

Soil/fill samples will be composited by placing equal portions of soil/fill from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scope or trowel and transferred to pre-cleaned jars provided by the laboratory. Sample jars will then be labeled and a chain-of-custody form will be prepared.

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-Site disposal requirements/costs, the owner or Site developer may also choose to characterize each stockpile individually. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-Site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil/fill is not a hazardous waste, the material will be properly disposed off-Site at a non-hazardous waste facility. Stockpiled soil/fill cannot be transported on or off Site until the analytical results are received.

5.2. Subgrade material

Subgrade material used to backfill excavations or placed to increase Site grades or elevation shall meet the following criteria.

- Excavated on-site soil/fill which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below the appropriate restricted soil cleanup objectives of Part 375, the soil/fill can be used as backfill on Site.
- Any off-site fill material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Off-site soils intended for use as Site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).
- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use.
- Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and cyanide. The soil will be acceptable for use as backfill provided that all parameters meet the appropriate restricted soil cleanup objectives of Part 375.

- Non-virgin soils will be tested via collection of one composite sample per 500 cubic yards of material from each source area. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin soil source area and both samples of the first 1,000 cubic yards meet the appropriate restricted soil cleanup objectives of Part 375, the sample collection frequency will be reduced to one composite for every 2,500 cubic yards of additional soils from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, provided all earlier samples met the appropriate restricted soil cleanup objectives of Part 375.

6. Vapor Intrusion

The purpose of this section is to provide environmental guidelines for dealing with the potential for vapor intrusion into new buildings constructed on the Site.

6.1. New Building Construction

Vapor intrusion (VI) mitigation techniques will be designed for new buildings constructed on the Site. These techniques will include the use of sub-slab vapor mitigation systems, designed into the foundation of the buildings, and installation of a vapor barrier between the building foundation and the lowest concrete slab flooring. The NYSDEC and NYSDOH will be provided with vapor intrusion mitigation design drawings for comment and approval prior to construction. After the building construction is complete, an indoor air sample will be collected to verify the effectiveness of the VI mitigation. Results of the sampling will be provided to the NYSDEC and NYSDOH.

APPENDIX C

INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORM



New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 Fax: (518) 402-9577
Website: www.dec.ny.gov



1/5/2016

Bonnie M. Leto
President
Niagara River World, Inc.
4000 River Road
Tonawanda, NY 14150

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Roblin Steel (formerly Wickwire Spencer)
Site No.: 915056
Site Address: 4000 River Road
Tonawanda, NY 14150

Dear Ms. Leto:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of *DER-10 Technical Guidance for Site Investigation and Remediation* (available online at <http://www.dec.ny.gov/regulations/67386.html>) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than February 15, 2016. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Qualified Environmental Professional (QEP). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
<http://www.dec.ny.gov/regulations/2586.html>

The signed certification forms should be sent to Brian Sadowski, Project Manager, at the following address:

New York State Department of Environmental Conservation
270 Michigan Ave
Buffalo, NY 14203-2915

Phone number: 716-851-7220. E-mail: brian.sadowski@dec.ny.gov

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

**PRR General Guidance
Certification Form Instructions
Certification Forms**

cc: w/ enclosures

**Brian Sadowski, Project Manager
Chad Staniszewski, Hazardous Waste Remediation Engineer, Region 9
David Rowlinson, GHD**

Enclosure I

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the Certification cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this Certification form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1	
Site No.	915056		
Site Name Roblin Steel (formerly Wickwire Spencer)			
Site Address:	4000 River Road	Zip Code:	14150
City/Town:	Tonawanda		
County:	Erie		
Site Acreage:	62.0		
Reporting Period: January 15, 2012 to January 15, 2016			
		YES	NO
1. Is the information above correct?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5. Is the site currently undergoing development?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Box 2	
		YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.			
A Corrective Measures Work Plan must be submitted along with this form to address these issues.			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
64.08-1-1.1	Niagara River World, Inc.	Monitoring Plan Landuse Restriction Site Management Plan IC/EC Plan Ground Water Use Restriction

An Environmental Easement was filed with the Erie County Clerk's Office on November 26, 2007. The Controlled Property may be used for restricted commercial and industrial use as long as the following long-term engineering controls are employed: (1) restrict the use of site groundwater as a source of potable or process water without necessary water quality treatment as determined by the Erie County Department of Health; (2) any proposed soil excavation on the property requires prior notification and prior approval of NYSDEC in accordance with the Site Management Plan approved by NYSDEC for this Controlled Property. The excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives; and (3) evaluate the potential for vapor intrusion for any buildings developed on the site. Provision for mitigation, such as installation of a vapor barrier and sub-slab vapor system or other engineering controls shall be implemented on all structures, prior to occupancy.

Post-closure groundwater monitoring is required every five years to ensure the long term effectiveness of the remedy.

64.08-1-1.2	Niagara River World, Inc.	Site Management Plan Monitoring Plan IC/EC Plan Ground Water Use Restriction Landuse Restriction
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An Environmental Easement was filed with the Erie County Clerk's Office on November 26, 2007. The Controlled Property may be used for restricted commercial and industrial use as long as the following long-term engineering controls are employed: (1) restrict the use of site groundwater as a source of potable or process water without necessary water quality treatment as determined by the Erie County Department of Health; (2) any proposed soil excavation on the property requires prior notification and prior approval of NYSDEC in accordance with the Site Management Plan approved by NYSDEC for this Controlled Property. The excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives; and (3) evaluate the potential for vapor intrusion for any buildings developed on the site. Provision for mitigation, such as installation of a vapor barrier and sub-slab vapor system or other engineering controls shall be implemented on all structures, prior to occupancy.

Post-closure groundwater monitoring is required every five years to ensure the long term effectiveness of the remedy.

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
64.08-1-1.1	Fencing/Access Control
64.08-1-1.2	Fencing/Access Control

IC CERTIFICATIONS
SITE NO. 915056

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Bonnie M Leto at 4000 River Rd. Tonawanda, NY
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Bonnie M Leto
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

1/11/2016
Date

IC/EC CERTIFICATIONS

Box 7


Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Paul M. Garvey at GHD, 285 Delaware Ave, Buffalo, NY 14202.
print name print business address

I am certifying as a Qualified Environmental Professional for the Owner
(Owner or Remedial Party)

Paul M. Garvey
Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification


Stamp (Required for PE) Date 1/13/14

Enclosure 3
Periodic Review Report (PRR) General Guidance

- I. **Executive Summary: (1/2-page or less)**
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. **Effectiveness of the Remedial Program - Provide overall conclusions regarding;**
 1. progress made during the reporting period toward meeting the remedial objectives for the site
 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
 - C. **Compliance**
 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. **Recommendations**
 1. recommend whether any changes to the SMP are needed
 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
 3. recommend whether the requirements for discontinuing site management have been met.
- II. **Site Overview (one page or less)**
 - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
 - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
- III. **Evaluate Remedy Performance, Effectiveness, and Protectiveness**

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
- IV. **IC/EC Plan Compliance Report (if applicable)**
 - A. **IC/EC Requirements and Compliance**
 1. Describe each control, its objective, and how performance of the control is evaluated.
 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
 4. Conclusions and recommendations for changes.
 - B. **IC/EC Certification**
 1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
- V. **Monitoring Plan Compliance Report (if applicable)**
 - A. **Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.**
 - B. **Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.**
 - C. **Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.**
 - D. **Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.**
 - E. **Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.**
- VI. **Operation & Maintenance (O&M) Plan Compliance Report (if applicable)**
 - A. **Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.**
 - B. **Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.**
 - C. **Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as**

designed/expected.

- D. **O&M Deficiencies** - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. **Conclusions and Recommendations for Improvements** - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. **Compliance with SMP** - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. **Performance and Effectiveness of the Remedy** - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. **Future PRR Submittals**
 - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
 - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

APPENDIX D

ANALYTICAL TEST RESULTS



October 30, 2015

GHD

Sample Delivery Group: L796083
Samples Received: 10/22/2015
Project Number: 8618749-100-
Description: Niagara River World

Report To: Mr. Dave Rowlinson
285 Delaware Ave.
Suite 500
Buffalo, NY 14202

Entire Report Reviewed By:



T. Alan Harvill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE



			Collected by	Collected date/time	Received date/time
ENV-1 L796083-01 GW			Brian Doyle	10/21/15 09:15	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 13:54	10/28/15 13:54	DAH
ENV-3R L796083-02 GW			Brian Doyle	10/21/15 09:45	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 14:15	10/28/15 14:15	DAH
ENV-4 L796083-03 GW			Brian Doyle	10/21/15 11:00	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824591	1	10/29/15 16:22	10/29/15 16:22	BMB
ENV-7 L796083-04 GW			Brian Doyle	10/21/15 10:40	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 14:58	10/28/15 14:58	DAH
ENV-8 L796083-05 GW			Brian Doyle	10/21/15 10:20	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 15:19	10/28/15 15:19	DAH
ENV-9 L796083-06 GW			Brian Doyle	10/21/15 10:00	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 15:40	10/28/15 15:40	DAH
TRIP BLANK L796083-07 GW			Brian Doyle	10/21/15 00:00	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824591	1	10/29/15 13:06	10/29/15 13:06	JHH
GW-3 L796083-08 GW			Brian Doyle	10/21/15 11:20	10/22/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 16:01	10/28/15 16:01	DAH

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE



NRG-3 L796083-09 GW Collected by Brian Doyle Collected date/time 10/21/15 12:00 Received date/time 10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 16:23	10/28/15 16:23	DAH

1
Cp

2
Tc

3
Ss

NRG-4 L796083-10 GW Collected by Brian Doyle Collected date/time 10/21/15 12:10 Received date/time 10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 16:44	10/28/15 16:44	DAH

4
Cn

5
Sr

NRG-5 L796083-11 GW Collected by Brian Doyle Collected date/time 10/21/15 12:40 Received date/time 10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 13:33	10/28/15 13:33	DAH

6
Qc

7
Gl

8
Al

NRG-6 L796083-12 GW Collected by Brian Doyle Collected date/time 10/21/15 12:20 Received date/time 10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 17:05	10/28/15 17:05	DAH

9
Sc

FD@ ENV-7 L796083-13 GW Collected by Brian Doyle Collected date/time 10/21/15 10:40 Received date/time 10/22/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG824424	1	10/28/15 17:26	10/28/15 17:26	DAH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Collected date/time: 10/21/15 09:15

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 13:54	WG824424
Benzene	ND		1.00	1	10/28/2015 13:54	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 13:54	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 13:54	WG824424
Bromoform	ND		1.00	1	10/28/2015 13:54	WG824424
Bromomethane	ND		5.00	1	10/28/2015 13:54	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 13:54	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 13:54	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 13:54	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 13:54	WG824424
Chloroethane	ND		5.00	1	10/28/2015 13:54	WG824424
Chloroform	ND		5.00	1	10/28/2015 13:54	WG824424
Chloromethane	ND		2.50	1	10/28/2015 13:54	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 13:54	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 13:54	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 13:54	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 13:54	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 13:54	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 13:54	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 13:54	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 13:54	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 13:54	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 13:54	WG824424
cis-1,2-Dichloroethene	ND		1.00	1	10/28/2015 13:54	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 13:54	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 13:54	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 13:54	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 13:54	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 13:54	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 13:54	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 13:54	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 13:54	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 13:54	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 13:54	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 13:54	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 13:54	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 13:54	WG824424
Styrene	ND		1.00	1	10/28/2015 13:54	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 13:54	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 13:54	WG824424
Toluene	ND		5.00	1	10/28/2015 13:54	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 13:54	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 13:54	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 13:54	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 13:54	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 13:54	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 13:54	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 13:54	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 13:54	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 13:54	WG824424
(S) Toluene-d8	103		90.0-115		10/28/2015 13:54	WG824424
(S) Dibromofluoromethane	96.1		79.0-121		10/28/2015 13:54	WG824424
(S) o,o,a-Trifluorotoluene	99.3		90.4-116		10/28/2015 13:54	WG824424
(S) 4-Bromofluorobenzene	94.2		80.1-120		10/28/2015 13:54	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc



Collected date/time: 10/21/15 09:45

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 14:15	WG824424
Benzene	ND		1.00	1	10/28/2015 14:15	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 14:15	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 14:15	WG824424
Bromoform	ND		1.00	1	10/28/2015 14:15	WG824424
Bromomethane	ND		5.00	1	10/28/2015 14:15	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 14:15	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 14:15	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 14:15	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 14:15	WG824424
Chloroethane	ND		5.00	1	10/28/2015 14:15	WG824424
Chloroform	ND		5.00	1	10/28/2015 14:15	WG824424
Chloromethane	ND		2.50	1	10/28/2015 14:15	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 14:15	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 14:15	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 14:15	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 14:15	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 14:15	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 14:15	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 14:15	WG824424
1,1-Dichloroethane	2.04		1.00	1	10/28/2015 14:15	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 14:15	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 14:15	WG824424
cis-1,2-Dichloroethene	1.78		1.00	1	10/28/2015 14:15	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 14:15	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 14:15	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 14:15	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 14:15	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 14:15	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 14:15	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 14:15	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 14:15	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 14:15	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 14:15	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 14:15	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 14:15	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 14:15	WG824424
Styrene	ND		1.00	1	10/28/2015 14:15	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 14:15	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 14:15	WG824424
Toluene	ND		5.00	1	10/28/2015 14:15	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 14:15	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 14:15	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 14:15	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 14:15	WG824424
Trichloroethene	1.12		1.00	1	10/28/2015 14:15	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 14:15	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 14:15	WG824424
Vinyl chloride	1.72		1.00	1	10/28/2015 14:15	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 14:15	WG824424
(S) Toluene-d8	102		90.0-115		10/28/2015 14:15	WG824424
(S) Dibromofluoromethane	96.6		79.0-121		10/28/2015 14:15	WG824424
(S) o,o,a-Trifluorotoluene	99.8		90.4-116		10/28/2015 14:15	WG824424
(S) 4-Bromofluorobenzene	92.5		80.1-120		10/28/2015 14:15	WG824424

Cp

Tc

Ss

Cn

Sr

Gc

Gl

Al

Sc



Collected date/time: 10/21/15 11:00

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/29/2015 16:22	WG824591
Benzene	ND		1.00	1	10/29/2015 16:22	WG824591
Bromochloromethane	ND		1.00	1	10/29/2015 16:22	WG824591
Bromodichloromethane	ND		1.00	1	10/29/2015 16:22	WG824591
Bromoform	ND		1.00	1	10/29/2015 16:22	WG824591
Bromomethane	ND		5.00	1	10/29/2015 16:22	WG824591
Carbon disulfide	ND		1.00	1	10/29/2015 16:22	WG824591
Carbon tetrachloride	ND		1.00	1	10/29/2015 16:22	WG824591
Chlorobenzene	ND		1.00	1	10/29/2015 16:22	WG824591
Chlorodibromomethane	ND		1.00	1	10/29/2015 16:22	WG824591
Chloroethane	ND		5.00	1	10/29/2015 16:22	WG824591
Chloroform	ND		5.00	1	10/29/2015 16:22	WG824591
Chloromethane	ND		2.50	1	10/29/2015 16:22	WG824591
Cyclohexane	ND		1.00	1	10/29/2015 16:22	WG824591
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/29/2015 16:22	WG824591
1,2-Dibromoethane	ND		1.00	1	10/29/2015 16:22	WG824591
1,2-Dichlorobenzene	ND		1.00	1	10/29/2015 16:22	WG824591
1,3-Dichlorobenzene	ND		1.00	1	10/29/2015 16:22	WG824591
1,4-Dichlorobenzene	ND		1.00	1	10/29/2015 16:22	WG824591
Dichlorodifluoromethane	ND		5.00	1	10/29/2015 16:22	WG824591
1,1-Dichloroethane	ND		1.00	1	10/29/2015 16:22	WG824591
1,2-Dichloroethane	ND		1.00	1	10/29/2015 16:22	WG824591
1,1-Dichloroethene	ND		1.00	1	10/29/2015 16:22	WG824591
cis-1,2-Dichloroethene	2.67		1.00	1	10/29/2015 16:22	WG824591
trans-1,2-Dichloroethene	ND		1.00	1	10/29/2015 16:22	WG824591
1,2-Dichloropropane	ND		1.00	1	10/29/2015 16:22	WG824591
cis-1,3-Dichloropropene	ND		1.00	1	10/29/2015 16:22	WG824591
trans-1,3-Dichloropropene	ND		1.00	1	10/29/2015 16:22	WG824591
Ethylbenzene	ND		1.00	1	10/29/2015 16:22	WG824591
2-Hexanone	ND		10.0	1	10/29/2015 16:22	WG824591
Isopropylbenzene	ND		1.00	1	10/29/2015 16:22	WG824591
2-Butanone (MEK)	ND		10.0	1	10/29/2015 16:22	WG824591
Methyl Acetate	ND		20.0	1	10/29/2015 16:22	WG824591
Methyl Cyclohexane	ND		1.00	1	10/29/2015 16:22	WG824591
Methylene Chloride	ND		5.00	1	10/29/2015 16:22	WG824591
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/29/2015 16:22	WG824591
Methyl tert-butyl ether	ND		1.00	1	10/29/2015 16:22	WG824591
Styrene	ND		1.00	1	10/29/2015 16:22	WG824591
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/29/2015 16:22	WG824591
Tetrachloroethene	ND		1.00	1	10/29/2015 16:22	WG824591
Toluene	ND		5.00	1	10/29/2015 16:22	WG824591
1,2,3-Trichlorobenzene	ND		1.00	1	10/29/2015 16:22	WG824591
1,2,4-Trichlorobenzene	ND		1.00	1	10/29/2015 16:22	WG824591
1,1,1-Trichloroethane	ND		1.00	1	10/29/2015 16:22	WG824591
1,1,2-Trichloroethane	ND		1.00	1	10/29/2015 16:22	WG824591
Trichloroethene	ND		1.00	1	10/29/2015 16:22	WG824591
Trichlorofluoromethane	ND		5.00	1	10/29/2015 16:22	WG824591
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/29/2015 16:22	WG824591
Vinyl chloride	ND		1.00	1	10/29/2015 16:22	WG824591
Xylenes, Total	ND		3.00	1	10/29/2015 16:22	WG824591
(S) Toluene- d8	103		90.0-115		10/29/2015 16:22	WG824591
(S) Dibromofluoromethane	99.0		79.0-121		10/29/2015 16:22	WG824591
(S) o,o,a-Trifluorotoluene	106		90.4-116		10/29/2015 16:22	WG824591
(S) 4-Bromofluorobenzene	100		80.1-120		10/29/2015 16:22	WG824591

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc



Collected date/time: 10/21/15 10:40

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 14:58	WG824424
Benzene	ND		1.00	1	10/28/2015 14:58	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 14:58	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 14:58	WG824424
Bromoform	ND		1.00	1	10/28/2015 14:58	WG824424
Bromomethane	ND		5.00	1	10/28/2015 14:58	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 14:58	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 14:58	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 14:58	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 14:58	WG824424
Chloroethane	ND		5.00	1	10/28/2015 14:58	WG824424
Chloroform	ND		5.00	1	10/28/2015 14:58	WG824424
Chloromethane	ND		2.50	1	10/28/2015 14:58	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 14:58	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 14:58	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 14:58	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 14:58	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 14:58	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 14:58	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 14:58	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 14:58	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 14:58	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 14:58	WG824424
cis-1,2-Dichloroethene	83.6		1.00	1	10/28/2015 14:58	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 14:58	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 14:58	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 14:58	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 14:58	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 14:58	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 14:58	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 14:58	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 14:58	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 14:58	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 14:58	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 14:58	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 14:58	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 14:58	WG824424
Styrene	ND		1.00	1	10/28/2015 14:58	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 14:58	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 14:58	WG824424
Toluene	ND		5.00	1	10/28/2015 14:58	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 14:58	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 14:58	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 14:58	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 14:58	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 14:58	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 14:58	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 14:58	WG824424
Vinyl chloride	51.9		1.00	1	10/28/2015 14:58	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 14:58	WG824424
(S) Toluene-d8	103		90.0-115		10/28/2015 14:58	WG824424
(S) Dibromofluoromethane	96.2		79.0-121		10/28/2015 14:58	WG824424
(S) o,o,a-Trifluorotoluene	99.3		90.4-116		10/28/2015 14:58	WG824424
(S) 4-Bromofluorobenzene	93.2		80.1-120		10/28/2015 14:58	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

GI

Al

Sc



Collected date/time: 10/21/15 10:20

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 15:19	WG824424
Benzene	ND		1.00	1	10/28/2015 15:19	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 15:19	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 15:19	WG824424
Bromoform	ND		1.00	1	10/28/2015 15:19	WG824424
Bromomethane	ND		5.00	1	10/28/2015 15:19	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 15:19	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 15:19	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 15:19	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 15:19	WG824424
Chloroethane	ND		5.00	1	10/28/2015 15:19	WG824424
Chloroform	ND		5.00	1	10/28/2015 15:19	WG824424
Chloromethane	ND		2.50	1	10/28/2015 15:19	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 15:19	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 15:19	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 15:19	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 15:19	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 15:19	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 15:19	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 15:19	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 15:19	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 15:19	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 15:19	WG824424
cis-1,2-Dichloroethene	15.7		1.00	1	10/28/2015 15:19	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 15:19	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 15:19	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 15:19	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 15:19	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 15:19	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 15:19	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 15:19	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 15:19	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 15:19	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 15:19	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 15:19	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 15:19	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 15:19	WG824424
Styrene	ND		1.00	1	10/28/2015 15:19	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 15:19	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 15:19	WG824424
Toluene	ND		5.00	1	10/28/2015 15:19	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 15:19	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 15:19	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 15:19	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 15:19	WG824424
Trichloroethene	1.16		1.00	1	10/28/2015 15:19	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 15:19	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 15:19	WG824424
Vinyl chloride	2.02		1.00	1	10/28/2015 15:19	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 15:19	WG824424
(S) Toluene-d8	103		90.0-115		10/28/2015 15:19	WG824424
(S) Dibromodifluoromethane	97.1		79.0-121		10/28/2015 15:19	WG824424
(S) o,a,a-Trifluorotoluene	98.1		90.4-116		10/28/2015 15:19	WG824424
(S) 4-Bromodifluorobenzene	93.3		80.1-120		10/28/2015 15:19	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



Collected date/time: 10/21/15 10:00

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 15:40	WG824424
Benzene	ND		1.00	1	10/28/2015 15:40	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 15:40	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 15:40	WG824424
Bromoform	ND		1.00	1	10/28/2015 15:40	WG824424
Bromomethane	ND		5.00	1	10/28/2015 15:40	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 15:40	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 15:40	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 15:40	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 15:40	WG824424
Chloroethane	ND		5.00	1	10/28/2015 15:40	WG824424
Chloroform	ND		5.00	1	10/28/2015 15:40	WG824424
Chloromethane	ND		2.50	1	10/28/2015 15:40	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 15:40	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 15:40	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 15:40	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 15:40	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 15:40	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 15:40	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 15:40	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 15:40	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 15:40	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 15:40	WG824424
cis-1,2-Dichloroethene	ND		1.00	1	10/28/2015 15:40	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 15:40	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 15:40	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 15:40	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 15:40	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 15:40	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 15:40	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 15:40	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 15:40	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 15:40	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 15:40	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 15:40	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 15:40	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 15:40	WG824424
Styrene	ND		1.00	1	10/28/2015 15:40	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 15:40	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 15:40	WG824424
Toluene	ND		5.00	1	10/28/2015 15:40	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 15:40	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 15:40	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 15:40	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 15:40	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 15:40	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 15:40	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 15:40	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 15:40	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 15:40	WG824424
(S) Toluene-d8	102		90.0-115		10/28/2015 15:40	WG824424
(S) Dibromofluoromethane	97.8		79.0-121		10/28/2015 15:40	WG824424
(S) a, a, a-Trifluorotoluene	98.1		90.4-116		10/28/2015 15:40	WG824424
(S) 4-Bromofluorobenzene	92.7		80.1-120		10/28/2015 15:40	WG824424

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



Collected date/time: 10/21/15 00:00

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/29/2015 13:06	WG824591
Benzene	ND		1.00	1	10/29/2015 13:06	WG824591
Bromochloromethane	ND		1.00	1	10/29/2015 13:06	WG824591
Bromodichloromethane	ND		1.00	1	10/29/2015 13:06	WG824591
Bromoform	ND		1.00	1	10/29/2015 13:06	WG824591
Bromomethane	ND		5.00	1	10/29/2015 13:06	WG824591
Carbon disulfide	ND		1.00	1	10/29/2015 13:06	WG824591
Carbon tetrachloride	ND		1.00	1	10/29/2015 13:06	WG824591
Chlorobenzene	ND		1.00	1	10/29/2015 13:06	WG824591
Chlorodibromomethane	ND		1.00	1	10/29/2015 13:06	WG824591
Chloroethane	ND		5.00	1	10/29/2015 13:06	WG824591
Chloroform	ND		5.00	1	10/29/2015 13:06	WG824591
Chloromethane	ND		2.50	1	10/29/2015 13:06	WG824591
Cyclohexane	ND		1.00	1	10/29/2015 13:06	WG824591
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/29/2015 13:06	WG824591
1,2-Dibromoethane	ND		1.00	1	10/29/2015 13:06	WG824591
1,2-Dichlorobenzene	ND		1.00	1	10/29/2015 13:06	WG824591
1,3-Dichlorobenzene	ND		1.00	1	10/29/2015 13:06	WG824591
1,4-Dichlorobenzene	ND		1.00	1	10/29/2015 13:06	WG824591
Dichlorodifluoromethane	ND		5.00	1	10/29/2015 13:06	WG824591
1,1-Dichloroethane	ND		1.00	1	10/29/2015 13:06	WG824591
1,2-Dichloroethane	ND		1.00	1	10/29/2015 13:06	WG824591
1,1-Dichloroethene	ND		1.00	1	10/29/2015 13:06	WG824591
cis-1,2-Dichloroethene	ND		1.00	1	10/29/2015 13:06	WG824591
trans-1,2-Dichloroethene	ND		1.00	1	10/29/2015 13:06	WG824591
1,2-Dichloropropane	ND		1.00	1	10/29/2015 13:06	WG824591
cis-1,3-Dichloropropene	ND		1.00	1	10/29/2015 13:06	WG824591
trans-1,3-Dichloropropene	ND		1.00	1	10/29/2015 13:06	WG824591
Ethylbenzene	ND		1.00	1	10/29/2015 13:06	WG824591
2-Hexanone	ND		10.0	1	10/29/2015 13:06	WG824591
Isopropylbenzene	ND		1.00	1	10/29/2015 13:06	WG824591
2-Butanone (MEK)	ND		10.0	1	10/29/2015 13:06	WG824591
Methyl Acetate	ND		20.0	1	10/29/2015 13:06	WG824591
Methyl Cyclohexane	ND		1.00	1	10/29/2015 13:06	WG824591
Methylene Chloride	ND		5.00	1	10/29/2015 13:06	WG824591
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/29/2015 13:06	WG824591
Methyl tert-butyl ether	ND		1.00	1	10/29/2015 13:06	WG824591
Styrene	ND		1.00	1	10/29/2015 13:06	WG824591
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/29/2015 13:06	WG824591
Tetrachloroethene	ND		1.00	1	10/29/2015 13:06	WG824591
Toluene	ND		5.00	1	10/29/2015 13:06	WG824591
1,2,3-Trichlorobenzene	ND		1.00	1	10/29/2015 13:06	WG824591
1,2,4-Trichlorobenzene	ND		1.00	1	10/29/2015 13:06	WG824591
1,1,1-Trichloroethane	ND		1.00	1	10/29/2015 13:06	WG824591
1,1,2-Trichloroethane	ND		1.00	1	10/29/2015 13:06	WG824591
Trichloroethene	ND		1.00	1	10/29/2015 13:06	WG824591
Trichlorofluoromethane	ND		5.00	1	10/29/2015 13:06	WG824591
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/29/2015 13:06	WG824591
Vinyl chloride	ND		1.00	1	10/29/2015 13:06	WG824591
Xylenes, Total	ND		3.00	1	10/29/2015 13:06	WG824591
(S) Toluene-d8	99.6		90.0-115		10/29/2015 13:06	WG824591
(S) Dibromofluoromethane	97.7		79.0-121		10/29/2015 13:06	WG824591
(S) o,o,a-Trifluorotoluene	106		90.4-116		10/29/2015 13:06	WG824591
(S) 4-Bromofluorobenzene	104		80.1-120		10/29/2015 13:06	WG824591

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc



Collected date/time: 10/21/15 11:20

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 16:01	WG824424
Benzene	ND		1.00	1	10/28/2015 16:01	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 16:01	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 16:01	WG824424
Bromoform	ND		1.00	1	10/28/2015 16:01	WG824424
Bromomethane	ND		5.00	1	10/28/2015 16:01	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 16:01	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 16:01	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 16:01	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 16:01	WG824424
Chloroethane	ND		5.00	1	10/28/2015 16:01	WG824424
Chloroform	ND		5.00	1	10/28/2015 16:01	WG824424
Chloromethane	ND		2.50	1	10/28/2015 16:01	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 16:01	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 16:01	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 16:01	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 16:01	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 16:01	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 16:01	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 16:01	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 16:01	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 16:01	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 16:01	WG824424
cis-1,2-Dichloroethene	ND		1.00	1	10/28/2015 16:01	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 16:01	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 16:01	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 16:01	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 16:01	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 16:01	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 16:01	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 16:01	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 16:01	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 16:01	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 16:01	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 16:01	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 16:01	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 16:01	WG824424
Styrene	ND		1.00	1	10/28/2015 16:01	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 16:01	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 16:01	WG824424
Toluene	ND		5.00	1	10/28/2015 16:01	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 16:01	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 16:01	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 16:01	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 16:01	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 16:01	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 16:01	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 16:01	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 16:01	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 16:01	WG824424
(S) Toluene-d8	104		90.0-115		10/28/2015 16:01	WG824424
(S) Dibromofluoromethane	97.3		79.0-121		10/28/2015 16:01	WG824424
(S) a,a,a-Trifluorotoluene	99.0		90.4-116		10/28/2015 16:01	WG824424
(S) 4-Bromofluorobenzene	93.1		80.1-120		10/28/2015 16:01	WG824424

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time 10/21/15 12:00

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	10/28/2015 16:23	WG824424
Benzene	ND		1.00	1	10/28/2015 16:23	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 16:23	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 16:23	WG824424
Bromoform	ND		1.00	1	10/28/2015 16:23	WG824424
Bromomethane	ND		5.00	1	10/28/2015 16:23	WG824424
Carbon disulfide	1.03		1.00	1	10/28/2015 16:23	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 16:23	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 16:23	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 16:23	WG824424
Chloroethane	ND		5.00	1	10/28/2015 16:23	WG824424
Chloroform	ND		5.00	1	10/28/2015 16:23	WG824424
Chloromethane	ND		2.50	1	10/28/2015 16:23	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 16:23	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 16:23	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 16:23	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 16:23	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 16:23	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 16:23	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 16:23	WG824424
1,1-Dichloroethane	1.04		1.00	1	10/28/2015 16:23	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 16:23	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 16:23	WG824424
cis-1,2-Dichloroethene	ND		1.00	1	10/28/2015 16:23	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 16:23	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 16:23	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 16:23	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 16:23	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 16:23	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 16:23	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 16:23	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 16:23	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 16:23	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 16:23	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 16:23	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 16:23	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 16:23	WG824424
Styrene	ND		1.00	1	10/28/2015 16:23	WG824424
1,1,2-Tetrachloroethane	ND		1.00	1	10/28/2015 16:23	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 16:23	WG824424
Toluene	ND		5.00	1	10/28/2015 16:23	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 16:23	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 16:23	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 16:23	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 16:23	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 16:23	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 16:23	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 16:23	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 16:23	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 16:23	WG824424
(S) Toluene-d8	101		90.0-115		10/28/2015 16:23	WG824424
(S) Dibromofluoromethane	97.8		79.0-121		10/28/2015 16:23	WG824424
(S) o,o,a-Trifluorotoluene	98.4		90.4-116		10/28/2015 16:23	WG824424
(S) 4-Bromofluorobenzene	93.0		80.1-120		10/28/2015 16:23	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



Collected date/time: 10/21/15 12:10

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 16:44	WG824424
Benzene	ND		1.00	1	10/28/2015 16:44	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 16:44	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 16:44	WG824424
Bromoform	ND		1.00	1	10/28/2015 16:44	WG824424
Bromomethane	ND		5.00	1	10/28/2015 16:44	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 16:44	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 16:44	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 16:44	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 16:44	WG824424
Chloroethane	ND		5.00	1	10/28/2015 16:44	WG824424
Chloroform	ND		5.00	1	10/28/2015 16:44	WG824424
Chloromethane	ND		2.50	1	10/28/2015 16:44	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 16:44	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 16:44	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 16:44	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 16:44	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 16:44	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 16:44	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 16:44	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 16:44	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 16:44	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 16:44	WG824424
cis-1,2-Dichloroethene	ND		1.00	1	10/28/2015 16:44	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 16:44	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 16:44	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 16:44	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 16:44	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 16:44	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 16:44	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 16:44	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 16:44	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 16:44	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 16:44	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 16:44	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 16:44	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 16:44	WG824424
Styrene	ND		1.00	1	10/28/2015 16:44	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 16:44	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 16:44	WG824424
Toluene	ND		5.00	1	10/28/2015 16:44	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 16:44	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 16:44	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 16:44	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 16:44	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 16:44	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 16:44	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 16:44	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 16:44	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 16:44	WG824424
(S) Toluene-d8	102		90.0-115		10/28/2015 16:44	WG824424
(S) Dibromofluoromethane	97.3		79.0-121		10/28/2015 16:44	WG824424
(S) o,a,a-Trifluorotoluene	99.4		90.4-116		10/28/2015 16:44	WG824424
(S) 4-Bromofluorobenzene	92.9		80.1-120		10/28/2015 16:44	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc



Collected date/time: 10/21/15 12:40

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND	J3	50.0	1	10/28/2015 13:33	WG824424
Benzene	ND		1.00	1	10/28/2015 13:33	WG824424
Bromochloromethane	ND	J6	1.00	1	10/28/2015 13:33	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 13:33	WG824424
Bromoform	ND	J3	1.00	1	10/28/2015 13:33	WG824424
Bromomethane	ND		5.00	1	10/28/2015 13:33	WG824424
Carbon disulfide	ND	J6	1.00	1	10/28/2015 13:33	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 13:33	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 13:33	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 13:33	WG824424
Chloroethane	ND		5.00	1	10/28/2015 13:33	WG824424
Chloroform	ND		5.00	1	10/28/2015 13:33	WG824424
Chloromethane	ND		2.50	1	10/28/2015 13:33	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 13:33	WG824424
1,2-Dibromo-3-Chloropropane	ND	J3	5.00	1	10/28/2015 13:33	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 13:33	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 13:33	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 13:33	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 13:33	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 13:33	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 13:33	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 13:33	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 13:33	WG824424
cis-1,2-Dichloroethene	22.5	J6	1.00	1	10/28/2015 13:33	WG824424
trans-1,2-Dichloroethene	1.94	J6	1.00	1	10/28/2015 13:33	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 13:33	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 13:33	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 13:33	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 13:33	WG824424
2-Hexanone	ND	J3	10.0	1	10/28/2015 13:33	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 13:33	WG824424
2-Butanone (MEK)	ND	J3	10.0	1	10/28/2015 13:33	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 13:33	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 13:33	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 13:33	WG824424
4-Methyl-2-pentanone (MIBK)	ND	J3	10.0	1	10/28/2015 13:33	WG824424
Methyl tert-butyl ether	ND	J5	1.00	1	10/28/2015 13:33	WG824424
Styrene	ND		1.00	1	10/28/2015 13:33	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 13:33	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 13:33	WG824424
Toluene	ND		5.00	1	10/28/2015 13:33	WG824424
1,2,3-Trichlorobenzene	ND	J3	1.00	1	10/28/2015 13:33	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 13:33	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 13:33	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 13:33	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 13:33	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 13:33	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 13:33	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 13:33	WG824424
Xylenes, Total	ND	J5	3.00	1	10/28/2015 13:33	WG824424
(S) Toluene-d8	101		90.0-115		10/28/2015 13:33	WG824424
(S) Dibromofluoromethane	95.3		79.0-121		10/28/2015 13:33	WG824424
(S) o,o,a-Trifluorotoluene	99.1		90.4-116		10/28/2015 13:33	WG824424
(S) 4-Bromofluorobenzene	94.5		80.1-120		10/28/2015 13:33	WG824424

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



Collected date/time: 10/21/15 12:20

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 17:05	WG824424
Benzene	ND		1.00	1	10/28/2015 17:05	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 17:05	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 17:05	WG824424
Bromoform	ND		1.00	1	10/28/2015 17:05	WG824424
Bromomethane	ND		5.00	1	10/28/2015 17:05	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 17:05	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 17:05	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 17:05	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 17:05	WG824424
Chloroethane	ND		5.00	1	10/28/2015 17:05	WG824424
Chloroform	ND		5.00	1	10/28/2015 17:05	WG824424
Chloromethane	ND		2.50	1	10/28/2015 17:05	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 17:05	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 17:05	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 17:05	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 17:05	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 17:05	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 17:05	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 17:05	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 17:05	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 17:05	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 17:05	WG824424
cis-1,2-Dichloroethene	10.3		1.00	1	10/28/2015 17:05	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 17:05	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 17:05	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 17:05	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 17:05	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 17:05	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 17:05	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 17:05	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 17:05	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 17:05	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 17:05	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 17:05	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 17:05	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 17:05	WG824424
Styrene	ND		1.00	1	10/28/2015 17:05	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 17:05	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 17:05	WG824424
Toluene	ND		5.00	1	10/28/2015 17:05	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 17:05	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 17:05	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 17:05	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 17:05	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 17:05	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 17:05	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 17:05	WG824424
Vinyl chloride	ND		1.00	1	10/28/2015 17:05	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 17:05	WG824424
(S) Toluene-d8	102		90.0-115		10/28/2015 17:05	WG824424
(S) Dibromofluoromethane	97.8		79.0-121		10/28/2015 17:05	WG824424
(S) o,o,a-Trifluorotoluene	98.2		90.4-116		10/28/2015 17:05	WG824424
(S) 4-Bromofluorobenzene	92.0		80.1-120		10/28/2015 17:05	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc



Collected date/time: 10/21/15 10:40

L796083

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	10/28/2015 17:26	WG824424
Benzene	ND		1.00	1	10/28/2015 17:26	WG824424
Bromochloromethane	ND		1.00	1	10/28/2015 17:26	WG824424
Bromodichloromethane	ND		1.00	1	10/28/2015 17:26	WG824424
Bromoform	ND		1.00	1	10/28/2015 17:26	WG824424
Bromomethane	ND		5.00	1	10/28/2015 17:26	WG824424
Carbon disulfide	ND		1.00	1	10/28/2015 17:26	WG824424
Carbon tetrachloride	ND		1.00	1	10/28/2015 17:26	WG824424
Chlorobenzene	ND		1.00	1	10/28/2015 17:26	WG824424
Chlorodibromomethane	ND		1.00	1	10/28/2015 17:26	WG824424
Chloroethane	ND		5.00	1	10/28/2015 17:26	WG824424
Chloroform	ND		5.00	1	10/28/2015 17:26	WG824424
Chloromethane	ND		2.50	1	10/28/2015 17:26	WG824424
Cyclohexane	ND		1.00	1	10/28/2015 17:26	WG824424
1,2-Dibromo-3-Chloropropane	ND		5.00	1	10/28/2015 17:26	WG824424
1,2-Dibromoethane	ND		1.00	1	10/28/2015 17:26	WG824424
1,2-Dichlorobenzene	ND		1.00	1	10/28/2015 17:26	WG824424
1,3-Dichlorobenzene	ND		1.00	1	10/28/2015 17:26	WG824424
1,4-Dichlorobenzene	ND		1.00	1	10/28/2015 17:26	WG824424
Dichlorodifluoromethane	ND		5.00	1	10/28/2015 17:26	WG824424
1,1-Dichloroethane	ND		1.00	1	10/28/2015 17:26	WG824424
1,2-Dichloroethane	ND		1.00	1	10/28/2015 17:26	WG824424
1,1-Dichloroethene	ND		1.00	1	10/28/2015 17:26	WG824424
cis-1,2-Dichloroethene	81.5		1.00	1	10/28/2015 17:26	WG824424
trans-1,2-Dichloroethene	ND		1.00	1	10/28/2015 17:26	WG824424
1,2-Dichloropropane	ND		1.00	1	10/28/2015 17:26	WG824424
cis-1,3-Dichloropropene	ND		1.00	1	10/28/2015 17:26	WG824424
trans-1,3-Dichloropropene	ND		1.00	1	10/28/2015 17:26	WG824424
Ethylbenzene	ND		1.00	1	10/28/2015 17:26	WG824424
2-Hexanone	ND		10.0	1	10/28/2015 17:26	WG824424
Isopropylbenzene	ND		1.00	1	10/28/2015 17:26	WG824424
2-Butanone (MEK)	ND		10.0	1	10/28/2015 17:26	WG824424
Methyl Acetate	ND		20.0	1	10/28/2015 17:26	WG824424
Methyl Cyclohexane	ND		1.00	1	10/28/2015 17:26	WG824424
Methylene Chloride	ND		5.00	1	10/28/2015 17:26	WG824424
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	10/28/2015 17:26	WG824424
Methyl tert-butyl ether	ND		1.00	1	10/28/2015 17:26	WG824424
Styrene	ND		1.00	1	10/28/2015 17:26	WG824424
1,1,2,2-Tetrachloroethane	ND		1.00	1	10/28/2015 17:26	WG824424
Tetrachloroethene	ND		1.00	1	10/28/2015 17:26	WG824424
Toluene	ND		5.00	1	10/28/2015 17:26	WG824424
1,2,3-Trichlorobenzene	ND		1.00	1	10/28/2015 17:26	WG824424
1,2,4-Trichlorobenzene	ND		1.00	1	10/28/2015 17:26	WG824424
1,1,1-Trichloroethane	ND		1.00	1	10/28/2015 17:26	WG824424
1,1,2-Trichloroethane	ND		1.00	1	10/28/2015 17:26	WG824424
Trichloroethene	ND		1.00	1	10/28/2015 17:26	WG824424
Trichlorofluoromethane	ND		5.00	1	10/28/2015 17:26	WG824424
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	10/28/2015 17:26	WG824424
Vinyl chloride	50.0		1.00	1	10/28/2015 17:26	WG824424
Xylenes, Total	ND		3.00	1	10/28/2015 17:26	WG824424
(S) Toluene-d8	103		90.0-115		10/28/2015 17:26	WG824424
(S) Dibromofluoromethane	98.1		79.0-121		10/28/2015 17:26	WG824424
(S) o,o,a-Trifluorotoluene	98.3		90.4-116		10/28/2015 17:26	WG824424
(S) 4-Bromofluorobenzene	93.2		80.1-120		10/28/2015 17:26	WG824424

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc

WG824424

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-01,02,04,05,06,08,09,10,11,12,13

Method Blank (MB)

(MB) 10/28/15 11:29

Analyte	MB Result	MB Qualifier	MB RDL
	mg/l		mg/l
Acetone	ND		0.0500
Benzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromochloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
Carbon disulfide	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
Cyclohexane	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100
trans-1,3-Dichloropropene	ND		0.00100
Ethylbenzene	ND		0.00100
2-Hexanone	ND		0.0100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Acetate	ND		0.0200
Methyl Cyclohexane	ND		0.00100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gf
- 8 Al
- 9 Sc

ACCOUNT: GHD

PROJECT: B618749-100-

SDG: L796083

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QUALITY CONTROL SUMMARY

ONE LAB NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

[L796083-01.02.04.05.06.08.09.10.11.12.13](#)

Method Blank (MB)

(MB) 10/28/15 11:29

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Methyl tert-butyl ether	ND		0.00100
Styrene	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	102		90.0-115
(S) Dibromofluoromethane	96.0		79.0-121
(S) o,o,a-Trifluorotoluene	98.4		90.4-116
(S) 4-Bromofluorobenzene	93.2		80.1-120

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 GI
- 8 AI
- 9 Sc

Laboratory Control Sample (LCS) - Laboratory Control Sample Duplicate (LCSD)

(LCS) 10/28/15 09:21 - (LCSD) 10/28/15 09:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.117	0.112	93.8	89.8	28.7-175			4.35	20.9
Benzene	0.0250	0.0247	0.0248	98.9	99.2	73.0-122			0.350	20
Bromodichloromethane	0.0250	0.0230	0.0232	92.1	92.8	75.5-121			0.750	20
Bromochloromethane	0.0250	0.0257	0.0260	103	104	78.9-123			0.860	20
Bromoform	0.0250	0.0236	0.0231	94.5	92.4	71.5-131			2.27	20
Bromomethane	0.0250	0.0211	0.0208	84.3	83.1	22.4-187			1.46	20
Carbon disulfide	0.0250	0.0225	0.0224	90.1	89.5	53.0-134			0.700	20
Carbon tetrachloride	0.0250	0.0210	0.0211	84.0	84.4	70.9-129			0.520	20
Chlorobenzene	0.0250	0.0258	0.0257	103	103	79.7-122			0.360	20
Chlorodibromomethane	0.0250	0.0246	0.0245	98.6	98.1	78.2-124			0.490	20
Chloroethane	0.0250	0.0205	0.0207	82.1	82.8	41.2-153			0.740	20
Chloroform	0.0250	0.0235	0.0237	94.2	95.0	73.2-125			0.850	20

ACCOUNT:
GHD

PROJECT:
8618749-100-

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QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-01.02.04.05.06.08.09.10.11.12.13

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 10/28/15 09:21 • (LCSD) 10/28/15 09:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	0.0250	0.0234	0.0235	93.4	94.1	55.8-134			0.740	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0243	0.0246	97.1	98.2	64.8-131			1.12	20
1,2-Dibromoethane	0.0250	0.0262	0.0258	105	103	79.8-122			1.30	20
1,2-Dichlorobenzene	0.0250	0.0270	0.0274	108	110	84.7-118			1.75	20
1,3-Dichlorobenzene	0.0250	0.0243	0.0241	97.2	96.3	77.6-127			0.900	20
1,4-Dichlorobenzene	0.0250	0.0257	0.0261	103	104	82.2-114			1.47	20
Dichlorodifluoromethane	0.0250	0.0212	0.0221	84.9	88.3	56.0-134			3.90	20
1,1-Dichloroethane	0.0250	0.0236	0.0237	94.5	95.0	71.7-127			0.550	20
1,2-Dichloroethane	0.0250	0.0219	0.0216	87.6	86.5	79.8-122			1.26	20
1,1-Dichloroethene	0.0250	0.0188	0.0188	75.1	75.4	59.9-137			0.440	20
cis-1,2-Dichloroethene	0.0250	0.0249	0.0248	99.8	99.1	77.3-122			0.740	20
trans-1,2-Dichloroethene	0.0250	0.0244	0.0247	97.4	98.9	72.6-125			1.53	20
1,2-Dichloropropane	0.0250	0.0254	0.0252	102	101	77.4-125			0.810	20
cis-1,3-Dichloropropene	0.0250	0.0244	0.0243	97.5	97.1	77.7-124			0.380	20
trans-1,3-Dichloropropene	0.0250	0.0234	0.0229	93.6	91.6	73.5-127			2.19	20
Ethylbenzene	0.0250	0.0250	0.0250	100	99.8	80.9-121			0.250	20
2-Hexanone	0.125	0.123	0.119	98.4	94.8	59.4-151			3.76	20
Isopropylbenzene	0.0250	0.0248	0.0247	99.3	98.9	81.6-124			0.410	20
2-Butanone (MEK)	0.125	0.119	0.112	95.0	89.7	46.4-155			5.79	20
Methylene Chloride	0.0250	0.0243	0.0240	97.4	96.1	69.5-120			1.36	20
4-Methyl-2-pentanone (MIBK)	0.125	0.108	0.106	86.6	84.5	63.3-138			2.46	20
Methyl tert-butyl ether	0.0250	0.0237	0.0235	95.0	94.0	70.1-125			1.07	20
Styrene	0.0250	0.0261	0.0257	104	103	79.9-124			1.33	20
1,1,2,2-Tetrachloroethane	0.0250	0.0254	0.0240	102	96.2	79.3-123			5.47	20
Tetrachloroethene	0.0250	0.0244	0.0252	97.7	101	73.5-130			3.02	20
Toluene	0.0250	0.0246	0.0245	98.3	98.0	77.9-116			0.340	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0209	0.0210	83.7	84.0	62.0-141			0.340	20
1,2,3-Trichlorobenzene	0.0250	0.0255	0.0265	102	106	75.7-134			3.76	20
1,2,4-Trichlorobenzene	0.0250	0.0255	0.0266	102	106	76.1-136			3.98	20
1,1,1-Trichloroethane	0.0250	0.0222	0.0224	88.9	89.5	71.1-129			0.730	20
1,1,2-Trichloroethane	0.0250	0.0276	0.0270	111	108	81.6-120			2.42	20
Trichloroethene	0.0250	0.0243	0.0253	97.1	101	79.5-121			4.01	20
Trichlorofluoromethane	0.0250	0.0181	0.0184	72.4	73.7	49.1-157			1.82	20
Vinyl chloride	0.0250	0.0221	0.0219	88.3	87.5	61.5-134			0.840	20
Xylenes, Total	0.0750	0.0759	0.0753	101	100	79.2-122			0.810	20
(S) Toluene-d8				103	102	90.0-115				

- Cp
- Tc
- Ss
- Cn
- Sr
- Qc
- GI
- AI
- Sc

ACCOUNT:
GHD

PROJECT:
8618749-100-

SQG:
L796083

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QUALITY CONTROL SUMMARY

ONE LAB NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method B260C

L796083-01,02,04,05,06,08,09,10,11,12,13

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 10/28/15 09:21 • (LCSD) 10/28/15 09:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				97.3	96.8	79.0-121				
(S) o,o,d-Trifluorotoluene				101	98.2	90.4-116				
(S) 4-Bromofluorobenzene				92.9	91.1	80.1-120				

L796083-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 13:33 • (MS) 10/28/15 12:08 • (MSD) 10/28/15 12:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00174	0.0910	0.114	71.4	90.1	1	25.0-156		J3	22.8	21.5
Benzene	0.0250	ND	0.0281	0.0299	112	120	1	58.6-133			6.16	20
Bromodichloromethane	0.0250	ND	0.0181	0.0217	72.2	86.7	1	69.2-127			18.2	20
Bromochloromethane	0.0250	ND	0.0176	0.0212	70.6	84.6	1	74.4-128	J5		18.2	20
Bromoform	0.0250	ND	0.0185	0.0233	74.0	93.1	1	66.3-140		J3	22.9	20
Bromomethane	0.0250	ND	0.0107	0.0121	42.7	48.3	1	16.6-183			12.3	20.5
Carbon disulfide	0.0250	ND	0.00692	0.00785	27.7	31.4	1	34.9-138	J6	J6	12.6	20
Carbon tetrachloride	0.0250	ND	0.0161	0.0190	64.2	76.0	1	60.6-139			16.8	20
Chlorobenzene	0.0250	ND	0.0198	0.0231	79.2	92.5	1	70.1-130			15.5	20
Chlorodibromomethane	0.0250	ND	0.0194	0.0236	77.5	94.6	1	71.6-132			19.8	20
Chloroethane	0.0250	ND	0.0117	0.0136	46.9	54.4	1	33.3-155			14.8	20
Chloroform	0.0250	ND	0.0185	0.0217	74.1	86.7	1	66.1-133			15.6	20
Chloromethane	0.0250	ND	0.0105	0.0126	42.1	50.4	1	40.7-139			17.9	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0208	0.0262	83.3	105	1	63.9-142		J3	22.9	20.2
1,2-Dibromoethane	0.0250	ND	0.0195	0.0236	78.0	94.6	1	73.8-131			19.2	20
1,2-Dichlorobenzene	0.0250	ND	0.0228	0.0268	91.1	107	1	77.4-127			16.1	20
1,3-Dichlorobenzene	0.0250	ND	0.0198	0.0234	79.0	93.5	1	67.9-136			16.8	20
1,4-Dichlorobenzene	0.0250	ND	0.0213	0.0251	85.2	100	1	74.4-123			16.3	20
Dichlorodifluoromethane	0.0250	ND	0.0126	0.0150	50.3	60.1	1	42.2-146			17.7	20
1,1-Dichloroethane	0.0250	0.000408	0.0180	0.0212	70.6	83.0	1	64.0-134			15.8	20
1,2-Dichloroethane	0.0250	0.000848	0.0165	0.0195	62.8	74.5	1	60.7-132			16.3	20
1,1-Dichloroethene	0.0250	ND	0.0124	0.0143	49.4	57.2	1	48.8-144			14.6	20
cis-1,2-Dichloroethene	0.0250	0.0225	0.0317	0.0327	36.7	40.8	1	60.6-136	J6	J6	3.16	20
trans-1,2-Dichloroethene	0.0250	0.00194	0.0157	0.0181	55.0	64.7	1	61.0-132	J5		14.3	20
1,2-Dichloropropane	0.0250	ND	0.0192	0.0225	76.7	89.9	1	69.7-130			15.8	20
cis-1,3-Dichloropropene	0.0250	ND	0.0179	0.0214	71.4	85.8	1	71.1-129			18.2	20
trans-1,3-Dichloropropene	0.0250	ND	0.0173	0.0212	69.3	84.7	1	66.3-136			20.0	20

- Cp
- Tc
- Ss
- Cn
- Sr
- Cc
- Gl
- Al
- Sc

ACCOUNT: GHD

PROJECT: B618749-100-

SDG: L796083

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QUALITY CONTROL SUMMARY

ONE LAB NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-01,02,04,05,06,08,09,10,11,12,13

L796083-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/28/15 13:33 • (MS) 10/28/15 12:08 • (MSD) 10/28/15 12:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	ND	0.0303	0.0326	121	130	1	62.7-136			7.36	20
2-Hexanone	0.125	ND	0.0945	0.119	75.6	95.5	1	59.4-154	J3		23.3	20.1
Isopropylbenzene	0.0250	ND	0.0205	0.0240	81.9	95.8	1	67.4-136			15.6	20
2-Butanone (MEK)	0.125	ND	0.0939	0.118	75.1	94.7	1	45.0-156	J3		23.0	20.8
Methylene Chloride	0.0250	ND	0.0165	0.0192	66.1	76.9	1	61.5-125			15.1	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0872	0.109	69.8	87.5	1	60.7-150	J3		22.6	20
Methyl tert-butyl ether	0.0250	ND	0.0363	0.0400	145	160	1	61.4-136	J5	J5	9.74	20
Styrene	0.0250	ND	0.0207	0.0241	82.9	96.3	1	68.2-133			15.0	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0217	0.0262	86.7	105	1	64.9-145			18.9	20
Tetrachloroethane	0.0250	ND	0.0177	0.0210	70.6	83.9	1	57.4-141			17.1	20
Toluene	0.0250	ND	0.0282	0.0303	113	121	1	67.8-124			7.10	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0170	0.0195	67.9	77.9	1	53.7-150			13.8	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0219	0.0270	87.5	108	1	65.7-143	J3		20.9	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0224	0.0265	89.7	106	1	67.0-146			16.9	20
1,1,1-Trichloroethane	0.0250	ND	0.0177	0.0207	70.7	82.6	1	62.8-138			15.6	20
1,1,2-Trichloroethane	0.0250	ND	0.0217	0.0261	86.7	104	1	74.1-130			18.4	20
Trichloroethene	0.0250	0.000324	0.0172	0.0198	67.4	78.1	1	48.9-148			14.4	20
Trichlorofluoromethane	0.0250	ND	0.0128	0.0148	51.3	59.0	1	39.9-165			14.0	20
Vinyl chloride	0.0250	0.000399	0.0117	0.0135	45.1	52.2	1	44.3-143			14.2	20
Xylenes, Total	0.0750	ND	0.0931	0.0995	124	133	1	65.6-133	J5		6.71	20
(S) Toluene-d8					102	102		90.0-115				
(S) Dibromofluoromethane					97.1	96.5		79.0-121				
(S) o,o-d-Trifluorotoluene					99.5	99.8		90.4-116				
(S) 4-Bromofluorobenzene					92.3	92.1		60.1-120				

- Cp
- Tc
- Ss
- Cn
- Sr
- Cc
- GI
- Al
- Sc

ACCOUNT:
GHD

PROJECT:
8618749-100-

SDG:
L796083

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QUALITY CONTROL SUMMARY

ONE LAB NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-03_07

Method Blank (MB)

(MB) 10/29/15 11:50

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0500
Benzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromochloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
Carbon disulfide	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
Cyclohexane	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100
trans-1,3-Dichloropropene	ND		0.00100
Ethylbenzene	ND		0.00100
2-Hexanone	ND		0.0100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Acetate	ND		0.0200
Methyl Cyclohexane	ND		0.00100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100

Cp

Tc

Ss

Cn

Sr

Cc

GI

AI

Sc

ACCOUNT:
GHD

PROJECT:
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L796083

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QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 826DC

L796083-01.07

Method Blank (MB)

(MB) 10/29/15 11:50

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Methyl tert-butyl ether	ND		0.00100
Styrene	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	104		90.0-115
(S) Dibromofluoromethane	97.8		79.0-121
(S) o,o,o-Trifluorotoluene	107		90.4-116
(S) 4-Bromofluorobenzene	101		80.1-120

- Cp
- Tc
- Ss
- Cn
- Sr
- Cc
- GI
- AI
- Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 10/29/15 10:18 • (LCSD) 10/29/15 10:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0795	0.0827	63.6	66.2	28.7-175			3.93	20.9
Benzene	0.0250	0.0216	0.0214	86.5	85.6	73.0-122			0.970	20
Bromodichloromethane	0.0250	0.0281	0.0286	113	114	75.5-121			1.71	20
Bromochloromethane	0.0250	0.0237	0.0239	94.8	95.8	78.9-123			1.03	20
Bromoform	0.0250	0.0283	0.0278	113	111	71.5-131			1.81	20
Bromomethane	0.0250	0.0221	0.0227	88.4	91.0	22.4-187			2.84	20
Carbon disulfide	0.0250	0.0229	0.0232	91.6	92.6	53.0-134			1.13	20
Carbon tetrachloride	0.0250	0.0268	0.0261	107	105	70.9-129			2.38	20
Chlorobenzene	0.0250	0.0251	0.0247	100	98.8	79.7-122			1.64	20
Chlorodibromomethane	0.0250	0.0275	0.0275	110	110	78.2-124			0.180	20
Chloroethane	0.0250	0.0223	0.0238	89.3	95.1	41.2-153			6.26	20
Chloroform	0.0250	0.0251	0.0247	100	98.7	73.2-125			1.57	20

ACCOUNT:
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QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-03_07

Laboratory Control Sample (LCS) - Laboratory Control Sample Duplicate (LCSD)

(LCS) 10/29/15 10:18 - (LCSD) 10/29/15 10:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	0.0250	0.0186	0.0190	74.2	75.9	55.8-134			2.21	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0281	0.0279	113	112	64.8-131			0.920	20
1,2-Dibromoethane	0.0250	0.0242	0.0253	96.8	101	79.8-122			4.28	20
1,2-Dichlorobenzene	0.0250	0.0243	0.0247	97.0	98.7	84.7-118			1.67	20
1,3-Dichlorobenzene	0.0250	0.0266	0.0266	107	106	77.6-127			0.190	20
1,4-Dichlorobenzene	0.0250	0.0233	0.0238	93.4	95.2	82.2-114			1.99	20
Dichlorodifluoromethane	0.0250	0.0235	0.0239	94.1	95.5	56.0-134			1.48	20
1,1-Dichloroethane	0.0250	0.0227	0.0226	90.9	90.6	71.7-127			0.390	20
1,2-Dichloroethane	0.0250	0.0272	0.0263	109	105	79.8-122			3.40	20
1,1-Dichloroethene	0.0250	0.0264	0.0268	106	107	59.9-137			1.42	20
cis-1,2-Dichloroethene	0.0250	0.0230	0.0226	92.2	90.2	77.3-122			2.14	20
trans-1,2-Dichloroethene	0.0250	0.0225	0.0224	89.8	89.7	72.6-125			0.180	20
1,2-Dichloropropane	0.0250	0.0237	0.0249	94.6	99.7	77.4-125			5.22	20
cis-1,3-Dichloropropene	0.0250	0.0260	0.0269	104	108	77.7-124			3.53	20
trans-1,3-Dichloropropene	0.0250	0.0267	0.0286	107	114	73.5-127			6.91	20
Ethylbenzene	0.0250	0.0261	0.0245	104	97.8	80.9-121			6.38	20
2-Hexanone	0.125	0.113	0.122	90.2	98.0	59.4-151			8.28	20
Isopropylbenzene	0.0250	0.0255	0.0263	102	105	81.6-124			2.80	20
2-Butanone (MEK)	0.125	0.0894	0.0937	71.5	75.0	46.4-155			4.73	20
Methylene Chloride	0.0250	0.0215	0.0218	85.9	87.2	69.5-120			1.50	20
4-Methyl-2-pentanone (MIBK)	0.125	0.117	0.125	94.0	99.9	63.3-138			6.10	20
Methyl tert-butyl ether	0.0250	0.0235	0.0231	93.9	92.5	70.1-125			1.46	20
Styrene	0.0250	0.0249	0.0256	99.6	102	79.9-124			2.77	20
1,1,2,2-Tetrachloroethane	0.0250	0.0246	0.0254	98.4	102	79.3-123			3.26	20
Tetrachloroethene	0.0250	0.0264	0.0271	106	108	73.5-130			2.45	20
Toluene	0.0250	0.0232	0.0253	92.6	101	77.9-116			8.94	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0266	0.0266	107	107	62.0-141			0.0800	20
1,2,3-Trichlorobenzene	0.0250	0.0266	0.0270	106	108	75.7-134			1.43	20
1,2,4-Trichlorobenzene	0.0250	0.0270	0.0268	108	107	76.1-136			0.660	20
1,1,1-Trichloroethane	0.0250	0.0257	0.0260	103	104	71.1-129			1.18	20
1,1,2-Trichloroethane	0.0250	0.0248	0.0254	99.1	102	81.6-120			2.52	20
Trichloroethene	0.0250	0.0254	0.0255	102	102	79.5-121			0.440	20
Trichlorofluoromethane	0.0250	0.0269	0.0278	108	111	49.1-157			3.13	20
Vinyl chloride	0.0250	0.0232	0.0233	92.8	93.3	61.5-134			0.600	20
Xylenes, Total	0.0750	0.0716	0.0740	95.5	98.7	79.2-122			3.26	20
(S) Toluene-d8				105	110	90.0-115				

- Cp
- Tc
- Ss
- Cn
- Sr
- Qc
- GI
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- Sc

ACCOUNT
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QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-03-07

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 10/29/15 10:18 • (LCSD) 10/29/15 10:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				96.6	95.8	79.0-121				
(S) o,o-Trifluorotoluene				104	111	90.4-116				
(S) 4-Bromofluorobenzene				101	103	80.1-120				

L796458-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 15:09 • (MS) 10/29/15 15:28 • (MSD) 10/29/15 15:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00225	0.0535	0.0523	41.0	40.1	1	25.0-156			2.25	21.5
Benzene	0.0250	ND	0.0131	0.0141	52.5	56.2	1	58.6-133	J6	J6	6.90	20
Bromodichloromethane	0.0250	ND	0.0221	0.0228	88.4	91.2	1	69.2-127			3.19	20
Bromochloromethane	0.0250	ND	0.0153	0.0160	61.1	64.2	1	74.4-128	J6	J6	4.87	20
Bromoform	0.0250	ND	0.0239	0.0257	95.7	103	1	66.3-140			6.98	20
Bromomethane	0.0250	ND	0.00967	0.0100	38.7	40.1	1	16.6-183			3.62	20.5
Carbon disulfide	0.0250	ND	0.00448	0.00474	17.9	19.0	1	34.9-138	J6	J6	5.66	20
Carbon tetrachloride	0.0250	ND	0.0178	0.0185	71.2	74.0	1	60.6-139			3.82	20
Chlorobenzene	0.0250	ND	0.0187	0.0201	74.7	80.2	1	70.1-130			7.10	20
Chlorodibromomethane	0.0250	ND	0.0224	0.0242	89.5	96.9	1	71.6-132			7.95	20
Chloroethane	0.0250	ND	0.0110	0.0131	44.0	52.4	1	33.3-155			17.4	20
Chloroform	0.0250	0.00199	0.0208	0.0215	75.4	78.1	1	66.1-133			3.25	20
Chloromethane	0.0250	ND	0.00706	0.00747	28.2	29.9	1	40.7-139	J6	J6	5.63	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0252	0.0264	101	105	1	63.9-142			4.47	20.2
1,2-Dibromoethane	0.0250	ND	0.0186	0.0194	74.6	77.8	1	73.8-131			4.22	20
1,2-Dichlorobenzene	0.0250	ND	0.0191	0.0204	76.4	81.6	1	77.4-127	J6		6.50	20
1,3-Dichlorobenzene	0.0250	ND	0.0205	0.0226	82.0	90.5	1	67.9-136			9.88	20
1,4-Dichlorobenzene	0.0250	ND	0.0187	0.0188	74.8	75.0	1	74.4-123			0.300	20
Dichlorodifluoromethane	0.0250	ND	0.0118	0.0125	47.2	49.9	1	42.2-146			5.74	20
1,1-Dichloroethane	0.0250	ND	0.0155	0.0166	62.2	66.4	1	64.0-134	J6		6.48	20
1,2-Dichloroethane	0.0250	ND	0.0197	0.0198	78.9	79.3	1	60.7-132			0.580	20
1,1-Dichloroethene	0.0250	ND	0.0137	0.0141	54.8	56.4	1	48.8-144			2.95	20
cis-1,2-Dichloroethene	0.0250	ND	0.0154	0.0155	61.8	61.9	1	60.6-136			0.230	20
trans-1,2-Dichloroethene	0.0250	ND	0.0114	0.0120	45.4	48.1	1	61.0-132	J6	J6	5.78	20
1,2-Dichloropropane	0.0250	ND	0.0170	0.0183	68.2	73.3	1	69.7-130	J6		7.33	20
cis-1,3-Dichloropropene	0.0250	ND	0.0175	0.0184	70.2	73.7	1	71.1-129	J6		4.89	20
trans-1,3-Dichloropropene	0.0250	ND	0.0204	0.0216	81.6	86.4	1	66.3-136			5.67	20

- Cp
- Tc
- Ss
- Cn
- Sr
- Cc
- Gl
- Al
- Sc

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QUALITY CONTROL SUMMARY

ONE LAB NATIONWIDE

Volatile Organic Compounds (GC/MS) by Method 8260C

L796083-03.07

L796458-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 10/29/15 15:09 • (MS) 10/29/15 15:28 • (MSD) 10/29/15 15:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	ND	0.0176	0.0195	70.4	77.8	1	62.7-136			9.94	20
2-Hexanone	0.125	ND	0.0956	0.103	76.5	82.6	1	59.4-154			7.67	20.1
Isopropylbenzene	0.0250	ND	0.0190	0.0213	76.2	85.0	1	67.4-136			11.0	20
2-Butanone (MEK)	0.125	ND	0.0672	0.0711	53.8	56.9	1	45.0-156			5.65	20.8
Methylene Chloride	0.0250	ND	0.0135	0.0143	53.9	57.2	1	61.5-125	J6	J6	6.04	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.102	0.107	81.7	85.6	1	60.7-150			4.71	20
Methyl tert-butyl ether	0.0250	ND	0.0175	0.0187	70.0	75.0	1	61.4-136			6.91	20
Styrene	0.0250	ND	0.0190	0.0197	75.9	79.0	1	68.2-133			4.02	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0223	0.0235	89.2	94.1	1	64.9-145			5.40	20
Tetrachloroethene	0.0250	ND	0.0157	0.0169	62.9	67.7	1	57.4-141			7.24	20
Toluene	0.0250	ND	0.0158	0.0161	63.2	64.5	1	67.8-124	J6	J6	2.02	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0178	0.0184	71.1	73.5	1	53.7-150			3.30	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0220	0.0225	87.9	89.9	1	65.7-143			2.26	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0212	0.0224	84.7	89.6	1	67.0-146			5.57	20
1,1,1-Trichloroethane	0.0250	ND	0.0190	0.0195	76.2	78.1	1	62.8-138			2.55	20
1,1,2-Trichloroethane	0.0250	ND	0.0210	0.0217	83.9	87.0	1	74.1-130			3.57	20
Trichloroethene	0.0250	ND	0.0164	0.0169	65.5	67.6	1	48.9-148			3.17	20
Trichlorofluoromethane	0.0250	ND	0.0154	0.0172	61.6	68.7	1	39.9-165			10.8	20
Vinyl chloride	0.0250	ND	0.00937	0.0106	37.5	42.5	1	44.3-143	J6	J6	12.5	20
Xylenes, Total	0.0750	ND	0.0525	0.0564	70.0	75.2	1	65.6-133			7.15	20
(S) Toluene-d8					104	103		90.0-115				
(S) Dibromofluoromethane					97.5	96.4		79.0-121				
(S) o,o-Difluorotoluene					109	110		90.4-116				
(S) 4-Bromofluorobenzene					109	108		80.1-120				

- Cp
- Tc
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Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE. 

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio-VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ¹⁴ Accreditation not applicable


Third Party & Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA-Crypto	TN00003	USDA	5-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



GHD 285 Delaware Ave. Suite 500 Buffalo, NY 14202		Billing Information: Mr. Dave Rowlinson 285 Delaware Ave. Suite 500 Buffalo, NY 14202		Analysis / Container / Preservative										Chain of Custody Page ___ of ___			
Report to: Mr. Dave Rowlinson		Email To: dave.rowlinson@ghd.com		V8260TCLC 40m/Amb-HCl-BIK										 YOUR LAB OF CHOICE 12043 Lebanon Rd Moore, NJ, TN 37122 Phone: 615-754-8228 Phone: 800-767-8228 Fax: 615-754-8224			
Project Description: Niagara River World		City/State Collected: Tonawanda, NY												Client Project # 8618749-100		Lab Project # STEARNSANY-NIAGARA	
Phone: 716-743-8824 Fax:		Site/Facility ID #		P.O. #		Collected by (print): Brian Doyle		Rush? (Lab MUST Be Notified) Same Day _____ 200% Next Day _____ 100% Two Day _____ 50% Three Day _____ 25%		Date Results Needed		Email? ___ No ___ Yes FAX? ___ No ___ Yes		No. of Containers		Accum: STEARNSANY Template: T106210 Prelog-n: PS26459 TSR: 364 - T. Alan Maryll PB: 10.2.11 Shipped Via: FedEx Ground	
Immediately Packed on Ice N ___ Y <u>X</u>		Matrix *		Date		Time		Cntrs		Rem./Contaminant		Sample # (Lab only)					
Sample ID		Comp/Grab		Depth		Date		Time		Cntrs		Sample # (Lab only)					
ENV-1		G		GW		10/21/15		9:15		2		X 01					
ENV-3R		G		GW		10/21/15		9:45		2		X 02					
ENV-4		G		GW		10/21/15		11:00		2		X 03					
ENV-7		G		GW		10/21/15		10:40		2		X 04					
ENV-8		G		GW		10/21/15		10:20		2		X 05					
ENV-9		G		GW		10/21/15		10:00		2		X 06					
TRIP BLANK				GW						1		X 07					
GW-3		G		GW		10/21/15		11:20		2		X 08					
NRG-3		G		GW		10/21/15		12:00		2		X 09					
NRG-4		G		GW		10/21/15		12:10		2		X 10					

Matrix: SS - Soil GW - Groundwater WW - Waste Water DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date: 10/21/15	Time: 15:30	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Hold #
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 3.2 29	Condition: (lab use only) 600
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10-22-15 Time: 9:10	COC Seal Intact: <input checked="" type="checkbox"/> Y ___ N ___ NA pH Checked: <input type="checkbox"/> NCF.

APPENDIX E

DATA USABILITY REPORTING



Data Usability Summary Report

**Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170**

**815 River Rd.
ESC laboratory Sciences SDG#L795740
November 12, 2015
Sampling date: 10/20/2015**

**Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170**

**815 River Rd.
SDG#L795740**

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for GHD, project located in the 815 River Rd., SDG#L795740, ESC Laboratory Sciences, submitted to Vali-Data of WNY, LLC on November 3, 2015. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocol and USEPA National Functional Guidelines. The laboratory performed the analyses using USEPA methods, 8260B (Volatile Organics).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use but are qualified below in MS/MSD.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met. The MDL's are recorded on the 'Report of Analysis'. Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met.

INTERNAL STANDARD (IS)

All criteria were met.

SURROGATE SPIKE RECOVERIES

All criteria were met.

METHOD BLANK

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except 1,2,3-Trichlorobenzene was detected above the MDL, below the reporting limit in MW-1 but not in FD at MW-1.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

All criteria were met except the %Rec of Benzene and Ethyl benzene was outside QC limits, low in MW-2MS/MSD and should be qualified as estimated in MW-2 and MW-2MS/MSD.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met.

Alternate forms of regression were used on target analytes in which the RSD was <15% with acceptable results.

CONTINUING CALIBRATION

All criteria were met.

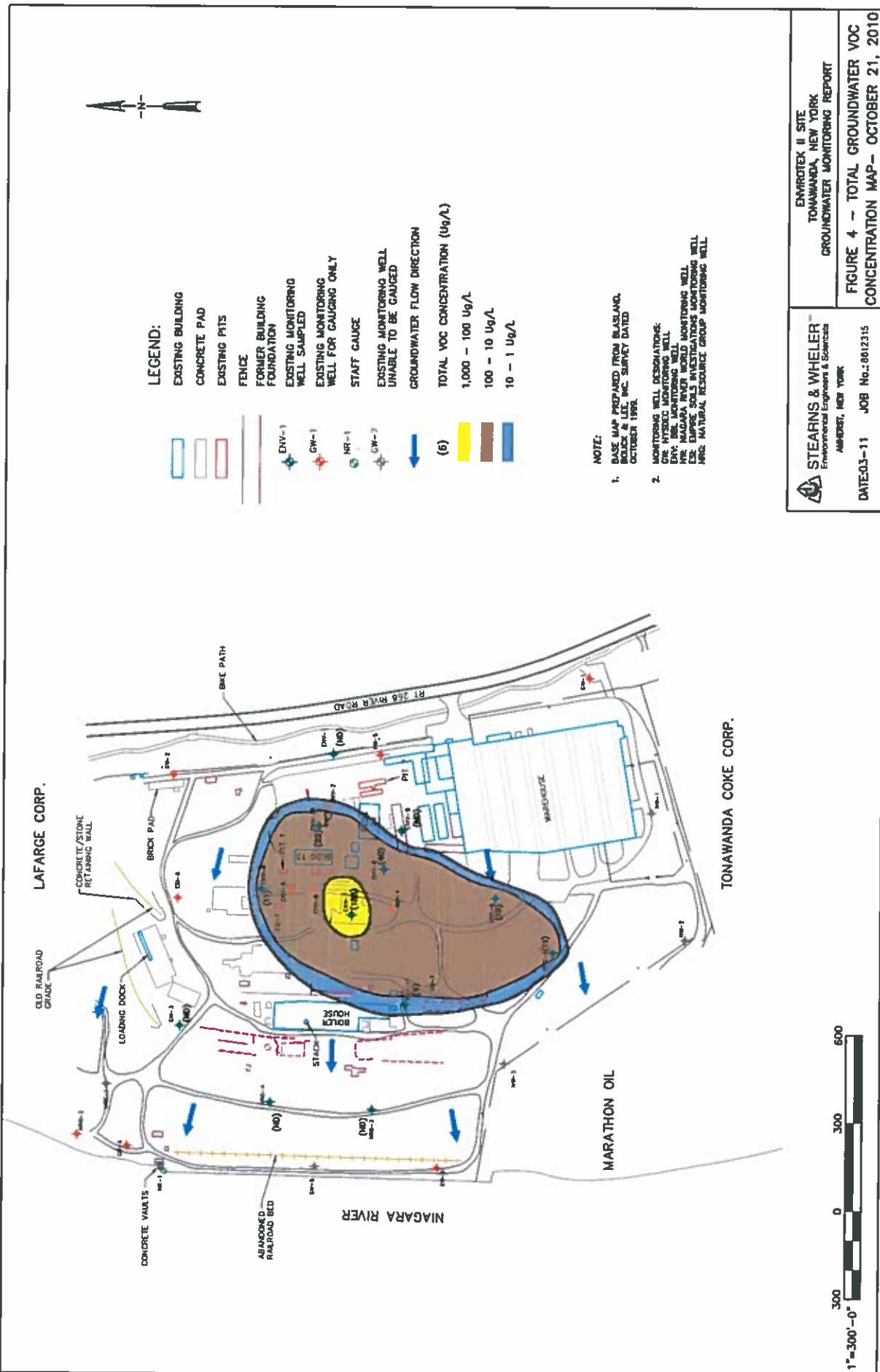
GC/MS PERFORMANCE CHECK

All criteria were met.

APPENDIX F

HISTORICAL GROUNDWATER TOTAL VOC CONCENTRATION FIGURES



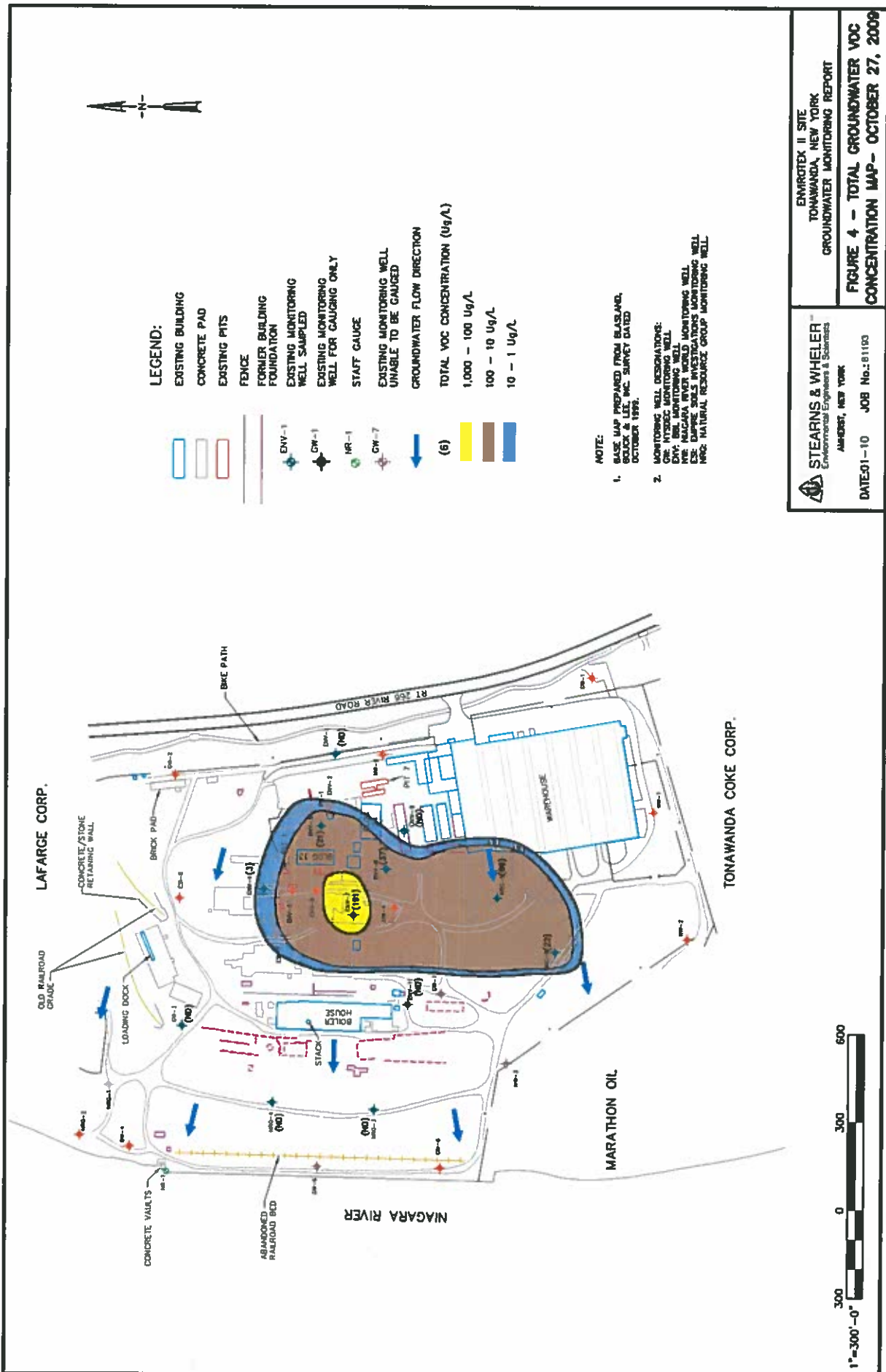


ENVROTEK II SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT

STEARNS & WHEELER
 Environmental Engineers & Scientists
 AMHERST, NEW YORK

DATE: 03-11 JOB No.: 0012315

FIGURE 4 - TOTAL GROUNDWATER VOC CONCENTRATION MAP - OCTOBER 21, 2010



LEGEND:

- EXISTING BUILDING
- CONCRETE PAD
- EXISTING PITS
- FENCE
- FORMER BUILDING FOUNDATION
- EXISTING MONITORING WELL SAMPLED
- EXISTING MONITORING WELL FOR GAUGING ONLY
- STAFF GAUGE
- EXISTING MONITORING WELL UNABLE TO BE GAUGED
- GROUNDWATER FLOW DIRECTION
- TOTAL VOC CONCENTRATION (ug/L)
- 1,000 - 100 ug/L
- 100 - 10 ug/L
- 10 - 1 ug/L

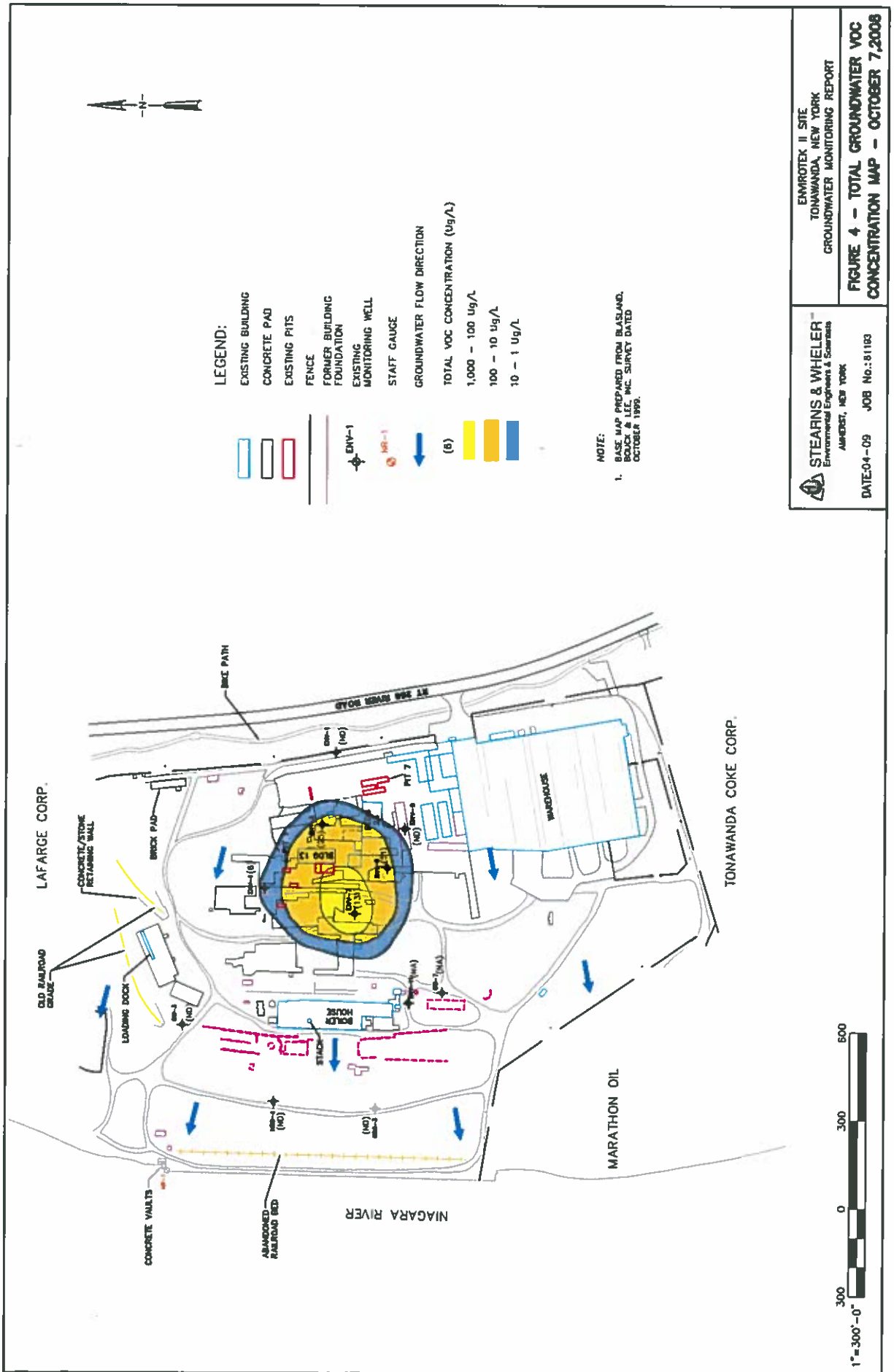
- NOTE:**
1. BASE MAP PREPARED FROM BLAISLAND, BUCK & LEE, INC. SURVEY DATED OCTOBER 1997.
 2. MONITORING WELL DESIGNATIONS:
 GW: HYDRO MONITORING WELL
 ENV: ENVIRONMENTAL MONITORING WELL
 MR: MARATHON RIVER WELLS MONITORING WELL
 ESE: ESE DEPOT SOILS INVESTIGATIONS MONITORING WELL
 NRC: NATURAL RESOURCE GROUP MONITORING WELL

ENVIROTEX II SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT

STEARNIS & WHEELER
 Environmental Engineers & Scientists
 AMHERST, NEW YORK

DATE: 01-10 JOB No.: 81100

FIGURE 4 - TOTAL GROUNDWATER VOC CONCENTRATION MAP - OCTOBER 27, 2009

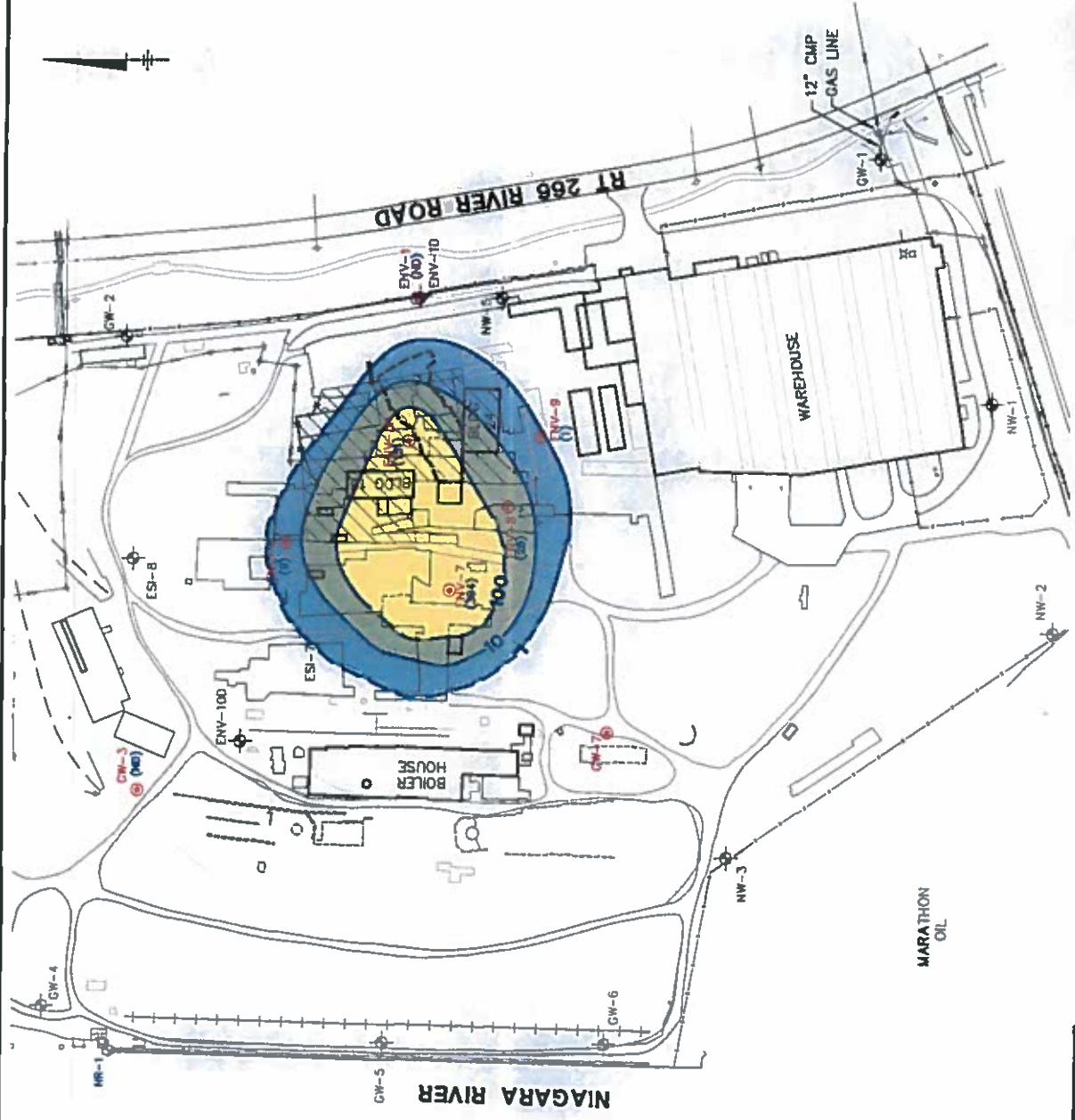


ENMROTEK II SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT

STEARN'S & WHEELER™
 Environmental Engineers & Scientists
 AMHERST, NEW YORK

FIGURE 4 - TOTAL GROUNDWATER VOC CONCENTRATION MAP - OCTOBER 7, 2006

DATE: 04-09 JOB No.: 51103



- LEGEND:**
- FENCE
 - EXISTING BUILDING
 - CONCRETE PAD
 - ABANDONED CONCRETE FOUNDATION
 - EXISTING OVERHEAD UTILITY LINES
 - ENVROTEK II SITE
 - MONITORING WELL
 - STAFF GUAGE
 - SITE GROUNDWATER MONITORING NETWORK WELL
 - TOTAL VOC CONCENTRATION (µg/L)
 - TOTAL VOC CONCENTRATION CONTOUR (µg/L) (DASHED WHERE INFERRED)
 - FINAL LIMITS OF SDA SOIL EXCAVATION
 - 1,000-100 µg/L
 - 100-10 µg/L
 - 10-1 µg/L

NOTES:

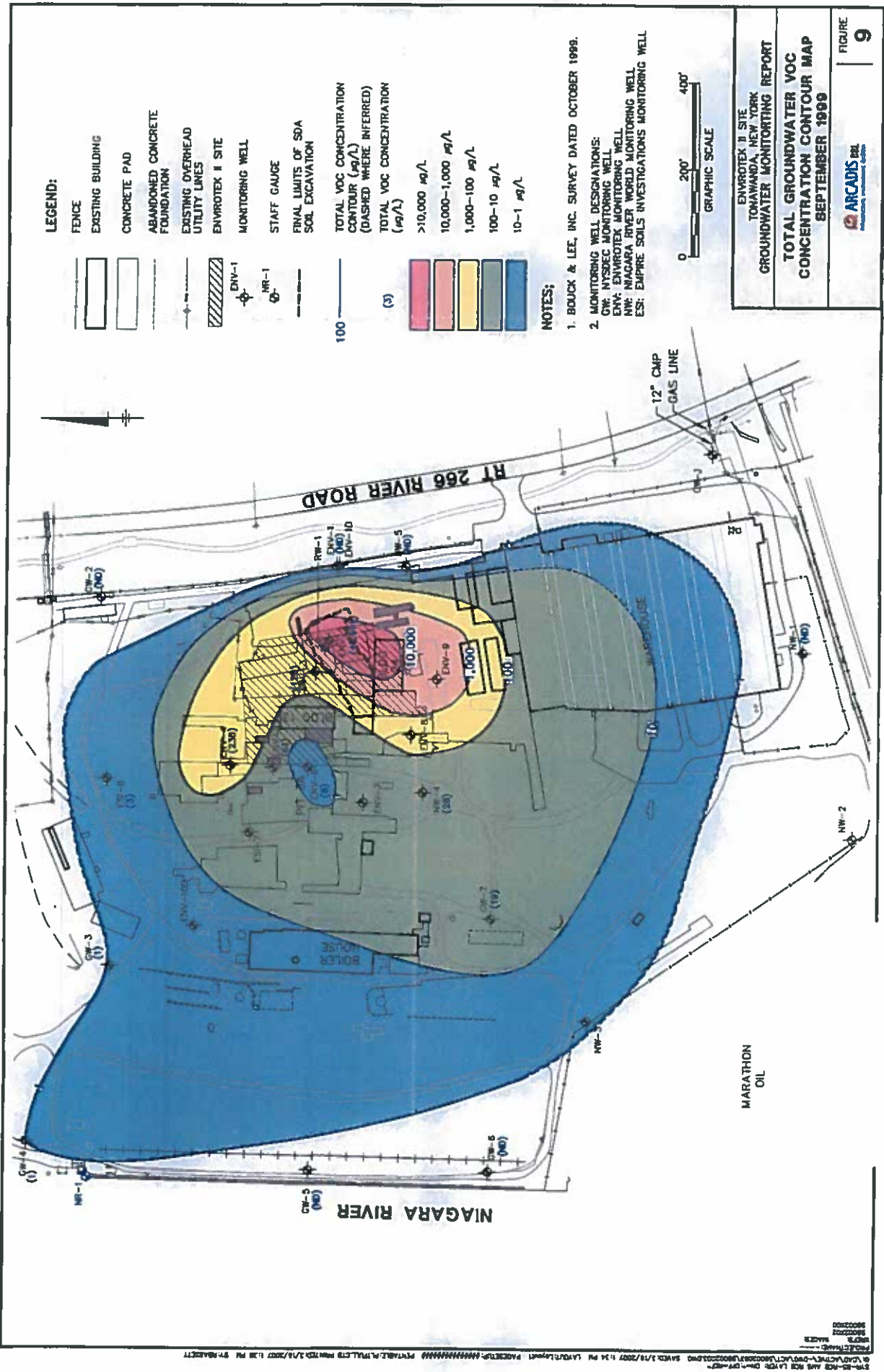
1. BOUCK & LEE, INC. SURVEY DATED OCTOBER 1999.
2. MONITORING WELL DESIGNATIONS:
 GW: HYDREC MONITORING WELL
 ENV: ENVROTEK MONITORING WELL
 MR: NIAGARA RIVER WORLD MONITORING WELL
 ESI: EMPIRE SOILS INVESTIGATIONS MONITORING WELL

ENVROTEK II SITE
 TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT
TOTAL GROUNDWATER VOC
CONCENTRATION MAP
 OCTOBER 17, 2005

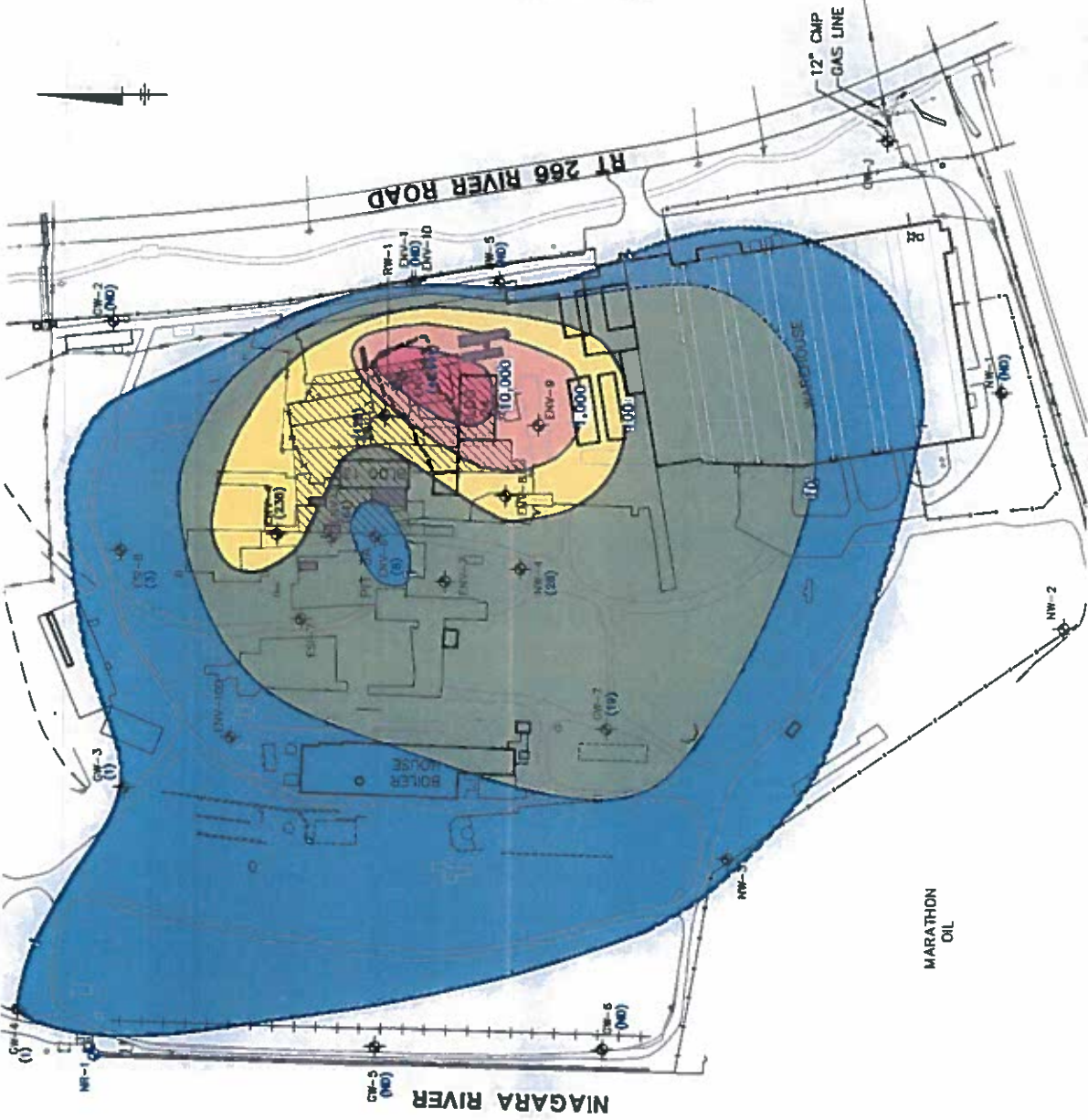
ARCAIS INC.

FIGURE 6

578-002 HAS 008 L1 01-07-05
 PROJECT: 578-002
 DATE: 10/17/05
 DRAWN BY: JLM
 CHECKED BY: JLM
 PROJECT: 578-002
 DATE: 10/17/05
 DRAWN BY: JLM
 CHECKED BY: JLM



S:\DWG-DES AND NOT LAYO Dwg-07-077
 11/27/2007 11:34 PM LAYOUT1.dwg PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS
 11/27/2007 11:34 PM LAYOUT1.dwg PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS
 11/27/2007 11:34 PM LAYOUT1.dwg PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS PLOTTER: HP-GL/PS



APPENDIX G

GROUNDWATER FIELD SAMPLING RECORDS



**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID ENV-1
Dave Rowlinson

Depth of well (from reference point)..... 24.2 ft EL 555.26
Initial static water level (from top of casing).... 8.0 ft EL 571.51
Top of PVC Casing Elevation 579.46

Evacuation Method:	Well Volume Calculation		
Submersible <u> X </u> Centrifugal _____	2in. casing: <u>16.3</u> ft. of water x .16 =	<u>2.60</u> gallons	
Airlift _____ Pos. Displ. _____	3in. casing: _____ ft. of water x .36 =	_____ gallons	
Bailer _____ >>> No. of bails _____	4in. casing: _____ ft. of water x .65 =	_____ gallons	

Volume of water removed 7.80 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 13.21 °C
pH 7.17
Conductivity 0.942 mS/cm
DO 3.28 mg/l
Turbidity 41.1 NTUs
Oxidation Reduction Potential(ORP) -95 mV

Sampling: Time: 9:15 AM

Sampling Method:	Stainless Steel Bailer _____	Analyses:	
	Disposable Bailer _____	Baseline	_____
	Submersible Pump <u> X </u>	Routine	<u> X </u>

Observations:
Weather/Temperature: Overcast, 60°F
Physical Appearance and Odor of Sample: Dark gray brown with some sediment, then clear. Sulfer odor

Comments: 9/16" socket needed to open cover.
Well is flush with pavement.

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID ENV-3
Dave Rowlinson

Depth of well (from top of casing).....	<u>15.8 ft</u>	<u>EL 564.34</u>
Initial static water level (from top of casing)....	<u>10.5 ft</u>	<u>EL 569.64</u>
Top of PVC Casing Elevation	<u>580.14</u>	

Evacuation Method:

Well Volume Calculation

Submersible	<u>X</u>	Centrifugal	<u> </u>	2in. casing:	<u>5.3</u> ft. of water x .16 =	<u>0.85</u> gallons
Airlift	<u> </u>	Pos. Displ.	<u> </u>	3in. casing:	<u> </u> ft. of water x .36 =	<u> </u> gallons
Bailer	<u> </u>	>>> No. of bails	<u> </u>	4in. casing:	<u> </u> ft. of water x .65 =	<u> </u> gallons

Volume of water removed 2.54 gals.
 > 3 volumes: yes no
 dry: yes no

Field Tests: Temp: 15.73 °C
 pH 7.69
 Conductivity 0.773 mS/cm
 DO 5.19 mg/l
 Turbidity 492 NTUs
 Oxidation Reduction Potential(ORP) -25 mV

Sampling: Time: 9:45 AM

Sampling Method:	Stainless Steel Bailer <u> </u>	Analyses:	
	Disposable Bailer <u> </u>	Baseline	<u> </u>
	Submersible Pump <u>X</u>	Routine	<u>X</u>

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: Clear initially, dark grayish with sediment, no odor

Comments: 9/16" socket needed to open cover.
Well is flush with pavement.

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID ENV-4
Dave Rowlinson

Depth of well (from top of casing)..... 23.3 ft EL 559.3
Initial static water level (from top of casing).... 13.7 ft EL 568.95
Top of PVC Casing Elevation 582.60

Evacuation Method:

Well Volume Calculation

Submersible	<u>X</u>	Centrifugal	_____	2in. casing:	<u>9.7</u> ft. of water x .16 =	<u>1.54</u> gallons
Airlift	_____	Pos. Displ.	_____	3in. casing:	_____ ft. of water x .36 =	_____ gallons
Bailer	_____	>>> No. of bails	_____	4in. casing:	_____ ft. of water x .65 =	_____ gallons

Volume of water removed 4.63 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 13.25 °C
pH 8.95
Conductivity 0.596 mS/cm
DO 1.85 mg/l
Turbidity 35.6 NTUs
Oxidation Reduction Potential(ORP) -248 mV

Sampling: Time: 11:00 AM

Sampling Method:	Stainless Steel Bailer	_____	Analyses:	
	Disposable Bailer	_____	Baseline	_____
	Submersible Pump	<u>X</u>	Routine	<u>X</u>

Observations:

Weather/Temperature: Partly sunny, 60°F

Physical Appearance and Odor of Sample: Dark grayish initially, then clear, some sulfur odor.

Comments: Well outside cap deteriorated. No lock, inner well cap missing.

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID ENV-7; FD
Dave Rowlinson

Depth of well (from top of casing).....	<u>17.2 ft</u>	EL <u>565.54</u>
Initial static water level (from top of casing)....	<u>13.5 ft</u>	EL <u>569.24</u>
Top of PVC Casing Elevation	<u>582.74</u>	

Evacuation Method:

Well Volume Calculation

Submersible	<u> </u>	Centrifugal	<u> </u>	2in. casing:	<u>3.7</u> ft. of water x .16 =	<u>0.59</u> gallons
Airlift	<u> </u>	Pos. Displ.	<u> </u>	3in. casing:	<u> </u> ft. of water x .36 =	<u> </u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u> </u>	4in. casing:	<u> </u> ft. of water x .65 =	<u> </u> gallons

Volume of water removed 1.78 gals.
 > 3 volumes: yes no
 dry: yes no

Field Tests: Temp: 13.53 °C
 pH 8.03
 Conductivity 0.674 mS/cm
 DO 3.75 mg/l
 Turbidity 455 NTUs
 Oxidation Reduction Potential(ORP) -22 mV

Sampling: Time: 10:45 AM

Sampling Method:	Stainless Steel Bailer <u> </u>	Analyses:	
	Disposable Bailer <u>X</u>	Baseline	<u> </u>
	Submersible Pump <u> </u>	Routine	<u>X</u>

Observations:

Weather/Temperature: Partly sunny, 60°F

Physical Appearance and Odor of Sample: Clear initially, dark brown, No odor

Comments: Well pad is intact and the stickup protective cover is in good condition.
Lock Broken

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID ENV-8
Dave Rowlinson

Depth of well (from top of casing)..... 17.8 ft EL 565.31
Initial static water level (from top of casing).... 13.5 ft EL 569.6
Top of PVC Casing Elevation 583.11

Evacuation Method:

Well Volume Calculation

Submersible _____ Centrifugal _____ 2in. casing: 4.3 ft. of water x .16 = 0.69 gallons
Airlift _____ Pos. Displ. _____ 3in. casing: _____ ft. of water x .36 = _____ gallons
Bailer X >>> No. of bails _____ 4in. casing: _____ ft. of water x .65 = _____ gallons

Volume of water removed 2.06 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 14.86 °C
pH 7.91
Conductivity 0.828 mS/cm
DO 4.45 mg/l
Turbidity N/A NTUs
Oxidation Reduction Potential(ORP) -37 mV

Sampling: Time: 10:20 AM

Sampling Method: Stainless Steel Bailer _____ Analyses: _____
Disposable Bailer X _____ Baseline _____
Submersible Pump _____ Routine X _____

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: Clear initially then dark grayish then brown with sediment, some odor

Comments: Well pad is intact and the stickup protective cover is in good condition.
Field equipment unable to record a turbidity reading due to very murky water.
Top well cover detached. Inner well cap intact.

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID ENV-9
Dave Rowlinson

Depth of well (from top of casing)..... 18.3 ft EL 565.35
Initial static water level (from top of casing).... 14.0 ft EL 569.65
Top of PVC Casing Elevation 583.65

Evacuation Method:

Well Volume Calculation

Submersible _____ Centrifugal _____ 2in. casing: 4.3 ft. of water x .16 = 0.69 gallons
Airlift _____ Pos. Displ. _____ 3in. casing: _____ ft. of water x .36 = _____ gallons
Bailer X >>> No. of bails _____ 4in. casing: _____ ft. of water x .65 = _____ gallons

Volume of water removed 2.06 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 14.7 °C
pH 7.47
Conductivity 2.34 mS/cm
DO 4.4 mg/l
Turbidity 320 NTUs
Oxidation Reduction Potential(ORP) -24 mV

Sampling: 10:00 AM

Sampling Method: Stainless Steel Bailer _____ Analyses: _____
Disposable Bailer X _____ Baseline _____
Submersible Pump _____ Routine X _____

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: Clear initially then some odor, dark grayish color

Comments: Well pad is intact and the stickup protective cover is in good condition.
Lock cut, needs replacement

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling

DATE 10/21/15

Samplers: Brian Doyle
Dave Rowlinson

SAMPLE ID ENV-11

Depth of well (from top of casing).....	<u>19.8</u> ft	EL <u>562.16</u>
Initial static water level (from top of casing)....	<u>NA</u> ft	EL <u>NA</u>
Top of PVC Casing Elevation	<u>581.96</u>	

Evacuation Method:

Well Volume Calculation

Submersible _____	Centrifugal _____	2in. casing: <u>NA</u> ft. of water x .16 =	<u>NA</u> gallons
Airlift _____	Pos. Displ. _____	3in. casing: _____ ft. of water x .36 =	_____ gallons
Bailer _____	>>> No. of bails _____	4in. casing: _____ ft. of water x .65 =	_____ gallons

Volume of water removed NA gals.

> 3 volumes: yes no

dry: yes no

Field Tests: Temp: _____ °C

pH _____

Conductivity _____ mS/cm

DO _____ mg/l

Turbidity _____ NTUs

Oxidation Reduction Potential(ORP) _____ mV

Sampling: _____ Time: _____

Sampling Method:	Stainless Steel Bailer _____	Analyses:	
	Disposable Bailer _____	Baseline	_____
	Submersible Pump _____	Routine	_____

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: _____

Comments: Flush Mount to surface
Unable to locate well, was determined that well was destroyed in recent past when brush was being cleared

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID GW-3
Dave Rowlinson

Depth of well (from top of casing)..... 21.1 ft EL 557.90
Initial static water level (from top of casing).... 10.4 ft EL 568.60
Top of PVC Casing Elevation 579.00

Evacuation Method:

Well Volume Calculation

Submersible	<u>X</u>	Centrifugal	<u> </u>	2in. casing:	<u>10.7</u> ft. of water x .16 =	<u>1.71</u> gallons
Airlift	<u> </u>	Pos. Displ.	<u> </u>	3in. casing:	<u> </u> ft. of water x .36 =	<u> </u> gallons
Bailer	<u> </u>	>>> No. of bails	<u> </u>	4in. casing:	<u> </u> ft. of water x .65 =	<u> </u> gallons

Volume of water removed 5.14 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 13.68 °C
pH 11.04
Conductivity 1.15 mS/cm
DO 2.07 mg/l
Turbidity 253 NTUs
Oxidation Reduction Potential(ORP) -214 mV

Sampling: Time: 11:20 PM

Sampling Method:	Stainless Steel Bailer	<u> </u>	Analyses:	<u> </u>
	Disposable Bailer	<u> </u>	Baseline	<u> </u>
	Submersible Pump	<u>X</u>	Routine	<u>X</u>

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: Some sulfur odor, initially grayish and turbid then clear

Comments: Well pad is intact and the stickup protective cover is in good condition.
Lock cut

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID NRG-3
Dave Rowlinson

Depth of well (from top of casing)..... 15.7 ft EL 568.85
Initial static water level (from top of casing)... 14.0 ft EL 570.55
Top of PVC Casing Elevation 584.55

Evacuation Method:

Well Volume Calculation

Submersible	<u> </u>	Centrifugal	<u> </u>	2in. casing:	<u>1.7</u> ft. of water x .16 =	<u>0.27</u> gallons
Airlift	<u> </u>	Pos. Displ.	<u> </u>	3in. casing:	<u> </u> ft. of water x .36 =	<u> </u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u> </u>	4in. casing:	<u> </u> ft. of water x .65 =	<u> </u> gallons

Volume of water removed 0.50 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 16.28 °C
 pH: 8.11
 Conductivity: 0.516 mS/cm
 DO: 3.53 mg/l
 Turbidity: 305 NTUs
 Oxidation Reduction Potential(ORP) -68 mV

Sampling: Time: 12:00 noon

Sampling Method:	Stainless Steel Bailer <u> </u>	Analyses:	<u>-</u>
	Disposable Bailer <u>X</u>	Baseline	<u> </u>
	Submersible Pump <u> </u>	Routine	<u>X</u>

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: Some petroleum odor, dark grayish color

Comments: Well pad is intact and the stickup protective cover is in good condition.
Lock cut

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID NRG-4
Dave Rowlinson

Depth of well (from top of casing)..... 18.4 ft EL 563.91
Initial static water level (from top of casing).... 12.7 ft EL 569.61
Top of PVC Casing Elevation 582.31

Evacuation Method:

Well Volume Calculation

Submersible _____ Centrifugal _____ 2in. casing: 5.7 ft. of water x .16 = 0.91 gallons
Airlift _____ Pos. Displ. _____ 3in. casing: _____ ft. of water x .36 = _____ gallons
Bailer X >>> No. of bails _____ 4in. casing: _____ ft. of water x .65 = _____ gallons

Volume of water removed 1.50 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 14.99 °C
 pH: 8.28
 Conductivity 0.519 mS/cm
 DO 3.00 mg/l
 Turbidity 31 NTUs
 Oxidation Reduction Potential(ORP) -140 mV

Sampling: _____ Time: 12:10 PM

Sampling Method: Stainless Steel Bailer _____
 Disposable Bailer X
 Submersible Pump _____

Analyses: Baseline _____
 Routine X

Observations:

Weather/Temperature: Partly sunny, 60°F

Physical Appearance and Odor of Sample: Sulfur odor, clear

Comments: Well pad is intact and the stickup protective cover is in good condition.
Lock cut

**STEARNS & WHELER GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE Envirotek II Sampling DATE 10/21/15

Samplers: Brian Doyle SAMPLE ID NRG-6
Dave Rowlinson

Depth of well (from top of casing)..... 20.31 ft EL 560.20
Initial static water level (from top of casing).... 11.50 ft EL 569.01
Top of PVC Casing Elevation 580.51

Evacuation Method:

Well Volume Calculation

Submersible Centrifugal 2in. casing: 8.8 ft. of water x .16 = 1.41 gallons
Airlift Pos. Displ. 3in. casing: _____ ft. of water x .36 = _____ gallons
Bailer >>> No. of bails _____ 4in. casing: _____ ft. of water x .65 = _____ gallons

Volume of water removed 4.23 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 16.1 °C
pH 10.85
Conductivity 1.67 mS/cm
DO 2.53 mg/l
Turbidity 179 NTUs
Oxidation Reduction Potential(ORP) -239 mV

Sampling: Time: 12:20 PM

Sampling Method: Stainless Steel Bailer _____ Analyses: _____
Disposable Bailer Baseline _____
Submersible Pump _____ Routine

Observations:

Weather/Temperature: Overcast, 60°F

Physical Appearance and Odor of Sample: No odor, lihjt gray initaly, then clear

Comments: Well pad is intact and the stickup protective cover is in good condition.
Lock cut